Report No. 52/11
National Park Authority

REPORT OF THE HEAD OF DEVELOPMENT PLANS

SUBJECT:
RESPONSE TO THE DRAFT SUPPLEMENTARY PLANNING GUIDANCE TO THE PEMBROKESHIRE COAST NATIONAL PARK LOCAL DEVELOPMENT PLAN

Purpose of Report: The purpose of this report is to advise Members of the response received on the above consultation and to ask Members to adopt the guidance for development management purposes subject to the Officer recommended changes.

Background: The following Supplementary Planning Guidance was approved for public consultation by the National Park Authority on 30th March 2011. The consultation began on 20th April 2011 and ended on 15th July 2011.

1. Conservation Area Proposals - various
2. Regionally Important Geodiversity Sites
3. Renewable Energy
4. Shop Front Design (jointly with Pembrokeshire County Council)

An estimated 1,800 letters were sent to various consultees. These included Agents, Architects, Town and Community Councils within the Park, Housing Associations, Estate Agents, Developers, Local Community Groups, local AM's and MP's, County Councillors, Utilities, Chambers of Trade, Environmental Groups, Government agencies, and other people who had expressed an interest.

Letters and CD copies of the consultation documents were provided to libraries within Pembrokeshire, St Clears and Cardigan. They were also available at the National Park centres in Newport, St David's and Tenby in this format. Paper copies of the documents were available to view at the National Park Offices in Llanion Park, Pembroke Dock.

The consultation was advertised via the Authority's web site and via a public notice within the Western Telegraph which appeared in the 20th April 2011 edition along with a press release.

A total of 16 individuals and organisations responded. 74 individual comments were made.

Main issues: The main issues raised by the consultation are set out and responded to in Appendix A. Appendix B provides a detailed printout of the representations made and Officer recommended responses. Appendix C shows the resultant proposed changes to the draft Supplementary Planning Guidance (relevant pages only). Please note that some changes cannot be shown as track changes due to reformatting in the Renewable Energy Supplementary Planning Guidance.

Recommendation

1. **That the following Supplementary Planning Guidance to the Pembrokeshire Coast National Park Local Development Plan be adopted for development management purposes subject to the amendments set out in Appendix A, B and C:**

   Conservation Area Proposals

   a) **Angle**
   b) **Caerfarchell**
   c) **Caldey Island**
   d) **Little Haven**
   e) **Manorbier**
   f) **Newport and Newport Parrog**
   g) **Portclew**
   h) **Porthgain**
   i) **Saundersfoot**
   j) **Solva**
   k) **St Davids**
   l) **Trefin**
   m) **Tenby**

2. **That the Regionally Important Geodiversity Sites Supplementary Planning Guidance to the Pembrokeshire Coast National Park Local Development Plan be adopted for development management purposes subject to the amendments set out in Appendix A, B and C.**

3. **That the Renewable Energy Supplementary Planning Guidance to the Pembrokeshire Coast National Park Local Development Plan be adopted for development management purposes subject to the amendments set out in Appendix A, B and C.**

4. **That the Shop Front Design Supplementary Planning Guidance to the Pembrokeshire Coast National Park Local Development Plan be adopted for development management purposes subject to the amendments set out in Appendix A, B and C.**

5. **That the Head of Development Plans be given delegated powers to:**

   a. **address typographical and grammatical errors,**
   b. **insert photos and illustrations,**
   c. **correct title references in the Newport Conservation Area Proposals.**
   d. **include cross references to policies 2 to 7 of the Local Development Plan and the Landscape Character Assessment Supplementary Planning Guidance within the appropriate Conservation Area Proposals.**

Background Documents
Pembrokeshire Coast National Park Local Development Plan Adopted September 2010

Draft Supplementary Planning Guidance on:

1. Conservation Area Proposals - various
2. Regionally Important Geodiversity Sites
3. Renewable Energy
4. Shop Front Design

Planning Policy Wales Edition 4 February 2011
Responses to the Supplementary Planning Guidance consultation

(For further information, please contact Martina Dunne on ext 4820)

Appendix A: Supplementary Planning Guidance Main Issues and Proposed Response

This report provides a summary of comments made and an Officer response.

Conservation Area Proposals

1.1 In summary there were issues raised about:

Newport and Newport Parrog Supplementary Planning Guidance

- The need for a complete and regular review and update of the document;
- The need for systematic monitoring of changes within the Conservation Area;
- The inadequacy of the SWOT analysis;
- Newport Parrog Conservation Area is not given proper consideration and needs to be a separate document;
- The Newport and Newport Parrog Conservation Area Statements should be separate documents and made supplementary planning guidance also;
- Stronger statements are required concerning the setting of the Conservation Area;
- Reference should be included to the Landscape Character Assessment Supplementary Planning Guidance; Historic landscapes; the need to protect views; climate change and the Shoreline Management Plan; renewable energy; local shopping, travel and civic space
- Points of detail are also made – include more detailed text / useful information should not be confined to diagrams / lack of vigour in applying the supplementary planning guidance and scepticism about its value as a material planning consideration

Saundersfoot Conservation Area

- Endorsement for approach at Saundersfoot and detailed comments on harbour area a Hean Castle and environs.

Officer Response:

Newport and Newport Parrog Supplementary Planning Guidance

1.2 A fundamental review of the Conservation Areas supplementary planning guidance can be made which can consider many of the issues raised, including the setting of Conservation Areas and provide an opportunity to reformat the documents and update them in relation to changes within Conservation Areas. In the meantime the technical update ensures that useful and valid supplementary planning guidance is retained by the Authority. Amendments have been made to better recognise the separate area of Newport Parrog Conservation Area within this document. The range of supplementary planning guidance are material considerations for relevant planning decisions and extracts should not be repeated within this document. Cross reference to the Landscape Character Assessment supplementary planning guidance and Policy 3 Newport Local Centre of the Local Development Plan can be made. This change can also be made to other Conservation Area supplementary planning guidance as appropriate.

Saundersfoot Conservation Area

1.3 An amendment has been made to refer to the open pastures located between the northern boundary of the Whitlow/Castle View estates at Saundersfoot.

Regionally Important Geodiversity Sites

1.4 There were no substantive issues raised.

Renewable Energy

1.5 As can be expected there was a mix of comments some asking for more stringent requirements and some asking for less restrictive requirements and guidelines. The comments made have been extremely useful and various improvements have been made to the document.

1.6 In summary the main issues raised were:

- the need to ensure that the requirement 'to enhance' the natural beauty is emphasised
- that references to wind energy proposals being used as 'a screen' were not helpful in a National Park context.
- should the Authority be more selective in the renewable technologies it is promoting
- are cumulative impacts going to be rigourously assessed?
- coastal edge locations need to be excluded for wind turbines.
- ensure guidelines are not perceived as requirements
- restructure the chapters to improve legibility.

Officer response:

1.7 Amendments have been made to delete references where opportunities on brownfield sites were being suggested. Additional guidelines are also included in terms of any proposals in the vicinity of the existing refineries and power station etc. The Authority is required to consider all technologies. Additional text is provided within the document in relation to cumulative impacts and the size of clusters. The text has also been strengthened in terms of guidance on considering clusters and cumulative impacts from incremental development. The text has also been revised to refer to checklists as all the guidelines under each technology may not be relevant for all proposals. The chapters have been restructured as suggested.

Shop Front Design

1.8 The main issues were raised:

- The need for appropriate access to shops for all users
- The need for quality shop fronts in Tenby and enforcement on signage
- Comments on what is appropriate signage in Conservation Areas
- Details comments on signage styles, materials, colours, shutters and free standing adverts.

Officer Response:

1.9 Amendments are proposed to ensure access complies with relevant building regulations and codes of practice

1.10 The Supplementary Planning Guidance will be publicised within commercial areas to ensure operators are aware of guidance. Enforcement procedures do not affect the content of the document which is appropriate.

1.11 Amendments are proposed in relation to signage in Conservation Areas and on other details.

Appendix B

Representations received during consultation on SPG commenced in April 2011 and closed on 15 July 2011, with officer responses, grouped by SPG

Conservation Area Proposals - Newport & Newport Parrog

3271 **Ms Imogen Morley, Newport Area Environment Group**

Comments on
"PCNPA Newport Conservation Area Proposals: Consultation Draft March 2011"
from Newport Area Environment Group (NAEG) 14/07/11

1. It is unlikely that this current consultation process alone will result in the sort of fundamental editing that is, at the very least, required to result in adequate planning guidance statements to be useable as clear material planning consideration in determining applications.

NAEG is shocked that the production of LDP SPGs for Newport Conservation Areas (as for all other Conservation Areas in the National Park) is being treated as a process of mere "technical update" (as described to the Authority in Report 18/11 30th March 2011)

2. The LDP no longer includes a Conservation Area policy as did the JUDP and in consequence the Conservation Areas SPGs must be strengthened to compensate for this fact

3. With the adoption of a new development plan, the opportunity should be grasped to properly review and revise Conservation Area Character Statements and Proposals documents.

Much of what is contained in this document is 10 years old!
It was prepared not within the last Plan period but the one before that!

Changes that have occurred within Conservation Areas since 2000 do not appear to have been systematically monitored over time so that at least some of the information given is now not up to date. Changes have happened, improvements have been made, trees, including important trees, removed, cables undergrounded - which are not acknowledged in this draft document. These are too numerous to set down here.

Mechanisms should be put in place in future to make sure that records - lists and plans and photographs are regularly updated.

Why is there no reference here to LDP policy 3 Newport Local Centre Tier 3 (Strategy Policy)?

Was any attempt ever made to incorporate information from background papers prepared for the LDP?

The LDP process used the "Action Plan" for Newport prepared through PLANED in 2004 and again in 2009, using techniques similar to SWOT

What use is the SWOT analysis contained in the draft from so long ago and in which only a handful of people participated? Its incorporation in 5 pages of this document causes some annoying repetition of what is stated elsewhere.

It is already admitted that many items in this SWOT fell outside the scope of "this exercise" and it is said that these are now asterisked but no asterisks appear.
It is now urgent that the SWOT analysis and Action Plan are studied together and updated, bearing in mind LDP policy 3, to extract what is within the scope of the Conservation Areas SPG, and to incorporate this only into the text of the SPG, committing the rest to an archive.

The current SPG itself should be designed to be easily regularly reviewed and updated throughout the Plan period so that it is always a completely relevant document

4. Newport Parrog Conservation Area

Of the 14 Conservation Areas in this National Park, two were designated in Newport in 1999 - Newport and Newport Parrog Conservation Areas Without any explanation or justification, this current document has amalgamated the two under one title "Newport Conservation Area" (see 1.2) and has treated the Parrog Conservation Area as the poor relation and as just one of 4 Conservation Area Zones within Newport. (See page 10)

Thus, the location map on page 2 marks "Newport Conservation Area" with no mention of Newport Parrog, other drawings do not label Parrog Conservation Area at all, and throughout the document only one Conservation Area is referred to.

The serious consequence is that Parrog Conservation Area has not been given proper consideration as an area with its own distinctive character and different requirements for management and development from that of the historic core of Newport.
This really is a very serious shortcoming. It is surely questionable whether the terms of s. 71 of the 1990 Act are being properly fulfilled.

A totally separate document should be written giving 100% attention to Newport Parrog rather than leaving it as an afterthought, as reads to be the case, at present.

We draw your attention to the experience of the application process at Bettws Newydd. It is nowhere explained in the current documents why the sea facing houses forming the Parrog Conservation Area are collectively of sufficient value to be worthy of designation and therefore visual protection.

Even the words in the Character Statement which should have protected the setting of these Conservation Area houses from an unashamedly modern development -

"5.4 Setting The Pembrokeshire Coast National Park Authority Local Plan identifies the following areas as important to the setting of Newport itself:
b) Slopes below Feidr Ganol and Feidr Brenin undeveloped and highly visible"
(i.e. the location of Bettws Newydd)
Newport and Newport Parrog Conservation Area Statement (June 2002),
(part of PCNPA Supplementary Planning Guidance since 2006).

- were disregarded by Development Management and the Conservation Area Officer.

5. "Newport and Newport Parrog's Conservation Areas Character Statement"
It is stated at 1.4 of the SPG draft that "(This report should be read in conjunction with the Newport and Newport Parrog's Conservation Areas Character Statement a synopsis of which is

set out in section 2.0)"
It is therefore unclear whether or not the Character Statement itself forms part of the SPG or not. NAEG says that it should. We also advocate very strongly that it is rewritten (and updated as necessary) as two separate Statements, one for Newport Parrog and one for Newport's historic core.
And these two Statements should be easily available to the public on the PCNPA website in just the same way as the Conservation Areas Proposals documents are.

6. Setting

As the Bettws Newydd Opposition Group constantly tried to emphasise to Officers in relation to Bettws Newydd, JUDP policy 79 did give some protection to the setting of the Parrog Conservation Area.

However, no such specific protection now exists in the LDP which makes it more important that a stronger statement concerning the setting of each Conservation Area is made, especially in relation to the Parrog Conservation Area where the ground rises forming a prominent backdrop to the South and where the area is viewed from important vantage points. These vantage points include the Coastal Path on the Heritage Coast entering Newport from the North, The Golf Coarse, Traethmawr and from waterborne craft on Newport Bay.
It is important that development within the backdrop does not detract from appreciation of the Conservation Area as is now the case with Bettws Newydd.

Reference should be made to the Landscape Character Assessment LCA 23 and such statements as the following endorsed
"Conserve and enhance the coastal character of the town through sympathetic building, siting, layout, form and materials for any new development…"
"Ensure that future building and infrastructure changes respect the outstanding historical value of the Mediaeval planned layout and the setting of the key extant buildings and historic sites, especially within the Conservation Areas"

It should also be stated that Newport forms the focus of the Newport and Carningli Registered Landscape of Special Historic Interest in Wales

7. Similarly, mention should be made of the need to protect views out of the Conservation Areas. There are several points around Newport where you stand in the Conservation Area and look out onto unpleasant sights/even eyesores.
These should be identified and recorded and wherever possible removed or suitable improvements achieved.
It should be stated that Enforcement action will be taken where such development is unauthorised.

8. We live in a rapidly changing world. 10 years ago, when the basis of this current draft document was written, we had hardly heard of "global warming and climate change" and knew nothing of "global peak oil". But we know now, and the implications for our Conservation Areas must be thought about and faced.

The overriding priority must be to prevent catastrophic climate change resulting from CO2 emissions. Generating energy renewably can achieve this.
The next priority is to provide energy security (by generating energy renewably)

Protecting a Conservation Area must follow the above two priorities.
Without energy security our future is precarious and, if climate change continues unchecked, few humans will survive either to inhabit or view a Conservation Area.

8 a) Climate Change
In terms of erosion of the coastline
"There are several local communities, such as…Newport Parrog…where there is increasing conflict between defence and the evolution of the shoreline…With anticipated Sea Level Rise the use of the water front will need to adapt."

""In some areas, such as…Newport …there is potential for significant erosion"
(West of Wales Shore line Management Plan 2 Section 4. Coastal Area B page 12)

In terms of flooding, it is acknowledged that
At Newport…"Risk is posed to the important sea frontage of the Parrog"
(West of Wales Shore line Management Plan 2 Section 4. Coastal Area B page 14)

In terms of the potential loss of trees due to increasingly stormy weather,
"The appearance of a town set within a woodland and trees is a particularly strong perception when viewed from the north across the river estuary, with the church tower and castle as prominent landmarks in the scene"
"Management and Guidance: Retain and enhance wherever possible the woodland, trees and hedgebank vegetation which contributes strongly to the setting of the town, especially on the western edges". (PCNPA LCA 23)

Several very important trees have been lost within the centre of Newport, including some important to the setting of the castle, in recent years.

There is a need to look at
- The potential loss of specific heritage features
- Impact on tourism and nature conservation
- The path of the National Trail through the Conservation Area
- The effect on small bays and beaches
- Flooding of facilities e.g. the Parrog Car Park and how to maintain the use of the waterfront
- The effect of tree loss and how this could be prevented /mitigated

8 b) In terms of facing up to the need to reduce emissions and the planet's limited resources

There needs to be
- Research into and Guidance in the appropriate retrofitting of buildings in Conservation Areas
- Guidance on the design and appearance preferred by PCNPA of microgeneration installations within its Conservation Areas, especially where this is permitted development. (Please see attached paper by NAEG on PCNPA Draft Renewable Energy - Supplementary Planning Guidance to be read in conjunction with these comments)
- Exploration of potential for community energy generation, particularly from the streams, and appropriate installation design.
- The need to encourage local shopping, to support the survival of the retail centre, to satisfactorily locate local produce stalls, to grow more food within and close to the area …
- to be more self sufficient as a community and generally reduce the need to travel

Significant in this last regard is Newport's lack of town centre civic space

9. Points of detail
There are several points of detail which need to be changed. These are too numerous to set down here. Examples include "Graveyards including tombstones" is really not enough to say – there is a wealth of maritime history to be uncovered on Newport's gravestones, worthy of a project in its own right; the pattern of water pumps is not mentioned; the streams are not given the significance deserved and are referred to as "culverted" when they were actually hand hewn in the 13th century to serve the burgage plots laid out to a mediaeval grid pattern and their existence is much neglected with indeed the loss of long stretches to culverting in recent years.…

Several shortcomings result from the use of a Synopsis (rather than a full Character Statement) and confining interesting information to lists and diagrams which at A4 scale are difficult to read. Whilst this provides useful checklists for some purposes, it makes the document less interesting than it should be. It also does not allow for emphasis of the most important points of character which could bring the description of the Conservation Areas to life, in a way which doesn't happen now. The loss of the SWOT analysis should allow space for greater and more appropriate expansion of the main text.

10. Application of SPGs
"The provision of up to date supplementary planning guidance will assist planning applicants in meeting the requirements of Local Development Plan and national planning policy" Report National Park Authority 18/11
REPORT OF THE PLANNING OFFICER (DEVELOPMENT PLANS) SUBJECT: LOCAL DEVELOPMENT PLAN SUPPLEMENTARY PLANNING GUIDANCE DRAFTS FOR CONSULTATION

Newport's experience of what we see as the lack of respect shown by Development Management and the Conservation Area Officer in applying Conservation Area Supplementary Planning Guidance to assessing the applications at Bettws Newydd, in recent years, has given rise to scepticism whether the SPGs will be of value as material planning consideration in practice, however well they are written.

The guidance needs to be very clear.
It will not be enough to just produce and make available the SPGs
A protocol needs to be introduced setting out very clearly how Development Management Officers should apply the guidance within them.
It should not be possible to sometimes ignore guidance, at Officers' discretion.

IM/SPB/NAEG 14/07/11

Attachment: Comments on The consultation paper on Pembrokeshire Coast National Park Local Development Plan Renewable Energy - Supplementary Planning Guidance March 20 By Newport Area Environment Group (NAEG) 14th July 2011

Officer Response

Numbers correspond to NAEG comments
1. The Authority has a duty to review Conservation Areas, including the review of boundaries. Such a review is intended for the National Park Conservation Areas. This separate 'technical' update ensures that the guidance reflects the up-to-date policies of the Authority and Welsh Government and allows a thorough review and the more fundamental editing requested by this

respondent whilst retaining valid and useful supplementary planning guidance in the meantime.

2. Planning Policy Wales Edition 4 contains National development control statements for Conservation Areas (see Chapter 6 including paragraphs 6.4.6, 6.5.17, 6.5.18, 6.5.19, 6.5.20). Such policies should not be repeated within Local Development Plans. No compensating strengthening is required in the SPG since national planning policy is in place.

3. The duty to review under the 1990 Act is separate to the technical updating and we are committed to reviewing all 14 CAs over time, working with relevant local groups elected through the relevant Town/Community Councils. All the background info including the SWOT, photos, plans etc will be updated during that process - there is the opportunity for a fundamental reformat of the document given that there is no set model to follow.

Frequent updating of the supplementary planning guidance would require a consultation exercise, and is likely to lead to consultation fatigue.

Policy 3 of the Local Development Plan, 'Newport Local Centre' (tier3) strategy policy sets out the land use priorities for Newport as a whole. Whilst the SPG will provide more detail about the Conservation Area. There is no need to repeat this policy however a cross reference can be included at the Introduction paragraph 1.6. Cross reference to Policies 2 to 7 of the Local Development Plan will be included as relevant within other Conservation Area Supplementary Planning Guidance.

The comment about including background papers from the Local Development Plan is not specific about what information should be included. The background papers were prepared as evidence to support the policies of the Local Development Plan. Where appropriate they have been used as the basis for supplementary planning guidance.

4. Newport Parrog Conservation Area.

(paragraphs 1-4) Whilst Newport and Newport Parrog Conservation Areas are separate Conservation Areas, their close proximity meant that they were designated at the same time. Both Conservation Areas were included within joint documents (Newport and Newport Parrog Conservation Area Statement June 2002), and the original Proposals Document of 2007. The updated Proposal Document is consistent with this approach, but it is acknowledged that the present document does not make the existence of Newport Parrog as a separate area clear enough. The document should therefore be amended as follows and please note that these changes are not included with the Committee papers:-

i. Title to be revised to 'NEWPORT AND NEWPORT PARROG CONSERVATION AREAS PROPOSALS'
ii. 1.2 to be amended to 'The historic cores of….'
iii. 1.4 to be amended to'……..the Newport and Newport Parrog Conservation Areas Statement was formally….
Iv. 1.6 to be amended (second sentence) to 'The Proposals will set the context for considering the effect of……of the Conservation Areas'
v. 1.7 to be amended to ……'how the character of the Conservation Areas can be……'
Vi. Conservation Area boundary map - title to be amended to 'Newport and Newport Parrog Conservation Areas'
Vii. Conservation Area Statutory Designation Map title to be amended to ' Newport and Newport Parrog Conservation Areas: Statutory……..'

Section 2. 'Zone 4 - the Parrog' to be replaced with 'The Parrog Conservation Area'
Map facing p. 13 to be retitled 'Newport and Newport Parrog Conservation Areas: Prominent Views…..' and title in box to be amended to 'Newport and Newport Parrog Conservation Areas. Designated 1999'
Section 3 to be retitled 'Newport and Newport Parrog SWOT Analysis'
Map on page 18 to be retitled 'Newport Parrog Conservation Area: Features'
Map on page 20 to be retitled 'Newport Parrog Conservation Area: Opportunities'
Introductory paragraphs to sections 6,7,8,9,10,11,12 and 13 to be amended to refer throughout to Conservation Areas rather than Conservation Area
13.1 to be amended to '……Conservation Areas' and supporting paragraph to refer top Conservation Areas in the plural throughout.
13.2 to be amended to 'CONSERVATION AREAS BOUNDARY REVIEW'
Section 14 - first para to be amended '…and the Parrog Conservation Areas'

A separate document can be considered as part of the fundamental review of Conservation Areas.

Whilst this consultation exercise does not present an opportunity to revisit Bettws Newydd or any other site specific proposal, the fundamental review of the documents will provide an opportunity to consider the character of Conservation Areas and what makes up that character and their setting.

5. Concerns about the status of the Conservation Area Character Statements are noted. The synopsis within the SPG form part of the document. The full statements do not form supplementary planning guidance. The status and potential inclusion of the full statements will form part of the fundamental review.

6. The setting of both Conservation Areas is shown on the map (page 33) identifying outlying areas including Carningli, Morfa Head and land to the north-east and north-west. Proposed development in this area will be weighed against this statement and relevant policies of the Local Development Plan, including Policy 15 'Conservation of the Pembrokeshire Coast National Park' and paragraph 4.77 which specifically includes impact on the setting of Listed Buildings, Scheduled Ancient Monuments and Conservation Areas.

Landscape Character Assessment. The LCA is adopted supplementary planning guidance. A range of guidance and LDP policies can be relevant to any particular proposal. It is not appropriate to repeat the content of other supplementary planning guidance however amendments can be made to cross reference the Landscape Character Assessment supplementary planning guidance within this and other Conservation Area Proposals supplementary planning guidance.

Reference to the Register of Landscapes of Special Historic Interest in Wales is considered beneficial. Extra bullet to be inserted in Section 3 (SWOT) 1.2 'Newport forms the focus of the Newport and Carningli Registered Landscape of Special Historic Interest in Wales'.

7. Views out of the Conservation Areas are included in the Features Maps (pp18-19). No change to the text is recommended.

8. The Renewable Energy and Sustainable Design supplementary planning guidance is the appropriate document to provide detailed guidance on renewable energy proposals. There is no need to repeat this guidance here.

8a & 8b) Many of the comments can inform discussion at the fundamental review of the Conservation Areas.

9. It is acknowledged that various points of detail require updating, and these are is best dealt with when the Conservation Area is reviewed as part of this Authority's duty under the 1990 Act. This will also allow consideration of reviewing the format of the Proposals document itself. No change to this document is recommended.

10. Relevant supplementary planning guidance is a material consideration in deciding planning applications. These are part of the overall weighing of issues and are taken into account by Officers. They are supplementary to the development plan and are consistent with it.

3391 **Mr John Pattenden**

Development
Rear of Cambrian Hotel
I wish to endorse proposals that land to the rear of the Cambrian Hotel be developed with buildings in context and in keeping with Milford Terrace cottages rather than some of the other less appropriate modern developments which have been allowed in the heart of the village in the past.

Officer Response

Comment noted. No change proposed, as the document embraces the principle of redevelopment in this area.

3391 **Mr John Pattenden**

Harbour Area
Open access to spectacular views of Saundersfoot Bay and provision for spectator participation in beach activities are special features of the village sea-front and it is important than any future developments exclude permanent structures likely to reduce this open aspect. Temporary accommodation currently used in this area for local/community events gives greater flexibility. Perhaps any improvements to the area could include a reduction of parking spaces, whilst maintaining disabled access, and enhancement of the area with colourful sea-front gardens.

Officer Response

The harbour area and sea-front car park is classed as 'important open space' on the features map, and the opportunity for the harbour area to host community events is highlighted in the SWOT analysis (3.9) along with the potential for facilities for the less able (3.7), and landscaping/planting (3.6).

No change proposed.

3391 **Mr John Pattenden**

The area covering Hean Castle, St Issell's Church and Netherwood ought to include the open pastures located between the northern boundary of the Whitlow/Castle View housing development, and areas B/C highlighted on your map. See shaded area on the enclosed. These are an important addition to the farmland and wooded areas highlighted on your map and contribute to the character of the area, serving as one side of the frame to the picture which is Saundersfoot village. With the right grants I have no doubt that these pastures, with a public footpath on one side and access gate for the local primary school on the other, could become hay/flower-rich meadows with a host of wild plants providing an ideal habitat for insects and birds. May I refer you to the Peak District National Park Hay Meadow Project and other papers enclosed.

Officer Response

Third bullet point of Section 13 be amended, by adding 'and the open pastures located between the northern boundary of the Whitlow/Castle View estates'.

Regionally Important Geodiversity Sites

2897 **Mrs YC Evans, Marloes & St Brides Community Council**

The only comment on this document is that Marloes Bay should be referred to as Marloes Sands.

Officer Response

The title for the RIGS used by the South West Wales RIGS group in the published data is Marloes Bay. Ordnance Survey maps identify the general area as Marloes Sands. In order to try to reduce the potential confusion between the SPG and the RIGS group publication it is proposed to amend the title of RIGS 491 to include Marloes Sands in addition to Marloes Bay within the SPG.

Renewable Energy

1616 Ms Ruth Chambers, Campaign for National Parks (CNP)

i) The Introduction – SPGs expand adopted plan policy. This SPG expands energy policy 33 in the context of the statutory purposes of a National Park. There is one overarching policy in the LDP to cover National Park purposes (Policy 1). It was felt when compiling the LDP the two purposes coupled with the duty (to seek to foster social and economic well being) are so fundamental to the work of the Park Authority that it was important to place them at the centre of the Plan. For this reason, CNP considers that the draft SPG (and all other SPGs) should also use this as a starting point rather than leaving it to the last paragraph of the introduction.

Officer Response

All SPGs are designed to form the supporting guidance of a particular policy (in this case Policy 33). Therefore, this introductory section should remain unchanged.

1616 Ms Ruth Chambers, Campaign for National Parks (CNP)

ii) The first statutory purpose includes the requirement to "enhance" natural beauty. Therefore the landscape sensitivity analysis should avoid concluding that development would be appropriately located in any currently degraded locations.

Officer Response

In the landscape sensitivity analysis all reference to brownfield sites will be omitted but reference to small turbines being located where they relate to existing buildings and built structures will be retained.

1616 Ms Ruth Chambers, Campaign for National Parks (CNP)

iii) NB Para 1.11 incorrectly reproduces LDP Policy 8.

Officer Response

Will check and amend the policy wording – page 35 of the LDP
http://www.pembrokeshirecoast.org.uk/Files/Files/dev%20plans/finalldp.pdf

1616 Ms Ruth Chambers, Campaign for National Parks (CNP)

v) The final section on funding provides useful information to potential developers and could help to promote schemes. However, this information is likely to become out of date more quickly than the substantive planning policy guidance and this could undermine the status of the guidance at a later date.

Officer Response

This Section will be deleted from the SPG and PCNPA will place a separate information sheet on funding on their website – which will be updated as and when required. The final SPG will provide a link to the relevant page on the PCNPA website.

1616 Ms Ruth Chambers, Campaign for National Parks (CNP)

Comments on larger scale technologies: v) Field scale solar PV: The description of field scale solar PV tends to be technology based rather than National Park specific and therefore would be information already known to installers. It seems superfluous in a document providing guidance

to developers seeking a National Park location. It is factual / informative rather than guidance and seems to be information aimed at parties other than developers. It describes landscape impacts rather than setting criteria and therefore does not at this stage provide guidance.

Officer Response

The document is intended for a range of audiences – not all of whom may be familiar with a relatively new technology such as solar PV. It is, as such, important to provide information on the features of the technology (and therefore what needs to be considered when assessing landscape sensitivity). Detailed information relating to siting guidance within different parts of the National Park is provided in the separate landscape sensitivity assessment. This is due for consultation as an addendum to the Supplementary Planning Guidance after October 2011. Generic guidance is also provided in the body of the SPG.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

vi) The landscape sensitivity of field scale solar PV developments is classified by the size of area covered. Will this be tested in all possible locations across the Park in the landscape assessment to be completed in the summer? It is possible that a very small (less than 1 ha) site could have an adverse impact in a highly sensitive location e.g. due to its height, exposure, ecological or cultural value. The sensitivity of the recipient landscape is not adequately reflected in the SPG. The New Forest National Park Authority has recently approved two applications for solar PV developments in well screened locations, but has since concluded that the National Park has reached capacity for such developments and will not approve any more. Is the National Park Authority satisfied that the SPG and landscape assessment will allow it to make similar judgements in the context of the Pembrokeshire Coast National Park landscape?

Officer Response

At the time the SPG was circulated, it did not include the detailed field-scale solar PV assessments that have been prepared for the National Park (based on Landscape Character Areas), following exactly the same approach as that used for the wind turbine assessment. This will be consulted upon in Autumn 2011.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

vii) Biomass: Section at end (para 5.13) only covers small-scale household and community biomass facilities. Guidance on medium/commercial scale facilities is missing.

Officer Response

The current paragraph 5.2 needs to more clearly state that medium/commercial scale developments are not considered appropriate in the National Park and therefore are not discussed further.

Currently the heading to paragraph 5.13 wrongly refers to anaerobic digestion facilities (which already exists in 4.17). The heading will be changed.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

viii) Wind: The detailed sensitivity assessment carried out in 2008 enables clearly justified guidance to be produced for wind technologies. This is an illustration of good practice.

Officer Response

No action required.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

General comments on technology specific guidance: ix) The SPG appears to be robust by tying detailed studies into the adopted policy.

Officer Response

No action required

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

General comments on technology specific guidance: x) The document mixes guidance to applicants with descriptive information of interest to consultees and promotional information to those whose main interest is not as an energy provider. The guidance is not easily distinguished and could frustrate applicants. It could be streamlined to enhance its readability, its acceptability to developers and to avoid the perception of the Park Authority as being bureaucratic.

Officer Response

Each technology description will be structured under the following headings:

What is [insert technology]?
- Description of [insert technology]
Key planning considerations
Guidance on the siting of [insert technology] covering
- Technological potential
- Suitable sites / sizes of development
- Key landscape sensitivities and general guidance for siting

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

General comments on technology specific guidance: Publication of separate guidance for commercial scale technologies by energy developers and guidance for small scale residential /community developers could help to streamline the SPG and make it more applicable to the needs of particular applicants.

Officer Response

It is difficult to distinguish between community-based schemes and commercial schemes in terms of the scale of development involved i.e. community schemes may not always be small in scale and vice versa. To avoid confusion we do not propose preparing separate guidance.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

General comments on technology specific guidance: - There is a core set of criteria that are common to all technologies but are repeated throughout in each section (albeit with slight variations in wording). Indeed, most of the criteria would be relevant in the determination of any large scale development.

Officer Response

Some users of the document may only be interested in certain sections, so to save having to flick through the document to refer to the criteria, or missing them altogether, the decision was made to ensure the criteria are available for each technology description.

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

xi) The SPG recognises that the majority of LCA 7 (Angle Peninsula) is not suitable for large or medium scale turbines, but suggests that they could be used as a screen from adjacent industry to the east. CNP does not agree that large wind turbines are an appropriate screen for other industrial development and asks for this proposition to be reconsidered, as it could have serious implications for the setting of the National Park (see comment ii above).

Officer Response

The adopted LDP (paragraph 4.148, page 58) sets out the potential for renewables in the National Park based on the renewable energy assessment. In terms of wind energy, 4.148 (f) states that:
There is potential for small scale proposals (10kW-50kW) and to a lesser degree medium scale proposals (50kW-330kW). Finally, there are extremely limited opportunities for larger scale proposals (>330kW – 3MW).

To provide more rigour in the assessment of proposals it is proposed that in the landscape sensitivity Annex the statement in landscape character areas 6, 7, 11 will be changed to read "There may be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below."

1616 **Ms Ruth Chambers, Campaign for National Parks (CNP)**

xii) CNP supports the development of renewable energy across the National Park, at an appropriate scale and in suitable locations. This includes small scale wind turbines associated with farmsteads and other rural dwellings. However, we are concerned that the SPG suggests that several LCAs may be suitable for small clusters of small scale turbines. The SPG rightly recognises that these would to have to be sensitively sited and meet other requirements of the guidance. In addition, CNP suggests that the SPG should state explicitly that this will include the need to ensure that the development of small scale turbines, including in clusters, does not have an unacceptable cumulative impact on the landscape of the National Park.

Officer Response

Although the original Renewable Assessment considered wind crofting no mention is made of this in the SPG. In the SPG cluster sizes will be reduced to 2-3 small turbines.

All of the wind assessments have been reviewed and reference removed to clusters of wind turbines from the following LCAs based on their levels of sensitivity or landscape scale:

- LCA 7: Angle Peninsula
- LCA 8: Freshwater East / Brownslade Burrows
- LCA 13: Brandy Brook

All LCAs where clusters are mentioned include the following guidance to address cumulative issues:

''The National Park Authority should ensure that any wind turbine
development located within the protected landscape does not sacrifice the essential integrity,

coherence and character of the landscape or the special qualities of the National Park.'

2046 **Mr Tom Lambshead, Network Rail Infrastructure Ltd**

Any proposed installation of Solar Photovoltaic panels adjacent to the railway should consider the following point at design stage to eliminate any risk to railway operations; the provision of any reflective material used in the solar collecting equipment should not interfere with the line of sight of train drivers and the potential for glare or reflection of light from the panels that may impact upon signalling must be eliminated.

Any proposal to install Wind Farms or Turbines adjacent to Network Rail property will need to consider the following, we would wish to see such equipment sited so that the lateral distance from the railway boundary to the foot of the mast is greater than the height of the mast + length of propeller blade. Wind turbulence may be a factor to be considered
and the applicant would need to ensure the design/position of the wind turbine does not present a potential problem for neighbours (railway included). Should the turbines collapse for any reason then the developer should ensure that any fail safe distance will include the wind-turbines potential for topple in the direction of the railway line.

Officer Response

No amendments necessary – this would be covered in comments on planning applications.

2897 **Mrs YC Evans, Marloes & St Brides Community Council**

Section 1.7 The first sentence should be amended as follows (capital letters): "In addition to powering AND HEATING homes, buildings, and businesses, renewable energy can bring social and economic benefits through job creation in the manufacturing, construction, EQUIPMENT INSTALLATION, and maintenance industries, AND IMPROVED JOB SECURITY IN TRADITIONAL NATIONAL PARK BUSINESSES, ESPECIALLY AGRICULTURE."

Officer Response

Added "and heating", but not other text, due to need for conciseness,.

2897 **Mrs YC Evans, Marloes & St Brides Community Council**

Section 1.7 This sentence should be added: "Schemes qualifying for FIT payments and/or exporting power bring energy-generating revenue into the Park: this is economically important because the consumption of fossil fuels and grid electricity within the Park causes an enormous outward flow of money."

Officer Response

No changes to SPG. This may well be true but we would need clear evidence to include this statement.

2897 **Mrs YC Evans, Marloes & St Brides Community Council**

Sections 2.4 &2.5 &3.2 The wording in all these sections needs revising because it plays down Pembrokeshire's UK 'ranking': fig 2.1 shows that only South Devon and Cornwall have a better solar resource. This sentence should be added at Section 9.7: "Compared with most British counties, Pembrokeshire has a good to very good wind energy resource; for many landowners

and/or rural property owners within the National Park, wind power promises the best return on capital investment of all renewable energy technologies".

Officer Response

Adapted wording to the following: "On the whole, Pembrokeshire Coast has a good wind energy resource comparative to many parts of the UK."

2897 Mrs YC Evans, Marloes & St Brides Community Council

Many guidelines are listed; apparently all apply to every wind turbine planning application within the National Park, regardless of installation size. This surely imposes a large burden on anyone who wants to put up even what the National Park classes as a small-scale wind turbine, i.e. a typical system for a family farm or smallholding. As the National Park seems quite tolerant of other developments associated with modern agriculture (poly tunnels, silos, tractor & cattle sheds), it is wrong to so burden small wind turbine developments: throughout the UK these need to be accepted as a standard feature of modern agricultural practice and rural living in locations which have a good wind resource. Furthermore, farmers and smallholders within the National Park have to remain competitive with similar businesses which are outside it; but they struggle to do so if discouraging National Park policies and procedures prevent them from diversifying into potentially lucrative renewable energy schemes.

Officer Response

No changes to SPG. These are guidelines only, and are designed to help site wind turbines to fit better within their environment.

3224 Ms Yana Bosseva, Renewable UK

Refer to National Renewable Energy Action Plan and National Policy Statements

Officer Response

Reference will be added to both documents at 1.17.

3224 Ms Yana Bosseva, Renewable UK

Wind speeds and economic viability are not planning matters and we therefore suggest that references to them should be removed from the SPG. Site assessment is a complicated process which requires site-by-site assessments of wind speed and other factors. Local planning authorities should not be prescribing where wind energy development or indeed other renewables must locate as this is likely to result in decisions which are not based on all the required information and analysis.

Officer Response

Will remove 9.8 – 9.11 and leave reference to the Renewable Energy Assessment.

3224 Ms Yana Bosseva, Renewable UK

Planning Policy Wales 2011: an additional
reference should be made to the fact that it sets different project scales, for example: community scale (50kW – 5MW); local development (5MW - 25MW) etc.

Officer Response

Will make reference to Planning Policy Wales 2011 but will not add information on the project scales – this guidance is specific to Pembrokeshire Coast National Park.

3224 **Ms Yana Bosseva, Renewable UK**

A reference to Welsh Office Circular Environmental Impact Assessment 11/99 on thresholds for wind energy projects be included under the Key Planning Considerations Section (paragraphs 9.12 to 9.15).

Officer Response

Will be added.

3224 **Ms Yana Bosseva, Renewable UK**

The provisions under Paragraph 9.18, which identify the most sensitive areas of the Park, are again unduly restrictive. As outlined above, the site selection process for appropriate sites for wind energy is complex and should not be limited to sites ''away from tranquil areas'' or ''away from the most prominent rural skylines''.

Officer Response

All actions within the National Park are guided by the purposes of designation The first purpose of national park designation is "the conservation or enhancement of the natural beauty, wildlife and cultural heritage of the Park", This is a landscape of national importance covered by national legislation it is therefore entirely to provide guidance on areas that would be highly sensitive to wind energy development.

No change.

3271 **Ms Imogen Morley, Newport Area Environment Group**

We wish to comment on
The installation, alteration or replacement of solar PV or solar thermal equipment on a dwelling house or a building situated within the curtilage of a dwelling house within a Conservation Area

Officer Response

We apologise for the incorrect wording on this statement and have corrected it to be in line with Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009.

3271 **Ms Imogen Morley, Newport Area Environment Group**

We object to the limitation of 9m2 on permitted development for Class A installations as set out on Page 48 at Table 10 of the Draft SPG for which we find no justification in The Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009 Part 40 Class A as quoted above.

Officer Response

The wording of this statement was incorrect and has been corrected in line with Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009.

3455 **Mr Christopher Jessop**

1.1: Section (a) Biomass power: the quoted output range for "medium scale" is incorrect.

Officer Response

Agree. Amend the Erratum for the Local Development text at 4.148 a) (and the policy text at 1.1 of the Supplementary Planning Guidance) to advise that medium scale proposals are normally under 10MW.

3455 **Mr Christopher Jessop**

1.1: Section (d): This wording implies a prejudice against air source heat pumps: the text must be rewritten. Firstly, some air source heat pumps are no louder than central heating boilers; secondly, there need be no visual impact associated with air source heat pumps. Various manufacturers produce internally-mounted air source heat pumps which only need louvres and/or roof vents for air supply/exhaust.

Officer Response

Insert Erratum in the Local Development Plan reasoned justification at 4.148d) and at 1.1 Section (d) of the Renewable Energy Supplementary Planning Guidance - insert the words 'some types of' before 'air source heat pumps'

The description of the technology has been changed to reflect these points in the SPG.

3455 **Mr Christopher Jessop**

1.4: This statement is invalid and must be corrected. All technologies discussed in this document are types of renewable energy; what crucially makes biomass combustion, for example, qualify as a renewable energy technique is that it should be "Zero net carbon" i.e. carbon emitted by burning biomass is cancelled by the carbon sequestrated during biomass growth.

Officer Response

The text has been changed so that the example given is air source heat pumps – these still produce carbon (from electricity used, assuming that this has been generated through conventional methods) but the quantity of carbon produced is less than that associated with conventional heating'

3455 **Mr Christopher Jessop**

1.7: This statement must be enlarged. Renewable energy technologies are not just concerned with powering homes, offices, etc. HEATING using renewable energy must be given equal importance.

Another crucial benefit of renewable energy technologies in the Park has been overlooked and must be included by adding this text: "Schemes which qualify for FIT payments and/or which earn the operator electricity sales revenue bring money into the Park from outside its economic area: this offsets the general trend of a constant and very large cash outflow from the Park caused by residents and businesses purchasing fossil fuels and/or grid electricity."

Officer Response

Heat has been added to the text.

3455 **Mr Christopher Jessop**

2.1: The list of solar energy technologies is incomplete: a third option is the direct heating of air. This is a serious omission, which must be rectified: Nu-Aire of Caerphilly offer a solar air heating option in their range of domestic and commercial ventilation systems.

Officer Response

Reference to direct heating of air has been added to the text.

3455 **Mr Christopher Jessop**

2.2: Solar heating for swimming pools should not be ignored: whilst it is not a crucial application in terms of delivering an essential service, it offers a very good match between supply of heat and demand for heat, and can displace significant fossil fuel consumption compared with heating swimming pools with gas, oil, or even electric heat pumps.

Officer Response

This is too detailed for this SPG.

3455 **Mr Christopher Jessop**

2.4 & 2.5: The statements undervalue Pembrokeshire's solar energy resource, and must be rewritten with a much more positive slant: as can be seen from figure 2.1, the only British counties which exceed our radiation figure are South Devon and Cornwall.

Officer Response

'average to good' deleted and replace with 'good.'

3455 **Mr Christopher Jessop**

2.8 and 2.12 and 2.13: In these sections various statements and/or stipulations are made about the siting of small-scale solar installations. However, in most cases the installations in question will be permitted development: there is a parallel with skylights, which are also permitted development. Therefore, as with skylights, the Park is not empowered to lay down rules about where and how they should be installed; however, it would be quite acceptable and understandable for the document to include recommendations prefaced by "ideally.", or "preferably."

Officer Response

Text has been edited to be more 'advisory'.

3455 **Mr Christopher Jessop**

2.11: "Solar PV has relatively low power generation." This statement is meaningless: relative to what?

Officer Response

This text has been deleted.

3455 **Mr Christopher Jessop**

2.11: "The appropriate location for this technology will be within the built environment." This statement is wrong: it ignores the economic diversification potential for owners of small plots of land such as smallholders, who could significantly boost their income by investing in PV, even

with only a relatively small land area being available.

Officer Response

This is covered under the section on Field-scale photovoltaics.

3455 **Mr Christopher Jessop**

3.2: "moderate levels of solar radiation." Again, relative to the rest of the UK, this is a serious understatement. Text must be rewritten.

Officer Response

Text now reads ‘good levels of solar radiation, relative to the UK as a whole’.

3455 **Mr Christopher Jessop**

3.4: Delete "rotated" and insert "tilted".

Officer Response

Replaced with ‘rotated and/or tilted’.

3455 **Mr Christopher Jessop**

3.22 “Solar PV development should not be located in areas within areas which are designated locally or nationally for their cultural heritage value.”

This is a vague and undefinable "catch-all", and should be deleted.

Officer Response

Text changed to: ‘Avoid adversely affecting areas of semi-natural habitat, and designated historic and archaeological sites directly or indirectly’.

3455 **Mr Christopher Jessop**

3.26: "Ensure new buildings constructed as part of a solar PV development match the local vernacular." This is imposing an unnecessary and unfair burden on a solar PV developer: such conditions are not imposed on agricultural buildings or on non-residential utility structures of similar classifications such as water and sewage pump houses.

Officer Response

This forms part of a checklist of key points to be taken into account in the siting of photovoltaics.

Text changed to: ‘Suitable materials (such as cladding of buildings) and finish colours should be used that integrate any new buildings with their surroundings. Utilise existing farm buildings to house inverters wherever possible’

3455 **Mr Christopher Jessop**

3.26: Delete "Ensure that any wind energy development." - This section is discussing solar PV technology only.

Officer Response

Changed

3455 **Mr Christopher Jessop**

4.4:"generating in the region of 10 kW" - Biogas production is normally measured in cubic metres per day: what is being measured here?
- Ditto ".up to 2 MW".

Officer Response

Information has been provided in this format to provide a comparator with other technologies described

3455 **Mr Christopher Jessop**

4.9: Add to list: "food processing waste".

Officer Response

Food waste is currently by Pembrokeshire County Council and composted. The collection is intended to cover 100% of the County area. The Regional Waste Plan does not permit waste to be treated within the National Park which has been generated from areas outside it. Such an enterprise would be necessarily be small in scale, serving areas of the National Park and in competition with the existing scheme maintained by Pembrokeshire County Council. There is no need to add food processing waste to this list under these circumstances.

3455 **Mr Christopher Jessop**

4.11: "power capacity": does this statement refer to the electrical rating of anaerobic digestion CHP?

Officer Response

Changed to read: power capacity (the amount of energy the installation could harness). This definition is taken from DECC.

3455 **Mr Christopher Jessop**

4.14: With reference to larger digesters: a larger digester coupled to a CHP generator and/or biogas boiler could generate heat for use in local housing.

Officer Response

This has been added to the text (para 4.11).

3455 **Mr Christopher Jessop**

4.15: Three crucial factors have been overlooked in this list:
- the control of odours from feedstock being delivered;
- the noise output of CHP generators;
- the potential for visible plumes from chimneys.

Officer Response

This has been added to the siting checklist.

3455 **Mr Christopher Jessop**

5.12: Three crucial factors have been overlooked in this list:
- particulate emissions from combustion processes;
- the noise output of CHP generators;
- the potential for visible plumes from chimneys.

Officer Response

This has been added to the siting checklist.

3455 **Mr Christopher Jessop**

9.7: The following text should be added: "Compared with most other British counties, Pembrokeshire has a good to very good wind energy resource. In consequence, for many landowners and/or rural domestic property owners within the National Park, wind power will give a far better return on capital investment compared to any other renewable energy technology". This would be back up what the document is trying to say at the opening of 2.11.

Officer Response

The National Park Authority is required to promote all forms of renewable energy within the National Park. The SPG is there to provide planning guidance.

3455 **Mr Christopher Jessop**

9.18 & Figure 9.3
- It is unwise to have a landscape sensitivity classification of "moderate-high". Such a non-committal expression is open to misinterpretation (in either direction). Recommendation: replace "moderate-high" by "significant".

Officer Response

This is a standard classification used in landscape sensitivity studies. It is judging the sensitivity of the landscape to the specified renewable technology.

3455 **Mr Christopher Jessop**

9.18, generally: A large number of guidelines have been stipulated; as there is no indication to the contrary, the implication is that all of these guidelines would be applied to any application for any wind turbine of any size within the National Park. This imposes a large burden upon anyone who is contemplating what the National Park defines as a small-scale wind turbine, i.e. a typical installation for a family farm or smallholding. The National Park seems reasonably tolerant of other large structures associated with modern agriculture or smallholdings, such as polytunnels, silos, tractor sheds and cattle sheds; is it therefore inappropriate to impose so many potentially difficult conditions upon small wind turbine developments which must gradually become a standard feature of modern agricultural practice in British locations which have a good wind resource. The attitude is inconsistent, anyway: in a part of the world which has relatively low tree cover, the conspicuous poles and overhead lines for the electricity grid and telephone system are accepted as a necessary feature of the contemporary landscape - so should small scale wind turbines.

Officer Response

The information is provided in the form of a checklist (this has been made clear in the revised text). The relevance of the individual items on the checklist will very much depend on the nature, location and scale of the proposals.

3455 Mr Christopher Jessop

Also 9.18
- The final guideline point given is "Seek opportunities to achieve wider landscape management objectives identified in the Pembrokeshire Coast National Park Landscape Character Assessment Study in association with any proposed development".

This seems to imply some kind of Section 106 agreement: whilst it might be appropriate (assuming it is legal) for multiple installations of medium or large wind turbines, it is an unreasonable objective when a landowner is simply seeking to erect a small-scale wind turbine as part of their plans for economic or agricultural diversification. A minimum scheme size must be stipulated, such that this clause shall only apply to larger wind power developments.

Officer Response

This section has been deleted as landscape issues will be addressed under Policy 15 of the Plan.

3457 Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park

The Friends are certainly not attracted by the concept of a renewable energy screen of wind turbines within or in close proximity to a National Park and strongly oppose anything that is likely to dilute the Sandford principle. Two wrongs don't make a right!

Officer Response

The adopted LDP (paragraph 4.148, page 58) sets out the potential for renewables in the National Park based on the renewable energy assessment. In terms of wind energy, 4.148 (f) states that:
There is potential for small scale proposals (10kW-50kW) and to a lesser degree medium scale proposals (50kW-330kW). Finally, there are extremely limited opportunities for larger scale proposals (>330kW – 3MW).

In the landscape sensitivity Annex the statement in landscape character areas 6, 7, 11 will be changed to read "There may be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below"

3457 Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park

There are much more exciting forms of technology under development, such as tidal energy, which we believe would be far more appropriate for a Coastal National Park. Indeed, such technology has none of the audio/visual disadvantages associated with wind turbines and is likely to prove to be more efficient, cheaper to install and virtually invisible. Indeed we made this point strongly to the County Council very recently when we urged them to defer the application for gigantic intrusive wind turbines at Wear Point.

Officer Response

The SPG is concerned with those on-shore technologies that are subject to planning. All forms of offshore renewable energy generation are covered by different regulations. The scope of this SPG will be set out in the introduction.

3457 Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park

We have serious concerns about the implications of “clusters” and the consequential cumulative effects. Whilst the plan suggests that a “key concern will be to ensure that the sequential development of small-scale turbines does not have a cumulative impact on the landscape of the National Park”, we also note that it highlights the concept that farmers may be encouraged to become involved in wind crofting of up to 5 small scale turbines. The Friends are very unhappy at the possibility of any expansion of the policy of small scale, ‘one-off’, isolated wind turbines within or close to the boundaries of the Park, let alone clusters of two or three which we consider would be the ‘thin end of the wedge’.

Officer Response

Although the original Renewable Assessment considered wind crofting no mention is made of this in the SPG. In the SPG cluster sizes will be reduced to 2-3 small turbines.

All of the wind assessments have been reviewed and reference removed to clusters of wind turbines from the following LCAs based on their levels of sensitivity or landscape scale:

- LCA 7: Angle Peninsula
- LCA 8: Freshwater East / Brownslade Burrows
- LCA 13: Brandy Brook

All LCAs where clusters are mentioned include the following guidance to address cumulative issues:

‘‘The National Park Authority should ensure that any wind turbine
development located within the protected landscape does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park.’

3457 **Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park**

We retain a concern that even our existing stance [generally supporting the principle of individual, small scale, ‘one-off’, isolated turbines that are appropriate in relation to the sensitivity of location] could lead to difficulties in preventing sequential development of ‘isolated’, one-off, small-scale turbines so that when viewed from further afield they cease to be isolated and create a cumulative detrimental impact on the landscape of the Park. In this respect we place great faith in the NPA to ensure that in each and every case, approval is appropriate in relation to the sensitivity of location and that the Sandford principle is strictly adhered to.

Officer Response

See previous response.

3457 **Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park**

We consider it somewhat ludicrous, for example, that the iconic site of Strumble Head is not even regarded as “Highly Sensitive” and this, a site where the undergrounding of cables was only recently completed at the expense of a million pounds. We question whether, had the development of small-scale wind turbines taken place first, the energy company involved would have incurred this expense at all. We strongly urge, therefore, that all of the coastal zones are re-visited in order to re-designate the vast majority of them more appropriately

Officer Response

The Strumble Head landscape character area (LCA 21) extends well inland from Strumble Head

itself and therefore the current sensitivity rating is considered appropriate given the slightly lesser sensitivity of the inland areas to small scale turbines. However the landscape guidance for this landscape character area is being reinforced to read.

"Do not site turbines (of any size) on Strumble Head or along this distinctive coastline."
"Ensure turbines do not conflict with views to important land mark features, namely the hillforts on Garn Fawr and Garn Fechen, and the lighthouse on Stumble Head"
"Ensure turbines do not affect the undeveloped and characterful skylines of jagged coastal cliffs and rocky hill summits"

3457 **Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park**

We have significant concerns over the zoning of some of the coastal locations, questioning whether it really is appropriate for virtually all of the coast of Britain's only truly coastal National Park to be designated "moderate to high sensitivity" for small scale turbines. The Friends are of the opinion that, since the Pembrokeshire Coast National Park is the only Park where National Park status has been conferred because of the coastline, they would have expected 'high sensitivity' to apply to the vast majority of it, not the other way around. We strongly urge, therefore, that all of the coastal zones are re-visited in order to re-designate the vast majority of them more appropriately.

Officer Response

Paragraph 9.19 includes two general guidance points relating to the coast, as follows:

"Locate any wind energy developments back from the coastal edge so that they do not detract from the relative remoteness, drama and natural character of the coastline"

"Locate wind energy developments (other than those within the curtilage of a private dwelling or associated with a settlement) at least one field back from the coastal edge to maintain its open and exposed character"

All coastal Landscape Character Areas include guidance to avoid siting turbines along the sensitive coastal edge.

"Site turbines away from the coastal edge to protect views, and the important relationship between land and sea".

For those with specific coastal features (e.g. prominent headlands or important coastal views), further guidance is given to guide development away from these locations – e.g. for LCA 9 Marloes:

Do not locate turbines on St Ann's Head, or where they may affect the sense of relative remoteness at St Ann's Head.
Consider views to and from the offshore islands, St Bride's Bay and the Angle Peninsular.
Ensure turbines do not compete with, or detract from, lighthouses as landmarks on the skyline.

3457 **Mrs Jill Eaton-Evans/Mr P Heard, Friends of Pembrokeshire National Park**

Finally, we wish to make it very clear that our position with regard to protected landscape areas is no different for protected coastal and marine areas. We also stress that where any proposals entail new or strengthened grid infrastructures, including new transmission lines, within or close

to a National Park, every effort should be made to underground cables wherever possible. If this is not feasible then there should be a strong presumption against the development in the same way as a housing development may be prevented because the sewerage system would be inadequate.

Officer Response

Policy 55 provides the Authority's policy context for consider power lines and will also be used for commenting on proposals outside normal planning control. The overall aim of the policy is to provide for the least obtrusive and damaging route which does not adversely effect the special qualities of the National Park.

4125 **Ms Vicky Moller, Cilgwyn Community Group**

While it is good to see some recognition of the importance of transferring to renewable energy, the draft SPG lacks clarity in a number of places:

It frequently suggests that renewables will be considered favourably, provided they do not negatively impact the national park.

This allows them to be rejected, as negative impacts can be interpreted by planning officers as they choose, and can include anything visible from anywhere, including the sky.

This is really missing the fundamental change we need, which is to look on how we obtain our essential resources – food, energy etc as part of the special character of a living sustainable countryside, something to foster in a National Park. The special character of these areas was formed largely by the active mutually beneficial relationship between humans and the natural environment that surrounded them. Of course there are also areas which were not shaped by humans, such as the sea foreshore. But living with nature rather than to its destruction must be at the heart of the vibrant beautiful living countryside which can evolve with our technical and social evolution. Renewable energy has a place in this evolution.

The SPG points out that some areas are more 'sensitive' than others, and therefore unsuited to renewable energy that could be seen. This approach fails to recognise that everyone has a right to live without damage to the environment, and therefore a right to transfer from fossil fuel to renewables wherever they live.

That does not mean they have a right to consume the profligate and unsustainable quantity of energy we have got used to. It does not mean that how the landscape looks is unimportant. It is important to see renewables in their setting, proportionate to the other uses of the land such as agriculture, forestry and tourism,

There is also a presumption running through the SPG that renewables should be sited to be as invisible as practically possible. This approach can be challenged as it is based on the idea that how things work should be hidden away, as somehow indecent. There is much to be said for showing how nature and humans support each other, rather than hiding the relationship as much as possible. However this is a matter of taste too, many people think works of engineering are intrinsically ugly in a natural landscape.

This leads to another presumption expressed in the SPG, that the 'special character' of the National Park can be defined by the writers of the National Park policy documents. Obviously different people will highlight different aspects of the special qualities, no one organisation has a

monopoly of ability to identify and value them.

There are a number of blurred areas. One is the wording around solar panels on domestic buildings. These, within clear parameters, are permitted development not requiring planning permission. The SPG goes on to detail guidance for siting for solar panels. If this is meant as a form of advice rather than planning guidance, it should make this clear, otherwise it looks as if the Authority is ignoring the PDO on solar panels.

Planning process: Requiring an EIA, or scoping for one, puts renewable energy beyond the reach of people of small financial means. It is therefore inappropriate to allow the authority to require EIAs for small 'pico' renewables of eg under 10 kWh. To do so can be seen as an indirect way to prevent their use in the Park.

I do appreciate that this SPG is intended as a cautions welcoming of more environment friendly energy in the Park, but it seems to read as a 'give it with one hand and take it away with the other' approach, allowing renewable energy to be as hard as ever to access in the areas most dedicated to the protection of the environment, the very areas where environmentally benign energy is most appropriate.

Officer Response

The document provides guidance for Officers in making reasoned recommendations on proposals. It does allow for proposals to be rejected but also to be approved. This framework acknowledges the National Park's primary purpose and that some locations are more sensitive than others. To ignore these sensitivities would be to contrary to the Environment Act. In terms of the National Park's character the Authority's landscape character assessment which underpins the Renewable Energy Assessment is the product of a series of studies by experts along with local stakeholder input. The character assessment itself which underpins the assessment has also been subject to consultation.

4125 Ms Vicky Moller, Cilgwyn Community Group

There are a number of blurred areas. One is the wording around solar panels on domestic buildings. These, within clear parameters, are permitted development not requiring planning permission. The SPG goes on to detail guidance for siting for solar panels. If this is meant as a form of advice rather than planning guidance, it should make this clear, otherwise it looks as if the Authority is ignoring the PDO on solar panels.

Officer Response

The wording of this statement was incorrect and has been corrected in line with Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009.

4125 Ms Vicky Moller, Cilgwyn Community Group

One technically questionable point is to say that biomass is low carbon rather than zero carbon. In its operation, wood harvested sustainably only releases the carbon it captured when it grew, so is zero carbon or neutral. Arguably it is better than this as young trees are said to capture more carbon than full grown trees, so a faster cycle of growth will improve carbon capture rates over those of an unharvested mature wood with little growth.

Officer Response

In a perfect world, biomass might be genuinely zero carbon, especially if it is grown, harvested and burned in a small area. However in practice, a significant amount of energy may be used in the process of producing and delivering the biomass, and much of this energy comes from fossil fuels (whether it is diesel for lorries moving the biomass or products around, or electricity in a sawmill or pellet plant). If fertilisers or pesticides are used on young biomass crops, these too usually have a significant carbon footprint. The emissions associated with its production are often referred to as Scope 3 emissions (where Scope 1 are those attributable to combustion, net of carbon captured in the growth phase and cope 2 are typically imported electricity, which is not relevant to biomass).

Defra publish annual emissions tables as part of their GHG Conversion Factors for Company Reporting. Annex 9 covers biomass – it's on page 39 in the 2011 edition. They show no direct Scope 1 emissions, but small emissions attributable to Scope 3. Essentially these total around 0.02kgCO2/kWh for wood logs and chop, but 0.04 for pellets. This compares well with figures of around 0.224 for natural gas, 0.308 for domestic heating oil and 0.415 for house coal on an equivalent basis (All scopes; Net CV). However, it should be said that much of the time we tend to quote the Scope 1 Gross CV figure for competing fuels, which is typically about 20% lower.

You are quite right that although mature forest stands have a high level of sequestered carbon, they capture little additional carbon, if any. However given that it can take many years to get back the total level of carbon in mature trees, you could argue that we should also account for potentially "lost" carbon when biomass is grown on a short period rotation.

In recent years there has also been some study of carbon sequestered in soils. Mature woodland may not be adding to the carbon stock in the trees, but in deciduous woodlands, the leaves may add a significant extra level of carbon to the soil each year. Even undisturbed grassland (or urban parks or gardens) can trap a large mass of carbon, but once soil passes under cultivation, much of this can be released back into the atmosphere.

In conclusion the additional inputs associated with commercial biomass production(growing inputs, transportation and processing, which are likely to be fossil fuel derived/powered) means that anything beyond cutting wood from your back garden woodland and using it in your wood burner, isn't likely to be truly carbon neutral.

4125 **Ms Vicky Moller, Cilgwyn Community Group**

Planning process: Requiring an EIA, or scoping for one, puts renewable energy beyond the reach of people of small financial means. It is therefore inappropriate to allow the authority to require EIAs for small 'pico' renewables of e.g. under 10 kWh. To do so can be seen as an indirect way to prevent their use in the Park.

Officer Response

The requirements set out in the guidance are Welsh Government requirements and reflect the need to consider if a proposal is likely to give rise to significant environmental effects. It is particularly important to consider this issue within a National Park which is classed as a 'sensitive area' under the regulations.

4182 **Mr James Hooker, Welsh Government**

Sent to LUC.

In the interests of ensuring that the provisions in Table 10.1 are consistent with the wording of Part 40 (Wales) of the General Permitted Development Order 1995 (as amended it is suggested that the track changes shown on the attached document are incorporated into the final version of the SPG.
SEE TABLE (SEPARATE DOCUENT)
Currently Part 40 (Wales) of the GDPO does allow solar panels (up to 100% coverage) to be installed on roofs of a dwelling or a building within the curtilage of the dwelling (even if the front a highway) in Conservation Areas. This is conditional upon them not protruding more that 200mm from the plane of the roof or the highest part of the solar equipment would be higher than the highest part of the roof (excluding chimneys).

Officer Response

Amended as suggested.

Shopfronts Design

2373 Ms Rose Freeman, The Theatres Trust

The Theatres Trust is the National Advisory Public Body for Theatres. The Theatres Trust Act 1976 states that 'The Theatres Trust exists to promote the better protection of theatres.' It currently delivers statutory planning advice on theatre buildings and theatre use through The Town & Country Planning (General Development Procedure) Order 1995, Article 10, Para (v) that requires the Trust to be consulted on planning applications which include 'development involving any land on which there is a theatre.'

Due to the specific nature of the Trust's remit we are concerned with the protection and promotion of theatres and as these consultations are not directly relevant to the Trust's work, we have no comments to make but look forward to being consulted on further planning policy documents in due course.

Officer Response

Comment noted. No change recommended.

2911 Ms Sue Houghton, St Dogmaels Community Council

St Dogmaels Community Council fully supports the proposed SPG on Shopfront Designs.

Officer Response

Support welcomed. No change recommended.

3221 Mr Alun Hunt, Pembrokeshire Local Access Group

I would like to make the following observations regarding the proposed SPG for Shopfront Design Consultation Draft 2011:

8.12
Entrance doors should have a door opening width of not less than 800mm.
Automatic doors will not normally be appropriate in historic or listed buildings as they may detract from their character.

Comments
a) Building Regulations Part M usually requires a new front entrance to have a clear opening width of at least 1000mm
b) The use of an automated door can help when there is insufficient space to provide a level platform in front of the doorway when a ramped or sloping approach is necessary.
c) On a sloping site it is better to position the door to one side so as to gain the benefit of the slope rather than a centrally located door.

13.1
New shopfronts should accommodate the needs of disabled people and the elderly, partially sighted and/or pushchairs, buggies. Dimensions should comply with the Disabled Persons Act 1991 and the British Standards Institution Code of Practice for Access to Buildings for the Disabled.

Comments
a) As far as I know The Disabled Persons Act 1991 does not exist (except in Australia) and the

Disability Discrimination Acts 1995/2005 do not set standards or dimensions.
B) Dimensions should comply with:
a. Building Regulations Approved Document M, gives minimum requirements and/or
b. BS 8300:2009+A1:2010 Design of buildings and their approaches to meet the needs of disabled people – Code of practice, gives better advice which is more current. Part M is based on and refers to BS8300.

Officer Response

8.12a Amend first sentence, adding "and a clear opening of at least 1000mm where the historic character of the building is not compromised". This proposed amendment will bring the document in line with current building regulations and the text should be amended accordingly.

8.12b No change recommended: the existing text would not preclude automatic doors in exceptional circumstances.

8.12c Amend text by adding extra sentence "For new shops on a sloping site, it is better to site the door to one side, so as to gain the benefit of the gradient". This is a practical comment the inclusion of which would provide useful advice.

13.1 Delete second sentence and substitute "Dimensions should comply with relevant building regulations and codes of practice". The proposed amendment would align the document with current regulations and practice concerning access provisions.

3471 **Ms Helen Lewis, Department of Economy and Transport (WAG)**

I refer to your consultation dated 15 April 2011 and would advise that the Welsh Government (Roads and Projects) as Highway Authority for the trunk roads have no objections or comments in respect of this proposal.

Officer Response

Response noted. No amendment is requested to the SPG.

3511 **Mr Harry F Gardiner, Tenby Civic Society**

The document is welcome; we have been worried by several poor shop front proposals and designs in Tenby and the number of signs and boards put up with no planning application. We include suggestions to improve the SPG for details where we have encountered problems in Tenby.

We attach a copy of a report from our last newsletter well received by our Members, that covered successful shop signage in Tenby; your document could communicate better with supporting images illustrating varieties of good and bad practice.

General Issues
1. It seems clear from Tenby, that poor results follow when shop front development proceeds in a rush before planning permission is obtained; the document should take a stronger position on this than in the Enforcement SPG priorities for signage. It could be helpful to advise estate agents of the policy to ensure they make clients are aware of reasonable procedures, especially those clients in a hurry!

2. In Tenby many local businesses make a better job of good shop front design than national

chains, who also can offend on point 1 above.

3. When the new shop design policy and enforcement policy come into effect there will be a substantial number of commercial and retail signs and notice boards in particular that should or could be enforced against; businesses could be warned and given a moratorium period to produce a better proposal, otherwise there could be a strong unproductive local reaction like that produced by the current inflexible new regime of parking enforcement. Start-up premises would also benefit from a pause. Unauthorised signage that is found satisfactory, need not be enforced against or an application required.

Specific Issues

4. In Conservation Areas; large flat fascia panels (often by national retail chains) should be made less prominent, include decorative detail/mouldings along top & bottom as well an architrave and cornice detail (SPG section 2.1); normal late twentieth century retail practice is not appropriate in conservation areas - a string of such national retail chain signs mar Tenby's High Street, some with recent permissions. We suggest additions to section 8, and that 8.16 should be amended so fascia depth was not normally more than one fifth of shop front height, not one quarter as proposed.

5. Signage lettering in Conservation Areas should be relatively slim, or elegant in character to fit the detail and delicacy of Victorian frontages.

6. Design principle 2.1 should be amended; "and shopfronts and signage" inserted after 'surrounding area'. (Tenby's refused sign at Subway is a case in point).

7. Para 4.3 sentence 2 change 'its' to 'they'. In para 5.4 add "so for example, modern signage lettering can be of elegant design and proportions, rather than large and brash".

8. Para 7.1; small paned windows; there are records of several shops having altered their small paned windows to larger ones - T W Hordley's 'Reminiscences' 1934. Norris's drawings in early 19th century Tenby also show small paned frontage windows.

9. Para 8.1; we disagree that "matt finish fascia boards are preferable"; there are many very acceptable gloss finish boards in Tenby, so no need to change there.

10. Signage (fascia boards, menus, pub TV notices etc) of plastic letters on white or cream plastic boards are almost always the worst signs in Tenby, not suiting the wall materials they are fixed on, and are particularly poor on Conservation Areas.

11. We disagree with para 9.3 sentence 2; "bulky plastic lettering or logos are not acceptable"; this is unclear and needs to be amended / qualified. We see lots of successful shop fascias with moulded individual gold or silver pressed raised (resin or plastic) letters stand out from the fascia surface, eg in Upper Frog Street, Tenby. Even the large serif style letters on Candy's restaurant on High Street fit much better on their gable than the adjoining flat plastic notice panels.

12. An addition to Para 9.4 and 9.5 advising against large posters, adverts, or display material bonded to the inside of shop windows. Can such material not be treated as part of the external structure and therefore form adverts subject to advertising control? Shelving with solid backs fitted against and blocking shop windows should also be restricted as a clear material blocking off of shop windows, and changing unduly the visual character of shopping streets. Both points apply

especially to Conservation Areas.

13. 'A' boards and detachable wall boards can clutter streets but are preferable to fixed boards of poor quality, of which there are many. Perhaps 'A' boards could be enforced against where pavements are only 2 metres or less wide. Menu and notice boards need to fit the scale and colours of the existing frontage, whether fixed or moveable.

14. Para 11.1 is welcome, but could include that shop front colour schemes and materials are best combined with a scheme for the whole frontage.

15. Para 12.3 seems restrictive; pull down exterior blinds were common in Victorian times: some shelter for shoppers helps compete with interior Malls!

16. Roller blinds; we suggest "or in Conservation Areas" is added to sentence 2.

Again our thanks and appreciation for the production and attention to important details in this joint consultation document.

Please separate sheet for pictures

Officer Response

General point re. illustrations of good and bad practice noted. Consideration will be given to illustrating the document with sketch illustrations.

1. This point is concerned with promoting the SPG rather than its content. No change recommended.

2. General observation noted. No change recommended.

3. These comments relate to enforcement procedures rather than content. No change to the document recommended.

4. This comment accurately reflects the traditional proportion of shopfronts. Amend 8.16 (second sentence) to 'Fascia depth should always be around a fifth of the shopfront height…..'.

5.This comment provides useful general advice on lettering. Add extra sentence to 9.3 ' Lettering on historic shopfronts or within Conservation Areas should be appropriately slim and elegant'

6. This is a valid comment: signage to shopfronts has equal potential for having a major impact on a places character. Paragraph 2.1. to be amended to 'Good design is good business: shopfronts and signage have a…'

7. 4.3 Typographical error noted. For comment concerning lettering, see point 4 above. Amend 4.3 (second sentence) to 'Where they exist….

8. Information on the local evolution of shopfronts welcomed. Amend 7.1 be adding a final sentence 'In some cases, the glazing bars of the old windows were removed'

9. Point noted and reference to matt finish to be deleted. Amend last sentence of 8.19 to 'Traditional fascia boards of timber or enamelled metal are preferable'

10. Detailed observation noted: plastic signage is usually inappropriate within Conservation Areas. Extra sentence to be added to 9.10 'plastic signs with' demountable plastic lettering are not appropriate within the historic built environment.

11. In some cases, it is agreed that individually mounted lettering can look attractive. Replace second sentence of 9.3 with 'In some cases, individually mounted lettering is an acceptable solution, where the provision of a fascia is not possible or desirable'

12. This is a welcome suggestion, providing clean advice on appropriate internal fittings. Add extra sentence to 9.5 'Blocking the inside of a shop window with inward-facing shelving or counters should be avoided'

13 This proposed amendment relates detachable signs to both shopfront and / or building. Add extra sentence to 9.10 'All detachable signs such as menu boards should complement the character of the shopfront and/or host building'

14. The proposed amendment is a useful addition to the text, relating the colour scheme of a shopfront to its host building. Add extra sentence to 11.1 'Colour schemes for shop-fronts should complement the host building'

15. Traditional fabric blinds providing shelter are included within 12.1. The advice contained within 12.3 seems to contradict this slightly: these are often introduced where traditional blinds would be suitable for listed buildings. The deletion of 12.3 is therefore proposed.

16. It is acknowledged that external roller grilles are not generally acceptable within Conservation Areas. Amend bullet 1 of paragraph 14.1 to 'On listed buildings or in Conservation Areas… and bullet 2 to 'In Conservation Areas external roller grilles may be acceptable away from the main shopfront subject to stringent design criteria'.

17 Comments noted. No change recommended.

3617 **Miss Rachael A Bust, The Coal Authority**

Thank you for consulting The Coal Authority on the above.
Having reviewed your document, I confirm that we have no specific comments to make on this document at this stage.

Officer Response

Comment noted. No amendment is requested.

3 NEWPORTAND NEWPORT PARROG S.W.O.T. ANALYSIS

Based on the 'Character Statement' the working group has identified what it feels to be the main

Strengths

Weaknesses

Opportunities

Threats of Newport and the Parrog Conservation Areas

The aim must be to build on strengths and seize opportunities while at the same time converting weaknesses into strengths and threats into opportunities.

This S.W.O.T was developed by the working group and includes many items that strictly fall outside the purpose and spatial scope of the Conservation Area Proposals exercise. This wealth of other material, opportunities etc. (shown by an asterisk in the following schedule) can be pursued through other appropriate channels.

Many of the issues contained within the SWOT analysis are not exclusive to the Conservation Area itself: many relate to the area in general or Pembrokeshire as a whole.

1.0 STRENGTHS

1.1 Location
National Park Conservation Area Designation
Fine Coastal/Estuary Setting and proximity of Coastal Path
Attractive Town, popular tourist destination

1.2 Archaeological, Architectural & Historic significance (see Newport and Newport Parrog Character Statement 2002)
Newport forms the focus of the Newport and Carningli Registered Landscape of Special Historic Interest in Wales'
Evidence of Stone Age habitation; extensive prehistoric remains in surrounding area
Unique Archaeological Site (Iron Age forts)
Conservation area of unique character
40 Listed Buildings and 3 Scheduled Ancient Monuments within Conservation Area
Surrounding area rich in industrial, agricultural and maritime heritage
Strong support for archaeology and history
Un-designated archaeological historic sites and features
Early field systems in surrounding area; abundant local prehistoric evidence of settlement
Christian heritage (3 Chapels, 1 Church)

1.3 Architectural significance
"Planted" Town with medieval grid-pattern layout
Distinctive palette of material and forms
Highly characteristic features and details survive intact
Dominantly C19 streetscape
Maritime Heritage (e.g. Limekilns, sea walls)

1.4 Nature Conservation and biodiversity
Local biodiversity – important habitats (open areas, graveyards, gardens, buildings, walls and spring-fed streams)
National and European Law in place to protect species and habitats whilst undertaking building works (e.g. bats)
Proximity to Carn Ingli Site of Special Scientific Interest (extensive heathland)

1.5 Important National Tourist Destination
Well established tourist trade
Features in county and national tourism marketing
Popular location for both visitors and locals throughout the year
Range of tourist accommodation in area
Range of tourist activities in surrounding area
Important centre for walkers and cyclists (outdoor activities and green tourism)

1.6 Accessibility
Improved road network to Pembrokeshire
National Trail/Public Rights of Way/permissive pathways/bridleways and cycle tracks and quiet lane scheme
Improved wheelchair access throughout town

1.7 Diversity of services and amenities
Availability of jobs in locality
Diversity of small businesses
Vibrant shopping centre
Good range of accommodation in the area (Guest Houses, B&Bs, Self Catering and Caravan Parks)
Remarkable range of shops and services but retaining atmosphere of small market town serving rural hinterland. Services include local pubs, village shop, post office, restaurants/tearooms, chapels, church, community hall, school, soccer field, rugby pitch, skate park, playing fields, Tourist Information Centres/National Park Authority Satellite Office….

13 CONSERVATION AREA BOUNDARY

Under Section 67 of the 1990 Listed Buildings and Conservation Areas Act, the National Park Authority is required to review Conservation Areas from time to time. The Conservation Area Working Group has suggested extending the boundary:-

• to the south to include St Brides Hill and a number of properties along the B4316.

• to the west to include the Old School, Bonvilles Court Colliery buildings and the Incline.

• to the north Coedrath, The Cottage and the railway tunnels and in addition a large area to include Netherwood, St Issells Church and Hean Castle and the open pastures located between the northern boundary of the Whitlow/Castle View estates'.

These suggestions will be considered in closer detail as a separate legislative process and will be subject to full public consultation.

Pembrokeshire Coast National Park Local Development Plan Renewable Energy - Supplementary Planning Guidance

National Park Authority Meeting 12th October 2011

Pembrokeshire Coast National Park Authority

CONTENTS

TABLES

FIGURES

ANNEXES

GLOSSARY

AD – Anaerobic Digestion
AONB – Area of Outstanding Natural Beauty
BREEAM – Building Research Establishment Environmental Assessment Method
CAD – Centralised Anaerobic Digestion
CCHP – Combined cooling heat and power
CCW – Countryside Council for Wales
CHP – Combined heat and power
CIL – Community Infrastructure Levy
CLG – Communities and Local Government
CSH – Code for Sustainable Homes
DECC – Department for Energy and Climate Change
EA – Environment Agency
EIA – Environmental Impact Assessment
FIT – Feed In Tariff
GSHP – Ground Source Heat Pump
IPC – Infrastructure Planning Commission
KWh – Kilowatt hours
LAPC – Local Air Pollution Control
LCA – Landscape Character Area
LDP – Local Development Plan
LPA – Local Planning Authority
LUC – Land Use Consultants
MIPPS – Ministerial Interim Planning Policy Statement
MW - Megawatt
MWh – Megawatt hours
NNR – National Nature Reserve
NPA – National Park Authority
NPS – National Policy Statement
PCNP – Pembrokeshire Coast National Park
PCNPA – Pembrokeshire Coast National Park Authority
PLANED - Pembrokeshire Local Action Network for Enterprise and Development
PPW – Planning Policy Wales
PV – Photovoltaics
ROC – Renewable Obligation Certificate
RHI – Renewables Heat Incentive
SAC – Special Area of Conservation
SDF – Sustainable Development Fund
SEA – Strategic Environmental Assessment
SHW – Solar Hot Water
SPA – Special Protection Area
SPG – Supplementary Planning Guidance
SSSI – Site of Special Scientific Interest
TAN – Technical Advice Note
WAG – Welsh Assembly Government

1 Introduction

1.1 The purpose of the Supplementary Planning Guidance (SPG) is to provide guidance to support the positive implementation of the Pembrokeshire Coast National Park Local Development Plan, Policy 33:

Pembrokeshire Coast National Park Local Development Plan - Policy 33: Renewable Energy

Small scale renewable energy schemes will be considered favourably, subject to there being no over-riding environmental and amenity considerations.
Medium scale schemes also offer some potential and will be permitted subject to the same considerations. Large scale renewable energy schemes will only be permitted where they do not compromise the special qualities* of the National Park. Where there are other renewable energy schemes already in operation in the area, cumulative impacts will be an important consideration.
Onshore connections to off shore renewable energy generators will also be permitted subject to there being no over-riding environmental and amenity considerations.
Developers requiring an undeveloped coastal location for onshore connections to offshore renewable energy installations will need to clearly justify this need in relation to Policy 8i) with the least obtrusive approach to design being taken.

Reasoned justification

The renewable energy policy is supported by a Renewable Energy Assessment, which maps:
a) The technical potential for renewables
b) the potential environmental and socio-economic constraints
c) Taking account of a) and b) the resultant potential opportunities for renewable energy

Guidance is also provided on assessing renewable proposals. Likely contributions for renewable energy and carbon emissions are also set out and have been incorporated in the Monitoring section of the Local Development Plan.

In terms of potential for renewables, the Renewable Energy Assessment advises:
a) On biomass heat/power installations small scale (100kW – 300kW) and medium scale(less than10MW) proposals are more likely to be appropriate
b) Similarly small scale anaerobic digestion plants within a complex of buildings are most likely to be acceptable for appropriate wastes (10kW).
c) The only realistic option for hydro power is micro schemes (<100kW).
d) The potential for ground and water source heat pumps exists throughout the Park area with the exception of some types of air source heat pumps where there will be locational restrictions due to noise and visual impact.
e) There is very significant potential for the future development of solar hot water in the National Park.
f) On wind energy developments: There is potential for small scale proposals (10kW-50kW) and to a lesser degree medium scale proposals (50kW-330kW). Finally, there are extremely limited opportunities for larger scale proposals (>330kW – 3MW).
There is also potential for offshore renewable energy developments which will have landward implications. As an exception to Policy 8i) the National Park Authority accepts that technically feasible routes for onshore connections may not be available only on the developed coast.
Innovative design solutions can often overcome the adverse impacts of normally incongruous development in such a sensitive landscape. Consideration of environmental impacts will include designated sites, such as Natura 2000 sites and undesignated sites.

Deleted: - 40MW

* See para 1.10 below.

1.2 This SPG draws heavily on the study commissioned by the National Park Authority for the *Development of a Renewable Energy Assessment and Target Information for the Pembrokeshire Coast National Park* and *Landscape Sensitivity Assessment for Renewables in the Pembrokeshire Coast National Park* (2008)[1] that informed the Local Development Plan. In particular, this study considered the impacts of renewable energy developments on the special qualities of the National Park with important elements of guidance. This guidance is repeated in this SPG.

THE ROLE OF RENEWABLE ENERGY

1.3 Renewable energy refers to energy flows that occur naturally and continuously in the environment, such as energy from the wind or sun. These sources are not depleted by being used.

1.4 The term renewable energy is commonly used to describe both 'renewable' energy and 'low carbon' technologies. Whilst 'renewable energy' technologies (such as wind and solar energy) do not create carbon emissions during energy generation, 'low- carbon' energy technologies (such as air source heat pumps) have associated carbon emissions (in this case from the use of electricity to drive the motor), albeit much lower than that associated with conventional energy generation.

Deleted: (such as biomass and anaerobic digestion) have associated carbon emissions,

1.5 For the purpose of this SPG, the term 'renewable energy' will be used to refer to renewable and low-carbon energy technologies.

1.6 Renewable energy offers an alternative to energy generation using fossil fuels. The environmental benefits of renewable energy primarily link to reducing carbon dioxide (CO_2) emissions.

1.7 In addition to powering and heating homes, buildings and businesses, renewable energy can bring social and economic benefits through job creation in the manufacturing, construction and maintenance industries. Renewable energy schemes can support rural diversification and educational opportunities, and community-owned renewable energy projects can provide incentives and ownership, as well as promoting self-sufficiency.

Deleted: Renewable energy schemes can support rural diversification, community-owned renewable energy projects, and can provide educational opportunities.

1.8 Careful consideration also needs to be given to likely adverse effects. Renewable energy schemes should minimise any environmental, social, resource and economic impacts through careful site selection, good design, construction and other measures that reflects local circumstances. These are 'material planning considerations' that will need to be addressed on a site-by-site basis. This is particularly important in National Parks, where renewable energy installations should not adversely affect their special qualities.

National Parks and special qualities

1.9 National Parks have been designated to conserve their natural beauty, wildlife and cultural heritage. It remains a central objective to maintain the integrity and quality of the landscape within National Parks. It follows that development proposals should not adversely affect the special qualities of the National Parks.

[1] Land Use Consultants for Pembrokeshire Coast National Park Authority (2008) *Development of a Renewable Energy Assessment and Target Information for the Pembrokeshire Coast National Park* http://www.pembrokeshirecoast.org.uk/default.asp?PID=240

The Welsh Assembly Government's national policy on National Parks states the following:
The Welsh National Parks are protected landscapes of international importance which capture much of what is distinct and special about rural Wales, environmentally and culturally... They are places where sustainable development is promoted for the benefit of the environment, the economy and for Park communities. They are places that experiment with new approaches in sustainable development and environmental conservation, providing exemplars of best practice for wider Wales, and helping to shape and lead future rural policy and practice.

1.10 The special qualities are those characteristics and features of a National Park that individually or in combination contribute to making the National Park unique. The special qualities of Pembrokeshire Coast National Park are outlined in the Pembrokeshire Coast Landscape Character Assessment Study[2] and in the Pembrokeshire Coast National Park Local Development Plan[3] and are as follows:

The special qualities of Pembrokeshire Coast National Park

- Coastal splendour
- Diverse geology
- Diversity of landscape
- Distinctive settlement character
- Rich historic environment
- Cultural heritage Richness of habitats and biodiversity
- Islands
- Accessibility
- Space to breathe
- Remoteness, tranquillity and wildness
- The diversity of experiences and combination of individual qualities

1.11 The priorities for protecting these special qualities are outlined in Policy 8 of the Pembrokeshire Coast National Park Local Development Plan:

[2] Pembrokeshire Coast National Park Authority (2009) Pembrokeshire Coast Landscape Character Assessment Study. This assessment has been published as draft Supplementary Panning Guidance to the Pembrokeshire Coast Local Development Plan (2010). Public consultation ending April 27th 2011.
[3] Pembrokeshire Coast National Park Authority (September 2010) Local Development Plan. pgs 99-100

Pembrokeshire Coast National Park Local Development Plan:

Policy 8: Special Qualities

The special qualities of the Pembrokeshire Coast National Park will be protected and enhanced. The priorities will be to ensure that:

a) The sense of remoteness and tranquillity is not lost and is wherever possible enhanced.

b) The identity and character of towns and villages is not lost through coalescence and ribboning of development or through the poor design and layout of development. The identification of Green Wedges will assist in achieving this priority.

c) The pattern and diversity of the landscape is protected and enhanced.

d) The historic environment is protected and where possible enhanced.

e) Development restores or wherever possible enhances the National Park's ecosystems. The protection of links between sites or the creation of links where sites have become isolated is of particular importance.

f) Development which would damage or destroy Geological Conservation Review sites or any other important geological resource is not permitted.

g) Local biodiversity action plan species and habitats are protected for their amenity, landscape and biodiversity value.

h) The Welsh language remains an important component in the social, cultural and economic life of many communities in the Park.

i) Development of the undeveloped coast is avoided and sites within stretches of the developed coast are protected for uses that need a coastal location.

1.12 The National Park Authorities of Wales have prepared Guidance for Sustainable Design in the National Parks of Wales[4]. This includes useful design guidance for renewable energy, to which developers and applicants should refer. This guidance is, reflected in the technology-specific guidance that follows.

POLICY CONTEXT FOR RENEWABLE ENERGY IN PEMBROKESHIRE COAST NATIONAL PARK

1.13 The key policy drivers for renewable and low carbon energy developments in Wales are as follows:

National policy

Renewable Energy (General)

1.14 The UK has signed up to the **EU Renewable Energy Directive 2009** and agreed to legally binding targets of 15% of energy from renewable sources by 2020. The **UK Renewable Energy Strategy (2009)** sets out the path for the UK to meet this target.

1.15 The **Energy Act (2008)** updated legislation on energy, including strengthening the **Renewables Obligation** to promote renewable and low-carbon energy options. The Energy Act enabled the introduction of the

[4] Beacons National Park Authority, Pembrokeshire Coast National Park Authority, and Snowdonia National Park Authority (2009) Guidance for Sustainable Design in the National Parks of Wales. This guidance is being refreshed under the Local Development Plan. Public consultation ending April 27th 2011.

Feed in Tariff, which provides financial support from Government for low-carbon electricity generation from projects of up to 5 megawatts (MW) (See **Section 11** for more information on funding). To complement the Feed In Tariff, the **Renewable Heat Incentive** was launched in March 2011, and will provide similar guaranteed payment for heat generated through renewable and low carbon heat technologies (See **Section 11** for details).

1.16 In addition to the Energy Act, the **Climate Change Act** was introduced in 2008. This legislation is a key driver for a UK transition to a low carbon economy, and aims to demonstrate the UK's international leadership in reducing carbon emissions and promoting renewable energy, including a legally binding target to reduce greenhouse gas emissions by 80% on 1990 levels by 2050.

1.17 As outlined in the Planning Act (2008), the **National Policy Statement on Energy (2011)**[5] and the **National Policy Statement on Renewable Energy Infrastructure (2011)**[6], provide a definition of projects which are considered to be nationally significant renewable energy infrastructure, and the prerequisites of such projects.

1.18 The **National Renewable Energy Action Plan (2010)**[7], as established by the Renewable Energy Directive 2009/28/EC, proposes measures to enable the UK to meet its 2020 greenhouse gas reduction target.

1.19 The **Energy Strategy for Wales (2003)** established specific renewable electricity production targets for Wales of 4TWh per annum by 2010 and 7TWh by 2020. In March 2010, the Assembly Government published the '**A Low Carbon Revolution: Wales Energy Policy Statement'** which sets out the sustainable development framework for the acceleration in Wales of the transition to an efficient low carbon based economy[8].

1.20 The land use planning policies of the Welsh Government are set out in **Planning Policy Wales (PPW) Edition 4 (2011)**.[9] PPW highlights that 'Local planning authorities should plan positively for all forms of renewable and low energy development using up to date and appropriate evidence.' This includes promoting the generation and use of energy from renewable sources and energy efficiency, especially as a means of reducing the effects of climate change.

1.21 Planning Policy Wales also usefully defines different scales of renewable energy project by the potential energy and/or heat output (in MW). The latest edition of PPW is supported by **guidance on the planning implications of renewable energy**, which also covers renewable energy in Wales's national parks[10].

1.22 **Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005)** states that Local Planning Authorities should undertake an assessment of the potential of all renewable energy resources, renewable energy

[5] Department of Energy and Climate Change (2011) *National Policy Statement on Energy.*
[6] Department of Energy and Climate Change (2011) *National Policy Statement on Renewable Energy Infrastructure.*
[7] Department of Energy and Climate Change (2010) *National Renewable Energy Action Plan for the United Kingdom*
[8] Welsh Assembly Givernment (2010) *A Low Carbon Revolution: Wales Energy Policy Statement*
[9] Welsh Assembly Government (2011) *Planning Policy Wales* – Edition 4.
[10] Welsh Assembly Government (2011) *Planning Implications of Renewable and Low Carbon Energy*

technologies, energy efficiency and conservation measures and include appropriate policies in local development plans. Pembrokeshire Coast National Park Authority has undertaken such an assessment and it is this assessment that forms the background to this guidance.[11]

1.23 Powers to make **Building Regulations** will pass to the Welsh Assembly Government with effect from 31 December 2011. The Assembly Government has an aspiration to reduce carbon emissions by 3% a year from 2011, enabling an 80% reduction before 2050.

Large-scale Renewable Energy

1.24 The UK Government plans to publish six draft **National Policy Statements** (NPSs) on energy in Spring 2011. The NPSs will guide the planning decisions made by the Infrastructure Planning Commission (IPC) on energy infrastructure, and one of the NPSs 'EN-3' will deal specifically with renewable energy.

1.25 **The Planning Act 2008**[12] sets out the thresholds for nationally significant infrastructure in the energy sector and empowers the IPC to examine applications and make decisions on nationally significant energy developments generating more than 50 MW onshore and 100 MW offshore. This includes generation from fossil fuels, wind, biomass, waste and nuclear. In England and Wales, these NPSs may also be a material consideration in decisions on applications that fall under the Town and Country Planning Act 1990 (as amended). The Infrastructure Planning Commission (IPC) is being replaced by the Major Infrastructure Unit which will operate within the Planning Inspectorate from 2012.

Local policy

1.26 Pembrokeshire Coast National Park Local Development Plan highlights the following key issues which form the priorities of the Pembrokeshire Coast National Park Authority (PCNPA) :

- Special qualities (See page 7);
- Major development, the potential for growth;
- Climate change, sustainable design, flooding, sustainable energy;
- Visitor economy, employment and rural diversification ;
- Affordable housing;
- Community facilities.

1.27 The Local Development Plan includes several policies which relate to renewable energy installations, including:

- **Policy 1: National Park Purposes and Duty** – This policy outlines the need for development within the National Park to be compatible with the purpose of the National Park, which is:

  a) the conservation or enhancement of the natural beauty, wildlife and cultural heritage of the Park, and

[11] Pembrokeshire Coast National Park Authority (2008) *Development of a Renewable Energy Assessment and Target Information for the Pembrokeshire Coast National Park*
[12] Part 3 Planning Act 2008.

b) the public understanding and enjoyment of those qualities.

- **Policy 8: Special Qualities** (listed in paragraph 1.11, above).
- **Policy 33: Renewable Energy** – this policy indicates that small- and medium-scale renewable energy schemes will be considered favourably, subject to there being no over-riding environmental and amenity considerations (see page 7).
- **Policy 47: Low Impact Development Making a Positive Contribution** – this policy indicates that low impact development will be permitted where it makes a positive social, environmental or economic contribution, and where there is no adverse landscape or visual impacts.

2 Small Scale Solar Installations

WHAT ARE SMALL SCALE SOLAR INSTALLATIONS?

2.1 Solar technologies are concerned with capturing energy from the sun. The two most common types of technology, and those considered here are solar hot water (SHW); and solar photovoltaics (PV). There are also emerging systems that heat the air of the building utilising roof mounted collector plates. This section covers small-scale building mounted SHW and solar PV installations, i.e. roof mounted solar panels or other solar panels with an area of less than 9m^2, which are subject to 'permitted development rights' (see paragraph 2.5). Field-scale commercial solar installations (known as 'solar farms') are addressed in **Section 3**.

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2.2 **Solar hot water:** Solar water heating is deployed primarily as a building-mounted or building-integrated technology serving the needs of the building with which it is associated. It involves collecting heat from the sun via highly heat-absorbent collectors. Two main types are common in the UK: flat plate collectors and evacuated tube collectors, the latter being more effective throughout the year but more expensive. In both types, radiation from the sun is collected by an absorber plate in the collector, and is transferred as heat to a liquid, which may be either water, or a special fluid employed to convey the energy to the hot water system using a heat exchanger. A typical solar hot water installation is shown in the image below.

2.3 **Solar Photovoltaics (PV):** Solar Photovoltaics (PV) produce electricity from the light of the sun. Solar PV can either be roof-mounted, building-integrated through the use of solar shingles, solar slates, solar glass laminates or free-standing in modular form.

Insert photo

Solar hot water panel (evacuated tube system)

Insert photo

Retrofit solar PV panel

Insert Photo

Building-integrated solar PV tiles

Technological potential within Pembrokes ıast National Park

2.4 The National Park receives good levels of solar radi ɔmpared to the rest of the UK (**Figure 2.1**). Therefore, in theory:

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- all areas of the National Park have good potent ɔlar energy generation; and
- small-scale solar installations can make a key cc ɔn to meeting renewable energy targets in the National Park.

Insert Figure 2.1: UK solar irradiation - Annual Total kWh/**m^2** banding

Map showing average annual solar radiation on a 30° incline facing due south
Source: Solar Trade Association

KEY PLANNING CONSIDERATIONS

2.5 Small-scale domestic solar PV and solar hot water installations are classified as 'permitted development' under the Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009, provided that the following apply[13]:

- Roof-mounted panels do not protrude more than 200mm when installed.
- Stand-alone panels are not:
  - more than 4 metres in height
  - above a maximum array area of $9m^2$

2.6 Stricter controls are likely to apply if the property is a listed building (i.e. buildings which are identified for their historic or architectural interest), or within a Conservation Area. In order to alter a listed building, 'listed building consent' must be applied for from the Pembrokeshire Coast National Park Authority, in accordance with the Planning (Listed Buildings and Conservation Areas) Act, 1990.

Choosing a suitable site within the National Park

2.7 When determining where to install small scale solar hot water and solar PV systems, the key consideration is maximising exposure to sunlight. It is generally recommended that solar thermal systems and solar PV panels:

- are installed on a south facing roof, or on a flat surface, tilted in a southerly direction at an angle of 30-40 degrees from the horizontal, avoiding the shade cast by nearby tall structures such as buildings and trees – which will reduce its ability to collect energy;
- take account of views from neighbouring properties and other nearby buildings.

Key landscape sensitivities and general guidance for siting small-scale solar installations within the National Park

2.8 Both solar hot water and solar PV units can be used throughout the National Park, principally associated with buildings including agricultural buildings, offering a solution with low landscape impact so long as care is taken to minimise to an acceptable level the visibility of the units . Both technologies can be retrofitted on the roof of existing buildings using roof-mounted panels or integrated into the design of new buildings, such as through the use of PV roof shingles (see images following paragraph 2.3).

2.9 Historic buildings, listed buildings and those located in building Conservation Areas are likely to be particularly sensitive to small scale solar installations). Retrofitted roof-mounted solar units on buildings can sometimes have a 'modernising' effect on their character and appearance, particularly when they are located on the principal elevation of a property. It is therefore beneficial for solar panels to:

- match other roof materials;

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Deleted: Consideration should be given to:

[13] Welsh Assembly Government (August 2009) Domestic Micro-generation Permitted Development: A Guide for Householders

- lie be flush with the roof and be mounted at the same angle to minimise contrast;
- be mounted on a side or rear roof elevation where they are likely to be less visible in the case of retrofitted panels, or incorporated as a garden feature, especially in the case of older buildings;
- be located and at a suitable angle to maximize the capture of the sun's energy.

In this way solar technologies can help:

- maintain and enhance the rich heritage of historic buildings and settlements of the National Park reflecting their local character.
- ensure that new development, restoration and conversions reinforce and enhance the character of settlements and their setting.
- ensure that high quality modern design fits neatly and complements building traditions of the past.

Deleted: <#>matching solar panels with other roof materials; ¶
<#>ensuring solar panels are flush with the roof and mounted at the same angle to minimise contrast;¶
<#>mounting retrofit panels on a side or rear roof elevation where they are likely to be less visible, or incorporated as a garden feature. This is especially in the case of older buildings;¶
<#>in all cases, ensuring that panels are in a location and at a suitable angle to capture the sun's energy. The aim should be to:¶
<#>Maintain and enhance the rich heritage of historic buildings and settlements of the National Park reflecting their local character.¶
<#>Ensure that new development, restoration and conversions reinforce and enhance the character of settlements and their setting.¶
<#>Ensure that high quality modern design fits neatly and complements building traditions of the past.¶

3 Field-Scale Solar Photovoltaics (PV)

WHAT ARE FIELD-SCALE SOLAR PHOTOVOLTAICS (PV)?

3.1 Solar technologies are concerned with capturing energy from the sun. This section covers field-scale solar PV installations. Small-scale solar PV and solar thermal installations are addressed in **Section 2.**

3.2 Field-scale solar PV is an emerging renewable technology which has been popular with developers, particularly as a result of the Government's Feed in Tariff which has provided an attractive financial incentive for their development (for schemes of less than 5MW in capacity). However, following changes to the FiT scheme, field-scale solar PV is only eligible for limited funding, and the Department of Energy and Climate Change should be consulted for the latest tariff.

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Deleted: for government funding through the FiT is currently being reviewed by the Department of Energy and Climate Change (DECC), with an update expected in summer 2011

3.3 There are few existing field-scale solar PV developments in the UK, although several have recently been granted planning permission, including Rhos-y-gilwen Solar Farm in Pembrokeshire. Proposals for field-scale solar PV developments consist of groups of solar PV panels installed in 'arrays' of 18-20 panels with each PV panel typically able to generate 220 watts of electrical power.

3.4 Four sizes of field-scale solar PV developments have been identified as having the potential to be located within National Park (classified to reflect its landscape sensitivities). These are:

Size	Area
Large	> 5 ha.
Medium	3 ha. – 4.9
Small	1 ha. – 2.9 ha.
Very small	<1 ha.

3.5 The main features of field-scale solar PV installations include:

- **Panels are dark in colour as a result of their non-reflective coating** to maximise absorption of light. They have been likened to polytunnels, silage bales wrapped in black plastic, or standing water (i.e. reservoirs or lakes) when viewed from a distance. Panels may also be seen from behind (back of the panels) or from the side (down the rows of frames) which strongly influences how they are perceived.
- **Panels are encased in an aluminium frame,** supported by aluminium or steel stands mounted and secured either on pre-moulded concrete block 'anchors', or foundations. Some developments contain panels that can be manually rotated and/or tilted several times a year to enable the arrays to track the sun. The technology does exist to allow for automatic tracking, although this is rarer.
- **Panels are held at a fixed angle** between 20-40 degrees from the horizontal, facing south to maximise absorption of energy from the sun
- **Arrays are sited in rows with intervening gaps** between them for access and to ensure that the individual panels are not in the shade of

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another panel. The actual arrangement of the arrays within the landscape varies from scheme to scheme (i.e. regular layouts versus more varied and irregular, depending on the site situation). Generally though, the **layout of solar arrays is regular.**

- **The height of the racks of solar panels varies** depending on the panel manufacturer and installer, but they tend to be between 2-4m off the ground. The approved scheme at Rhos-y-Gilwen has panels that will stand 2.5 metres above ground level and will be supported on metal legs. In order to qualify for the Feed in Tariff, the maximum height of any part of the solar farm must not be more than 4 metres.

Insert photo

Installed solar array near Berlin, Germany

Insert photo

Close up view of free-standing solar array

- **Grazing by sheep or geese** is possible dependent on the height of the solar panels. This is a compatible form of land management, as it ensures that growing vegetation does not affect the efficiency of the panels, and allows for traditional rural land management to continue.
- **Security fencing up to three metres in height** is generally proposed as part of field-scale solar PV developments for insurance purposes. This tends to be mesh fencing, often topped with razor wire.
- **Screen planting may be necessary** to ensure the solar panels and associated infrastructure are screened from view. This has to be at sufficient distance to avoid casting shade over the peripheral panels.

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3.6 In addition to the main features listed above, other aspects of field-scale solar PV developments include:

- Temporary storage for plant, machinery and materials during construction.
- Inverters to convert the electricity from DC to AC – these may be housed within small new or existing buildings.
- Transformer / underground power cables to transfer the electricity to the National Grid.
- On-site power house or control room (usually a Portacabin with a concrete base). The size of the proposed control room for the approved Rhos-y-Gilwen solar farm was 10 x 8 metres.
- CCTV.

3.7 New access tracks are not a requirement because temporary matting can be used to bring the solar panels to site (i.e. if a site is not accessible by existing roads or tracks).

Technological potential within Pembrokeshire Coast National Park

3.8 Wales is an attractive location in the UK for this technology, due to its good levels of solar radiation, relative to the UK as a whole.

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KEY PLANNING CONSIDERATIONS

3.9 Where a solar installation is larger than 9m^2, the development falls outside the scope of 'permitted development', under the Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009, and is likely to require planning permission from the Pembrokeshire Coast National Park Authority.

3.10 Field-scale solar installations with a power capacity (the amount of energy the installation could harness) of **less than 5MW** fall under Schedule 2.3(a) or 2.3(b) of the Town and Country Planning Act (Environmental Impact Assessment) (England and Wales) Regulations (1999). At this size an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for an EIA. Development proposals are also more likely to require an EIA if the area of the development exceeds 0.5 hectare, as outlined in the EIA Regulations (see **Table 10.2**).

3.11 If the solar installation produces **over 5MW** it must have an Environmental Impact Assessment (EIA), to support the planning application, in order to meet the requirements of the Electricity Act 1989. More information on EIA requirements is provided in **Section 11**.

Choosing a suitable site within the National Park

3.12 In general, the favoured sites for field-scale solar PV installations are plateaux tops / flat land or gentle slopes with a southerly aspect to maximise efficiency. From a landscape impact and logistical point of view, steep slopes should be avoided.

3.13 The capacity of power lines running close to the site is also an important consideration. 11kV lines can support installation of a solar array with an output of 2 or 2.5 MW, while 33kV lines could support a solar array which generates up to 5MW or more. It is also important to check the proximity of the nearest electricity substation, to which the solar panels will be connected.

3.14 The cumulative effect of multiple schemes should be taken into account, particularly as they tend to cluster around grid connection points.

3.15 The need to protect the high quality coastal landscape of the Pembrokeshire Coast National Park, limits locations suitable for the installation of field-scale solar PV developments. In March 2011, an assessment of landscape sensitivity to field-scale solar PV was completed on behalf of Pembrokeshire Coast National Park Authority. This used the Landscape Character Assessment of

Pembrokeshire Coast National Park[14] as a base. This divides the landscape of the National Park into 28 unique Landscape Character Areas (LCAs) each with its own distinct landscape character. The sensitivity of each Landscape Character Area to different scales of solar PV installation is indicated in **Figure 3.1 – 3.4** while **Annex 1** provides a commentary on these sensitivities and guidance on where and how solar PV developments can be accommodated within the National Park.

3.16 To use this information, identify the location of interest and relevant LCA using **Figure 3.1 – 3.4** and review the sensitivity description and guidance provided in **Annex 1** where separate information is provided for each LCA.[15]

Key landscape sensitivities and general guidance for siting field-scale solar installations within the National Park

Field-scale solar PV installations can occupy substantial areas of ground which may be visible (particularly where sites are able to be viewed from adjacent higher ground). Key landscape effects of field-scale solar PV developments are that they may:

- Be highly visible in open landscapes and on the upper slopes of hillsides, especially where covering significant areas.
- Lead to a perceived increase in human influence on the landscape.
- Result in a change in land use and in the appearance of a field or fields, affecting land cover patterns.
- Introduce a regular edge (to the panels) that can be particularly conspicuous in more irregular landscapes (especially where the panels do not follow contours).
- 'Overtop' hedgerows where panel heights rise to 3-4m, potentially reducing the visual prominence of field boundaries – this will be a particular issue where a number of adjacent small fields are developed.
- Change the character of enclosure with security fencing and screen planting (including hedges allowed to grow out) around solar PV developments.
- Damage landscape features during construction.
- Result in a significant change in the character of wild or natural landscapes which are valued for their high nature conservation value and qualities of remoteness.
- Introduce ancillary buildings that can be uncharacteristic in more wild and open landscapes.

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3.17 **Annex 1** provides guidance on the location and siting of field-scale photovoltaic developments. A checklist of the main factors to be taken into account in the siting of field-scale photovoltaics is provided below:

Deleted: Some general guidelines on siting

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- Locate any development back from the coastal edge (at least one field back) so that it does not detract from the relative remoteness, drama and natural character of the coastline, maintaining its open and exposed character.

[14] Pembrokeshire Coast National Park Authority/John Campion Associates (2009). www.pembrokeshirecoast.org.uk/Files/Files/dev%20plans/LCA%20Introduction%20FINAL%20June%2009.pdf

- Consider views along and to the coast, from local viewpoints, and from popular tourist and scenic routes (including The Pembrokeshire Coast Path and other rights of way). Avoid locating solar PV developments where they could be directly overlooked at close quarters from important or sensitive viewpoints.
- Site solar PV development on flat landforms or on lower slopes/within folds in gently undulating lowland landscapes rather than on prominent upland landforms, highly visible slopes, or coastal headlands.
- Ensure PV developments do not span across different landscape types, such as across upland-lowland transitions.
- Site PV developments in landscapes where screening is already provided by woodland, hedgebanks or high hedges. Where new screen planting is required the National Park Authority should be consulted on the appropriate choice of species.
- Avoid siting PV developments across multiple fields in areas with a small scale irregular field pattern that is important to landscape character.
- Site PV development in areas that already contain signs of human activity and development rather than in landscapes with a high degree of perceived naturalness or remoteness.
- Consider how panels will be transported to site – some rural lanes are very narrow and have hedges either side. Small vehicles suitable for these narrow lanes should be used to ensure these features are not damaged.
- Suitable materials (such as cladding of buildings) and finish colours should be used that integrate any new buildings with their surroundings. Utilise existing farm buildings to house inverters wherever possible.
- Avoid adversely affecting areas of semi-natural habitat, and designated historic and archaeological sites directly or indirectly.
- Protect the character and setting of buildings within Conservation Areas.
- Ensure that any PV developments do not detract from prominent landmarks.
- Protect the special qualities of the Pembrokeshire Coast National Park (see page 8).

Deleted: Ensure new buildings constructed as part of a solar PV development match the local vernacular, in terms of colours used and scale

Deleted: <#>Protect historic and archaeological sites.¶

Deleted: Seek opportunities to achieve wider landscape management objectives identified in the Pembrokeshire Coast National Park Landscape Character Assessment Study in association with any proposed developmen

4 Anaerobic Digestion

WHAT IS ANAEROBIC DIGESTION?

4.1 Anaerobic digestion (AD) is a method of waste treatment that can either produce a biogas with high methane content or, following a similar process, produces hydrogen, both from organic materials such as organic agricultural, household and industrial wastes and sewage sludge (feedstocks). The methane or hydrogen can be used to produce heat, electricity, or a combination of the two. Alternatively hydrogen can be used for storage of energy in hydrogen cells or as a medium for transporting energy for use elsewhere.

4.2 Anaerobic digesters utilising farm and food wastes bring considerable benefits. They convert methane, a significant greenhouse gas and a major by-product of animal slurries from livestock farming and anaerobic decomposition of food waste, into energy (electricity and heat). They make a significant contribution to reducing greenhouse gas emissions, both by reducing the quantities of methane released into the atmosphere, and by providing a low carbon energy source that substitutes for energy generated from fossil fuels.

4.3 An AD plant typically consists of a digester tank, buildings to house ancillary equipment, a biogas storage tank and a flare stack (3 – 10m in height). The digester tank is usually cylindrical or egg-shaped, its size being determined by the projected volume and nature of the waste. It can be part buried in the ground.

4.4 There are two scales of anaerobic digestion plant of relevance to Pembrokeshire Coast National Park:

- Small scale plants dealing with the waste from a single farm (generating in the region of 10kW) with the biogas potentially used to heat the farmhouse and other farm buildings in the winter when farm wastes are available.
- A medium-sized centralised facility (CAD) dealing with wastes from several farms supplemented by other feedstocks and potentially producing up to 2MW.

4.5 The potential sourcing of feedstock for anaerobic plants within the National Park includes:

- **Farm wastes:** the National Park is a major livestock producing area with a large number of small dairy farms producing significant quantities of farm slurries that are an ideal feedstock. In addition, the resultant digestate from AD is a good and stable fertiliser that does not have the environmental problems associated with farm slurries which may be easily washed into water courses.
- **Agricultural crops:** Where farm wastes are used in anaerobic digestion these are often supplemented during the summer by farm crops grown for that purpose.
- **Food processing wastes:** Food wastes produced within the National Park are a possible source.

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Deleted: Alternative feedstocks for digesters are required during the summer months when animals are grazed outside, such as plant materials (see below), other on-farm generated wastes, and green wastes.

Deleted: The waste created by the food production system can be utilised as a feedstock to produce biogas for AD plants.

- **Alternative plant materials:** Other sources of vegetation that have been considered as a feedstock for anaerobic digestion include waste vegetation arising from land management activities.

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<#>Hedge arisings and weeds¶
<#>Algal blooms and blanket weed from water bodies ¶
<#>Harvested heathers and bracken from heathland¶
Wild rushes and reeds.

Technological potential within Pembrokeshire Coast National Park

4.6 The potential for anaerobic digestion will depend on the availability of suitable feedstocks within the area.

KEY PLANNING CONSIDERATIONS

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4.7 Planning consent is likely to be required for all anaerobic digestion plant installations under the Town and Country Planning Act 1990.

4.8 Anaerobic digestion plants with a power capacity (the amount of energy the installation could harness) of **less than 5MW** fall under Schedule 2.3(a) or 2.3(b) of the Town and Country Planning Act (Environmental Impact Assessment) (England and Wales) Regulations (1999) (known as the 'EIA Regulations'). At this size an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for an EIA. Development proposals are also more likely to require an EIA if the area of the development exceeds 0.5 hectare, as outlined in the EIA Regulations (see **Table 11.2**).

4.9 It is also possible that where a development will process waste, it could also fall under Schedule 2.11(c) of the Regulations.

4.10 As the biogas produced from the anaerobic digestion of manure and slurry is classified as a waste, the storage of biodegradable waste for anaerobic digestion use requires an environmental permit or an agreed exemption under the Environmental Permitting Regulations 2010. The Environment Agency should be consulted to determine whether a permit is required[16]. Small-scale anaerobic digesters, which produce less than 0.4MW of power output, are exempt from any form of permit[17].

Choosing a suitable site within the National Park

4.11 Small-scale AD plants and those dealing with wastes from one or two farms offer significant potential for the generation of electricity and heat within the National Park. Provided digesters are integrated into the existing farm complex, or building groups, and natural screening is provided where appropriate, small digesters can be incorporated into the wider landscape and should not conflict with the National Park Management Plan objectives. Larger digesters, shared between a number of farms, or located to provide

[16] Environment Agency Position Statement: Anaerobic digestion of agricultural manure and slurry: http://www.environment-agency.gov.uk/static/documents/Research/PS_029_AD_of_agricultural_manures_and_slurry_final.pdf (accessed 11/02/2011)

[17] Environment Agency Position Statement: Anaerobic digestion of agricultural manure and slurry: http://www.environment-agency.gov.uk/static/documents/Research/PS_029_AD_of_agricultural_manures_and_slurry_final.pdf (accessed 11/02/2011)

heat and energy to groups of houses, will need to be considered in terms of traffic movements and the potential impacts on landscape and the built environment.

4.12 Large commercial AD plants are unlikely to be acceptable within the National Park, because of the scale of the development and the lorry / tractor movements required to supply the feedstock through the year. As highlighted in the South West Wales Regional Waste Plan (paragraph L7.3)[18], national parks are automatically excluded from areas of search for centralised waste sites, and a medium-sized waste facility will not be supported if it deals with waste from outside the National Park.

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Key landscape sensitivities and general guidance for siting anaerobic digestion plants within the National Park

4.13 Areas of the National Park where AD development of any scale should be avoided are:

- Tranquil, rural areas where human influence is limited.
- The coastal edge.
- All areas of semi-natural habitat.
- Areas with a strong historic character.

4.14 A checklist of the main factors to take into account in the siting of g small or medium-scale anaerobic digestion plants is provided below;

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- They should be integrated or adjacent to existing buildings or farmsteads.
- The digester tank should be part buried in the ground.
- Installations should not be sited in prominent locations or on exposed skylines – the flare stack can be prominent.
- Installations should not be prominent in key views, particularly those along the coastline.
- Existing landmarks (for example church towers and spires) should remain prominent and installations should not detract from views to these landmarks.
- Installations should not affect the historical value of designated industrial features, historic monuments and archaeological sites and remains, or the ecological value of semi-natural habitats.

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- Installations should not adversely affect the character and appearance of any building Conservation Areas and listed buildings.
- Suitable materials (such as cladding of buildings) and finish colours should be used that integrate structures with their surroundings.
- Tree planting (using native species) that helps filter views of the AD plant should be considered from key public vantage points. This may include tree planting at a distance from the anaerobic digestion plant.
- Measures should be taken to minimise any visual, odour and noise impacts on local residents associated with the operation of the plant and delivery of feedstocks.

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[18] Welsh Assembly Government (2008) South West Wales Regional Waste Plan – 1st Review.

5 Biomass Plants

WHAT ARE BIOMASS PLANTS?

5.1 Biomass plants are concerned with producing heat from the burning of plant materials. The final output will either be heat or electricity. For electricity production the heat / steam is used to turn a turbine. There are currently three basic categories of biomass plant:

- **Plants designed primarily for the production of electricity**. These are generally the largest schemes, in the range 10 – 40 MW. Excess heat from the process is not utilised. These plants are major multi-million pound developments and are unlikely to be suitable within the National Park because of the scale of development and associated traffic movements. **They are therefore not considered further here.**
- **Combined Heat and Power (CHP) plants** where the primary purpose is the generation of electricity but the excess heat is utilised, for instance, as industrial process heat or in a district heating scheme. The typical size range for combined heat and power is 5 to 30 MW thermal total energy output but smaller 'packaged' schemes of a few hundred kilowatts have been built in the UK.
- **Plants designed for the production of heat.** These cover a wide range of applications from domestic wood burning stoves and biomass boilers to boilers of a scale suitable for district heating, commercial and community buildings and industrial process heat. Size can range from a few kilowatts to above 5 MW of thermal energy.

5.2 Small and medium-scale biomass heating systems (and combined heat and power systems) for commercial premises, tourism facilities/accommodation complexes, community facilities (schools, leisure centres, public buildings) and groups of dwellings are typified by the following:

- A boiler (and boiler house) and associated storage facilities. A small heat plant for a school might consist of a 4m x 4m boiler house with a fuel bunker of similar proportions, which may be part underground, with a lockable steel lid.
- A chimney – for a small plant like the one described above, this will be 3m to 10m high, depending on plant design and surrounding buildings.
- Sufficient space to manoeuvre a large lorry or tractor and trailer safely for fuel delivery.

5.3 Domestic systems, including wood-burning stoves and biomass boilers, comprise the following features / requirements:

- Woodburning stoves are the size of a typical room heater and may be fitted with a back boiler to provide water heating as well as room heat. These typically use sawn logs.
- Biomass boilers are connected to central heating and hot water systems are generally larger than 15 kW and utilise either wood pellets or woodchip, although some can use sawn logs.

- Fuel storage space, typically 7m^3 of wood pellets or 21 – 35m^3 of woodchip.
- Access to accommodate bulk deliveries of wood fuel by lorry or tanker.

5.4 The three main fuels that are used in biomass heating systems are logs (mainly used in domestic wood-burning stoves), woodchip and wood pellets.

Technological potential within Pembrokeshire Coast National Park

5.5 Within the National Park the main potential is for medium, small and domestic scale biomass heating systems, as well as small-scale combined heat and power plants serving a group of dwellings or other collection of buildings. In all cases, the scale of development should be in-keeping with the scale of the landscape or settlement within which it is to be located. **Larger scale plants are unlikely to be suitable.**

KEY PLANNING CONSIDERATIONS

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Commercial (small and medium-scale) biomass installations

5.6 Heat-only biomass plants and combined heat and power electricity plants with an electrical output of 50MW or less will require planning permission from the local planning authority under the Town and Country Planning Act 1990. Biomass installations with an electrical output of greater than 50MW would need to apply for consent to the Infrastructure Planning Commission (IPC) in 2011, or the Major Infrastructure Unit within the Planning Inspectorate from 2012, as defined under the Planning Act 2008[19].

Environmental Impact Assessment

5.7 Biomass plants may fall under Schedule 2.3(a) or Schedule 2.3(b) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, if either of the following thresholds apply:

- industrial installations for the production of electricity, steam and hot water, where the development exceeds 0.5 hectares; and
- industrial installations for carrying gas, steam and hot water, where the area of works exceeds 1 hectare.

5.8 At this size, an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for an EIA.

5.9 It is also possible that where a development will process waste, it could also fall under Schedule 2.11(c) of the Regulations.

Domestic biomass installations

5.10 The installation of domestic biomass boilers which do not require alterations to the outside of the building does not require planning permission. The

[19] HMSO (2008) Planning Act 2008, Part 3, 15 (2): http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed February 2011)

installation, alteration or replacement of a flue, forming part of a biomass heating system, in a dwelling is classed as permitted development under the Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009. Exceptions to this include where the height of the flue would exceed the highest part of the roof by one metre or more, or in the case of buildings within a Conservation Area, where the flue would be installed on a wall or roof slope forming the principal or side elevation of the dwelling and would be visible from a highway. In such cases, planning permission would be required from the local planning authority under the Town and Country Planning Act 1990.

5.11 If the proposals will affect a listed building, additional regulations will apply and the Pembrokeshire Coast National Park Authority Buildings Conservation Officer should be consulted.

5.12 Through Planning Policy Wales, the Welsh Government actively promotes the installation of combined heat and power schemes as "imperative to reduce carbon emissions"[20].

Choosing a suitable site within the National Park

5.13 Community and domestic scale biomass heating systems that use local wood fuel bring significant reductions in CO_2 emissions. They will also provide a much needed stimulus to the existing local wood fuel supply chain and, in turn, will help diversify and strengthen the local land-based economy. They therefore bring significant benefits with household and community schemes generally easily accommodated into the built fabric of the National Park.

5.14 Provided they are well-integrated into the built environment, biomass plants have the potential to be installed throughout the National Park.

Key landscape sensitivities and general guidance for siting biomass plants within the National Park

5.15 Historic buildings, listed buildings and those located in Conservation Areas will require care in the siting of new structures and flues.

5.16 A checklist of the main factors to take into account in the siting of small-scale and community biomass facilities that require new building and/or the addition of a chimney is as follows:

- Integrate any new structures within existing building complexes.
- Avoid locating visible installations in prominent locations on the open coastal edge or on exposed skylines.
- Ensure existing landmarks (for example church towers and spires) remain prominent and that installations do not detract from views of existing landmarks.
- Ensure installations are not prominent in key views, particularly those along the coastline.
- Ensure installations do not affect the historical value of designated industrial features, historic monuments or archaeological sites and remains, or the ecological value of semi-natural habitats.

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[20] Welsh Assembly Government (2011) Planning Policy Statement for Wales – Edition 4.

- Ensure installations do not adversely affect the character and appearance of building Conservation Areas or of listed buildings.
- Suitable materials (such as cladding of buildings) and finish colours should be used that integrate structures with their surroundings.
- Measures should be taken to minimise any visual, odour and noise impacts on local residents associated with the operation of the plant and delivery of feedstocks..

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6 Micro-Hydro

WHAT IS MICRO-HYDRO?

6.1 Hydro power is the use of water flowing from a higher to a lower level to drive a turbine connected to an electrical generator, with the energy generated proportional to the volume of water and vertical drop or head.

6.2 Small-scale hydro power plants in the UK generally refer to sites generating up to a few hundred kilowatts where electricity is fed directly to the National Grid. Plants at the smaller end of this scale (typically below 100kW) are often referred to as micro-hydro and may include schemes providing power to a single home.

6.3 The majority of suitable locations are likely to be for 'run of river' schemes, where a proportion of a river's flow is taken from behind a low weir and returned to the same watercourse downstream after passing through the turbine. Appropriate locations for 'storage' schemes, where the whole river is dammed and flow released through turbines when power is required, are unlikely to exist. The key elements of a 'run of river' micro-hydro scheme are:

- A source of water that will provide a reasonably constant supply. Sufficient depth of water is required at the point at which water is taken from the watercourse, and this is achieved by building a weir across the watercourse of sufficient height to fill the penstock or 'intake'.
- A pipeline, often known as a 'penstock', to connect the intake to the turbine. A short open 'headrace' channel may be required between the intake and the pipeline.
- A cover / small shed housing the turbine, generator and ancillary equipment – the 'turbine house'.
- A 'tailrace' returning the water to the watercourse.
- A link to the electricity network, or the user's premises.

Technological potential within Pembrokeshire Coast National Park

6.4 Hydro power is well developed in Wales where most sites with a potential greater than 1 MW have been exploited. Within the Pembrokeshire Coast National Park the realistic options will be micro-hydro 'run of river' with an installed capacity of less than 100kW and the restoration of traditional mills (both river mills and tidal mills).

KEY PLANNING CONSIDERATIONS

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6.5 Small-scale hydro power plants will require planning permission from the local planning authority under the Town and Country Planning Act 1990. If the proposals will affect a listed building, additional regulations will apply and the Pembrokeshire Coast National Park Authority Buildings Conservation Officer should be consulted.

Environmental Impact Assessment

6.6 In line with Regulation 2(1) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, national parks are considered to be sensitive areas, and as such all micro-hydro development proposed within the National Park must all be screened by the Pembrokeshire Coast National Park Authority to determine whether an Environmental Impact Assessment (EIA) is required. Development proposals are also more likely to require an EIA where the micro-hydro installation has an electrical output of more than 0.5MW, as outlined in the EIA Regulations (see **Table 11.2**).

River Basin Management Plans and Abstraction Licenses

6.7 Local Planning Authorities have a statutory duty to have regard to River Basin Management Plans in exercising their planning powers. For hydropower schemes, this means ensuring that the hydropower development will not compromise the ability to achieve:

- The environmental objectives of the River Basin Management Plan;
- Good ecological status / potential of the waterbody; and
- No deterioration of water quality status.

6.8 For all hydro power schemes, the Environment Agency will need to be contacted to issue an abstraction license. In addition, an Impoundment Licence and Flood Defence Consent may also be required from the Environment Agency.

Choosing a suitable site within the National Park

6.9 Micro-hydro schemes can be integrated into the landscape with appropriate siting and design, utilising landform and existing vegetation to help screen the new small turbine housing.

6.10 The sensitive restoration of old water mill sites or other structures (i.e. weirs, mill ponds, millraces or leats, sluice gates and tailrace outlets) will bring considerable conservation benefits over and above the generation of electricity.

Key landscape sensitivities and general guidance for siting micro hydro schemes within the National Park

6.11 The following checklist should be noted when siting micro hydro schemes within Pembrokeshire National Park.

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- Hydro schemes sited in rivers lined with trees may be concealed more easily than those in open landscapes.
- In areas of more open landscape, high standards of design will help to minimise visual impacts, including the use of local materials for weirs and built structures along with vegetation screening.
- Burying pipelines and minimising hard surfacing and 'formal' planting can help to integrate more visible schemes into the rural landscape.
- Mills that are Listed Buildings and/or located within a Conservation Area require sensitive restoration that respects the structure of the original building.

7 Ground and Air Source Heat Pumps

WHAT ARE GROUND AND AIR SOURCE HEAT PUMPS?

Ground source heat pumps

7.2 Ground source heat pump (GSHP) systems capture the energy stored in the ground surrounding (or even underneath) buildings or from water (rivers, canals, lakes or underground aquifers). Essentially, they use low grade thermal energy from the ground and a refrigeration cycle to deliver heat energy at higher temperatures, (typically 40-45°C) or low temperatures, using a reverse cycle, for cooling (typically 6-12°C).

7.3 GSHP systems collect or deliver heat using ground collectors (typically coils or loops of pipe laid in trenches in the ground or vertical boreholes), in which a heat exchange fluid circulates in a closed loop and transfers heat via a heat exchanger to or from the heat pump. The heat pump itself is a similar size to a large fridge and is situated inside the building. A typical GSHP comprises the following:

- A heat pump.
- An earth collector loop (which may be laid in a trench or in boreholes).
- An interior heating or cooling distribution system.
- Boreholes or trenches – boreholes drilled to a depth of between 15 - 150 metres benefit from higher ground temperatures than trenches.

7.4 Once installed, there are no externally visible features associated with ground source heat pumps.

Air source heat pumps

7.5 An air source heat pump (ASHP) uses the air as a heat source for heating a building. They can be described as an air-conditioning unit running in reverse. Air source heat pumps are typically mounted on an external wall (sometimes under a window). Increasingly, manufacturers are producing internally-mounted air source heat pumps which only need louvers and/or roof vents for air supply/exhaust emissions (as in a conventional boiler). Air source heat pumps tend to be much easier and cheaper to install than ground source heat pumps (as they lack any need for external heat collector loops). Once installed, the only externally visible structure may be the 'air conditioning unit' associated with the heat pump facility, although, as noted above, internally mounted pumps are now increasingly available which have no external visual impact. Air source heat pumps, depending on the manufacturer, may be no louder than a central heating boiler.

7.6 For both technologies, temperatures generated will generally be cooler than that associated with conventional heating systems. They are therefore better at supporting under floor heating (in the case of GHSP) or ducted warm air (in the case of ASHPs). However, new product ranges are emerging that can be retrofitted to conventional household heating systems.

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Technological potential within Pembrokeshire Coast National Park

7.7 There are opportunities to use ground and air source heat pumps throughout the National Park.

KEY PLANNING CONSIDERATIONS

7.8 The installation, alteration or replacement of a ground source or water source heat pump within the curtilage of a dwelling is classed as permitted development under The Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009.

7.9 Air source heat pumps are not currently classed as permitted development under The Town and Country Planning (General Permitted Development) (Amendment) (Wales) Order 2009 and therefore planning permission is currently required from the local planning authority under the Town and Country Planning Act 1990. In the future, there is potential for air source heat pumps to be categorised as permitted development, and Pembrokeshire Coast National Park Authority will be able to advise on the status of this technology at the time of application.

7.10 In the case of listed buildings and Conservation Areas, advice should be sought from the National Park Authority's Conservation Officer, as separate regulations may apply.

Choosing a suitable site within the National Park

7.11 Because of their minimal landscape impacts, all areas of the National Park could be considered for the installation of ground and air source heat pumps.

Key landscape sensitivities and general guidance for siting ground and air source heat pumps within the National Park

7.12 The following checklist should be considered when siting ground or air source heat pumps within Pembrokeshire Coast National Park:

- The underground pipework associated with ground source heat pumps can easily be covered with soft or hard surfaces and so the system will not be visible from outside the building.
- During construction, the laying of pipes linked to ground source heat pumps should avoid disturbing ground which would be difficult to restore, such as unimproved grasslands, semi-natural habitats, tree roots and archaeological remains.
- PCNPA may require an archaeological survey before construction of ground source heat pumps and advice will need to be sought from the Dyfed Archaeological Trust.
- Air source heat pumps should be mounted on the least visible elevations, such as the rear or side elevation of the building if using an externally mounted unit. Internal units are appropriate anywhere within the National Park.

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8 District Heating

What is district heating?

8.2 District heating describes infrastructure which provides heat to multiple buildings from a central heat source through a network of pipes, to deliver space heating and hot water. Using this shared infrastructure, heat can usually be generated and delivered more efficiently than with multiple individual systems. There is significant potential for district heating in the UK, although relatively few systems are currently in place.

8.3 The technology typically comprises:

- An energy centre.
- A network of insulated pipes.
- A series of heat exchangers with heat meters in buildings being supplied with heat.

8.4 The pipe network can be installed at the same time as other services (water, drainage, etc.) to minimise costs in new developments. District heating systems can also be retrofitted into existing buildings, although this tends to be a more complicated process.

8.5 Renewable district heating schemes can make use of biomass boilers, anaerobic digestion and possibly ground source heat pumps. The central energy source can generate heat alone, or can be designed as a Combined Heat and Power (CHP) plant to generate both electricity and heat.

8.6 District heating can range from small-scale systems e.g. a biomass boiler supplying a group of ten dwellings, to large-scale schemes supplying town centres or communities, although larger systems are unlikely to be appropriate in the National Park.

8.7 District heating is flexible in terms of its energy source, and the heat can be derived from a wide range of fuel, plant and conversion process types, including traditional gas boilers, biomass boilers, gas or biomass combined heat and power systems and anaerobic digestion. As district heat networks are designed to last for many years; this flexibility also ensures that once installed, the system can adapt to technical advances.

Technological potential within Pembrokeshire Coast National Park

8.8 There is considerable scope for small-scale district heating systems associated with community facilities within the National Park such as swimming pools, leisure centres, sports halls, day and community centres, potentially combined with an adjacent new development. Other opportunities may include combining heating/cooling requirements for adjacent hotels, for example, in Tenby, Saundersfoot and St David's where there are a number of hotels in close proximity; or adjacent small business premises within the larger settlements of the National Park. The facilities being heated need to be in close proximity to minimise the costs of distribution piping and to minimise thermal losses.

KEY PLANNING CONSIDERATIONS

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8.9 District heating schemes that solely generate heat and those designed as a combined heat and power plant to generate both electricity and heat with an electrical output of 50MW or less will require planning permission from the local planning authority under the Town and Country Planning Act 1990.

8.10 District heating schemes with a capacity of more than 50MW are unlikely to be suitable within the National Park. Applications of this size would need to apply for consent to the Infrastructure Planning Commission (IPC) in 2011, or the Major Infrastructure Unit within the Planning Inspectorate from 2012, as defined under the Planning Act 2008[21].

8.11 CHP plants may fall under Schedule 2.3(a) or Schedule 2.3(b) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, which relate to:

- Industrial installations for the production of electricity, steam and hot water, where the development exceeds 0.5 hectare.
- Industrial installations for carrying gas, steam and hot water, where the area of works exceeds 1 hectare.

8.12 As such, an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for these to be undertaken.

8.13 It is also possible that where a development will process waste, it could also fall under Schedule 2.11(c) of the Regulations.

Choosing a suitable site within the National Park

8.14 The most appropriate opportunities will be small-scale district heating schemes associated with new development within the main settlements of the National Park, and small-scale schemes linked to an existing facility that has a large heat energy requirement.

Key landscape sensitivities and general guidance for siting district heating schemes within the National Park

8.15 Please refer to the information elsewhere in this SPG for the relevant technology / ies that are likely to make up a district heating scheme.

[21] HMSO (2008) Planning Act 2008, Part 3, 15 (2): http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed February 2011)

9 Wind Energy

WHAT IS WIND ENERGY?

9.1 Wind turbines are one of the best known and understood renewable technologies. Wind turbines use the wind's lift forces to rotate aerodynamic blades that turn a rotor creating a mechanical force that generates electricity. The amount of energy derived from a wind turbine depends on wind speed and the swept area of the blade (the greater the swept area, the more power the turbine will generate). Wind turbines are generally given planning permission for 25 years, although re-powering (providing a new generation of turbines) may take place after this period has elapsed.

9.2 Wind turbines can be deployed singly, in small clusters, (2 – 5 turbines) or in larger groups as wind farms (typically 5 or more turbines). In the Pembrokeshire Coast National Park, to conserve the National Park's special qualities, the only potential will be as single turbines or, in very specific cases, small clusters of 2 – 3 turbines.

9.3 In all cases wind turbines consist of:

- the tower
- a hub
- blades
- a nacelle (which contains the generator and gear boxes); and
- a transformer that can be housed either inside the nacelle or at the base of the tower.

9.4 The infrastructure requirements for large-scale turbines, in addition to the turbine itself, include:

- road access to the site (usually a bell mouth or equivalent off the main road but may include road widening of more minor roads to achieve access if turbines are large)
- on-site tracks (for construction and on-going maintenance)
- turbine foundations
- one or more anemometer masts
- electrical cabling and an electrical sub-station/control building plus connection to the grid.
- temporary crane hardstanding areas
- temporary construction compound

9.5 Wind energy developments are unique in relation to other tall structures in the landscape, in that they introduce a source of movement into the landscape. In most current designs the turbine blades turn around a horizontal axis (See image below) but in some designs, which have been deployed in and around the National Park, the blades turn around a vertical axis. Two-bladed turbines are also available.

Insert photo

Two and three blade wind turbines rotating on the horizontal axis

Insert photo

Vertical axis turbine

9.6 In the context of Pembrokeshire Coast National Park, four sizes of wind turbine have been identified (classified to reflect the landscape sensitivities of the National Park). These are:

Size	Height[1]	Energy output[2]	Cost of turbine[3]
Large	65m – 125m	330kW - 3MW	£800k - £1.3m
Medium	25m – 65m	50kW – 330kW	£130k - £800k
Small	<25m	10 kW - 50 kW	£10k - £139k
Micro	Building or mast mounted	< 10kW	£1.5k - £10k

1 Height to blade tip
2 Efficiency and energy output is increasing all the time and therefore these values are likely to increase
3 These are the installed cost and again costs are changing.

Technological potential within Pembrokeshire Coast National Park

9.7 On the whole, Pembrokeshire Coast National Park has a good wind energy resource compared to many other parts of the UK. For more details, refer to the Renewable Energy Assessment for Pembrokeshire Coast National Park.[23] Currently the BWEA[24] suggests that a large wind turbine requires an average wind speed of more than 7m/s to be viable. Small turbines may be viable with average wind speeds as low as 5m/s. :

WHAT ARE THE KEY PLANNING CONSIDERATIONS?

9.8 Turbines and turbine groups of less than 50MW capacity will need to apply for planning permission to the Pembrokeshire Coast National Park Authority under the Town and Country Planning Act 1990.

9.9 Pembrokeshire Coast National Park is also the determining authority for underground cabling related to the wind farm. If the cables which link the wind turbine to the grid connector are overhead cables, then this is considered to comprise 'associated development' for a 'nationally significant infrastructure project', as defined by the Department of Communities and Local Government[25]the application may need to be submitted to the IPC, as outlined in Section 14 (1)b and Section 16 of the Planning Act 2008[26]. In these cases, legal advice should be sought prior to submitting an application.

23 www.pembrokeshirecoast.org.uk/Files/Files/dev%20plans/Pembrokeshire%20Coast%20renewables%20draft%20final%20report.pdf

24 British Wind Energy Association (BWEA) : Wind Power: A guide for farms and rural businesses (November 1994)

25 Department of Communities and Local Government (2009) Guidance on associated development: Applications to the Infrastructure Planning Commission http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/guidanceassocdevelopment.pdf

26 HMSO (2008) Planning Act 2008, http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed March 2011)

Deleted: Wind speeds across the National Park have been estimated using the DBERR[22] wind speed database.

Deleted: On the whole, Pembrokeshire Coast has a good wind energy resource comparative to many parts of the UK. Further information on the wind resource within Pembrokeshire Coast National Park is provided in the Renewable Energy Assessment report available on PCNPA's website[23]

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Deleted: <#>**Wind resource for large-scale wind generation (65m – 125m producing 330kW – 3MW):** The areas where the highest wind speeds are recorded in the National Park at 40m above ground level are in the uplands, i.e. the Preseli Mountains (which rise to between 400 - 500 metres above sea level); the hills east of Newport and Dinas Head; and the exposed coastal peninsulas of St David's, Marloes, St Brides, Dale, Angle, Castlemartin and Stackpole.¶
<#>**Wind resource for medium-scale turbines (25m – 65m producing 50kW - 330kW):** There are fewer locations within the National Park at a height of 25m that achieve the viable higher wind speed of > 7m/s for medium scale turbines. Again good locations predominate around the upland coastal areas and in the Preseli Mountains.¶
<#>**Wind resource for small-scale turbines (<25m producing 3kW – 50kW):** There is considerable opportunity for small-scale wind generation within the National Park. The exceptions to this are some of the lowland areas of the inland estuarine hinterland of the Cleddau and Western Cleddau rivers, the sheltered coastal area around Saundersfoot and the valleys or wind sheltered slopes of the Preseli Mountains.¶
<#>In some locations, the prevailing wind cannot be exploited i.e. where buildings and other obstructions may have a detrimental effect on the quality and quantity of the wind resource. These would need to be assessed. ¶

Deleted: LUC for Pembrokeshire Coast National Park Authority (2008) Development of the Renewable Energy Assessment and Target Information for Pembrokeshire Coast National Park.

9.10 Applications for turbine and turbine groups greater than 50MW capacity will need to apply for consent to the Infrastructure Planning Commission (IPC) in 2011, or the Major Infrastructure Unit within the Planning Inspectorate from 2012, as defined under the Planning Act 2008[27].

9.11 Welsh Government Circular 11/99 is a useful reference in determining whether a wind energy development is likely to require an EIA, and covers other associated planning issues[28]. Individual wind turbines and windfarms are listed under Schedule 2.3(i) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (known as the 'EIA Regulations').

9.12 As such, an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for an EIA. Development proposals are also more likely to require an EIA if the area of the development exceeds 0.5 hectare, as outlined in the EIA Regulations.

Choosing a suitable site within the National Park

9.13 The potential for wind energy development within the National Park is constrained by the need to conserve the special qualities of the National Park. However, there is some potential for single or, in more limited locations, small clusters of 2 -3 small turbines where carefully sited.

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9.14 An assessment of landscape sensitivity to different sizes of wind turbine was completed in 2008[29]. This used the Landscape Character Assessment of Pembrokeshire Coast National Park[30] as a base. This divides the landscape of the National Park into 28 unique Landscape Character Areas (LCAs) each with its own distinct landscape character. The sensitivity of each Landscape Character Area to each class of turbine height is indicated in **Figures 9.1 - 9.3** while **Annex 2** provides a commentary on these sensitivities and guidance on where and how wind turbine developments can be accommodated within the National Park. To use this information, identify the location of interest and relevant LCA using **Figures 9.1 – 9.3** and review the sensitivity description and guidance provided in **Annex 2** where separate information is provided for each LCA.

Key landscape sensitivities and general guidance for siting wind energy schemes within the National Park

9.15 **Figures 9.1 – 9.3**, and **Annex 2** summarise the key landscape sensitivities to wind energy installations within the National Park. A checklist of the main factors to take into account in the siting of wind energy developments is provided below:

Deleted: Some general guidelines are provided below:

[27] HMSO (2008) Planning Act 2008, Part 3, 15 (2): http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed February 2011)

[28] Welsh Government Circular 11/99: Environmental Impact Assessment.

[29] Pembrokeshire Coast National Park Authority/Land Use Consultants (2008) Landscape Sensitivity Assessment for Renewables in the Pembrokeshire Coast National Park.

[30] Pembrokeshire Coast National Park Authority/John Campion Associates (2007) http://www.pembrokeshirecoast.org.uk/Files/Files/dev%20plans/LCA%20Introduction.pdf

- Locate any wind energy developments back from the coastal edge so that they do not detract from the relative remoteness, drama and natural character of the coastline.
- Locate any wind energy developments (other than those within the curtilage of a private dwelling or associated with a settlement) at least one field back from the coastal edge to maintain its open and exposed character.
- Locate any wind energy developments away from the most prominent rural skylines and consider the impact of associated access tracks and ancillary buildings.
- Consider views along the coast, from local viewpoints, popular tourist and scenic routes (including The Pembrokeshire Coast Path and rights of way network) when siting any wind energy developments in the landscape.
- Ensure wind farm sites do not span across different landscape types, such as across upland-lowland transitions.
- Utilise existing woodlands, rolling topography and overgrown hedges to integrate any infrastructure associated with any wind energy development into the landscape.
- Avoid affecting areas of semi-natural habitat, directly or indirectly.
- Protect designated historic and archaeological sites.
- Protect the character and setting of buildings within Conservation Areas.
- Ensure that any wind energy developments do not detract from prominent landmarks.
- Avoid siting turbines in the most tranquil areas.
- Consider how turbines will be transported to site – some rural lanes are very narrow and have hedges either side. Small vehicles suitable for these narrow lanes should be used to ensure these features are not damaged.
- Protect the Special Qualities of the Pembrokeshire Coast National Park as set out in the Pembrokeshire Coast National Park Local Development Plan.
- The National Park Authority should ensure that any wind turbine development located within the protected landscape does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[31].

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Deleted: associated access tracks

Deleted: Seek opportunities to achieve wider landscape management objectives identified in the Pembrokeshire Coast National Park Landscape Character Assessment Study in association with any proposed developmen

[31] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

10 On-shore Grid Connectors for Off-shore Wind Installations

What is an on-shore grid connector?

10.2 On-shore grid connectors provide a distribution transformer to which the off-shore generator (the wind turbines) can be connected via a cable, which is usually routed underground, but could be overhead.

10.3 The on-shore grid connection infrastructure consists of a grid connector (built structure), and cabling to link to the off-shore generator (the wind turbines). The cables will either take a route to the nearest road or a direct route to the nearest sub-station. A single cable would typically be of the order 22-100mm in diameter, depending on the continuous current rating.

10.4 Cables are generally buried beneath the onshore material at a depth of around 1.5m deep. If the coastline includes cliffs, a hole is drilled from the cliff top down to the base of the cliff. The cables will be connected within an inspection chamber (approx. 2m concrete cube, buried underground) at the cliff base; the cables pass through the rock and into a second chamber, placed at the top of the cliff, buried but with an inspection hatch exposed. The cable runs are buried in trenches at around 1.5m depth – width depends on the size and number of cables (e.g. a large offshore windfarm will require a trench width of over 2m).

Insert illustrations

Illustration of hole boring for long distance cabling (top) and of below and above ground cable connection chambers (bottom)[32]

KEY PLANNING CONSIDERATIONS

10.5 The installation of on-shore grid connectors and cables, from the above-water shoreline, will require planning permission from the local planning authority under the Town and Country Planning Act 1990.

10.6 If an *integrated application* for the off-shore turbines, cables *and* on-shore grid connection is made, then the applicant would need to apply for development consent to the Infrastructure Planning Commission (IPC) in 2011, or the Major Infrastructure Unit within the Planning Inspectorate from 2012, as defined under the Planning Act 2008[33].

10.7 If the on-shore grid connectors and/or cabling are the subject of a *separate* planning application to the off-shore wind turbines, then the application should be submitted to the Local Planning Authority (i.e. Pembrokeshire Coast National Park Authority), as it is not considered to comprise 'associated development' for a 'nationally significant infrastructure project', as

[32] 'Sheringham Shoal Offshore Wind Farm Onshore Grid Connection: Environmental Statement, Non-technical summary' Scira Offshore Energy Limited, prepared by Royal Haskoning. Available from: http://www.scira.co.uk/newsevents/documents/FINALNTS-220807.PDF [Accessed 21 July 2008]

[33] HMSO (2008) Planning Act 2008, Part 3, 15 (2): http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed March 2011)

defined by the Department of Communities and Local Government[34]. The exception to this is where the cables linking the off-shore turbines to the on-shore grid connector are overhead cables, in which case the application may need to be submitted to the IPC, as outlined in Section 14(1)b and Section 16 of the Planning Act 2008[35]. In these cases, legal advice should be sought prior to submitting an application. The Communities and Local Government website is the best source of up-to-date information on this matter:

http://www.communities.gov.uk/planningandbuilding/

Field Code Changed

10.8 On-shore grid connectors and underground cables may fall under Schedule 2.3(a) or Schedule 2.3(b) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, which relate to 'industrial installations for the production of electricity, steam and hot water, where the development exceeds 0.5 hectare'.

10.9 The determining authority (Pembrokeshire Coast National Park Authority or the IPC) would expect proposals to include the assessment of more than one option for the point at which connections arise onshore.

Choosing a suitable location within the National Park

10.10 The location of off-shore wind turbines is determined by the Renewable Energy Zone, as defined under Section 84 of the Energy Act 2004[36].

10.11 The location where the offshore cable comes on-shore is determined by the Distribution Network Operator or the National Grid, taking account of existing networks and infrastructure in relation to technical and economic considerations. This is influenced by the Offshore Transmission Licences, which are managed by Ofgem[37]. The location is determined by:

- surface features on the sea bed close to the foreshore
- geology of the cliffs (ease of drilling, stability, fissures, etc)
- impact on the existing grid infrastructure
- proximity of nearest distribution transformer
- cost and impact of cabling run to nearest transformer

General guidance for locating on-shore gird connectors within the National Park

10.12 On-shore grid connectors have the potential to impact on the local landscape in the following ways:

- Grid connections comprise small built structures which would have more significant landscape impacts in rural, tranquil areas.
- The process of placing cables underground is likely to cause localised landscape effects.

[34] Department of Communities and Local Government (2009) Guidance on associated development: Applications to the Infrastructure Planning Commission http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/guidanceassocdevelopment.pdf

[35] HMSO (2008) Planning Act 2008, http://infrastructure.independent.gov.uk/wp-content/uploads/2009/08/ukpga_20080029_en.pdf (Accessed March 2011)

[36] HMSO (2004) The Energy Act: http://www.legislation.gov.uk/ukpga/2004/20/contents (Accessed March 2011)

[37] Ofgem website: http://www.ofgem.gov.uk/Networks/offtrans/Pages/Offshoretransmission.aspx (Accessed March 2011)

- Overhead cables introduce new industrial structures into landscape with potentially significant impacts on views.

11 The Planning Application Process

11.1 This section provides information on the key stages of the process to secure planning consent for renewable energy installations. The following information is provided:

- Summary of the planning process and requirements of the applicant and local planning authority (Pembrokeshire Coast National Park Authority);
- Key legislation and consenting mechanisms;
- Environmental Impact Assessment requirements;
- Planning conditions and planning obligations.

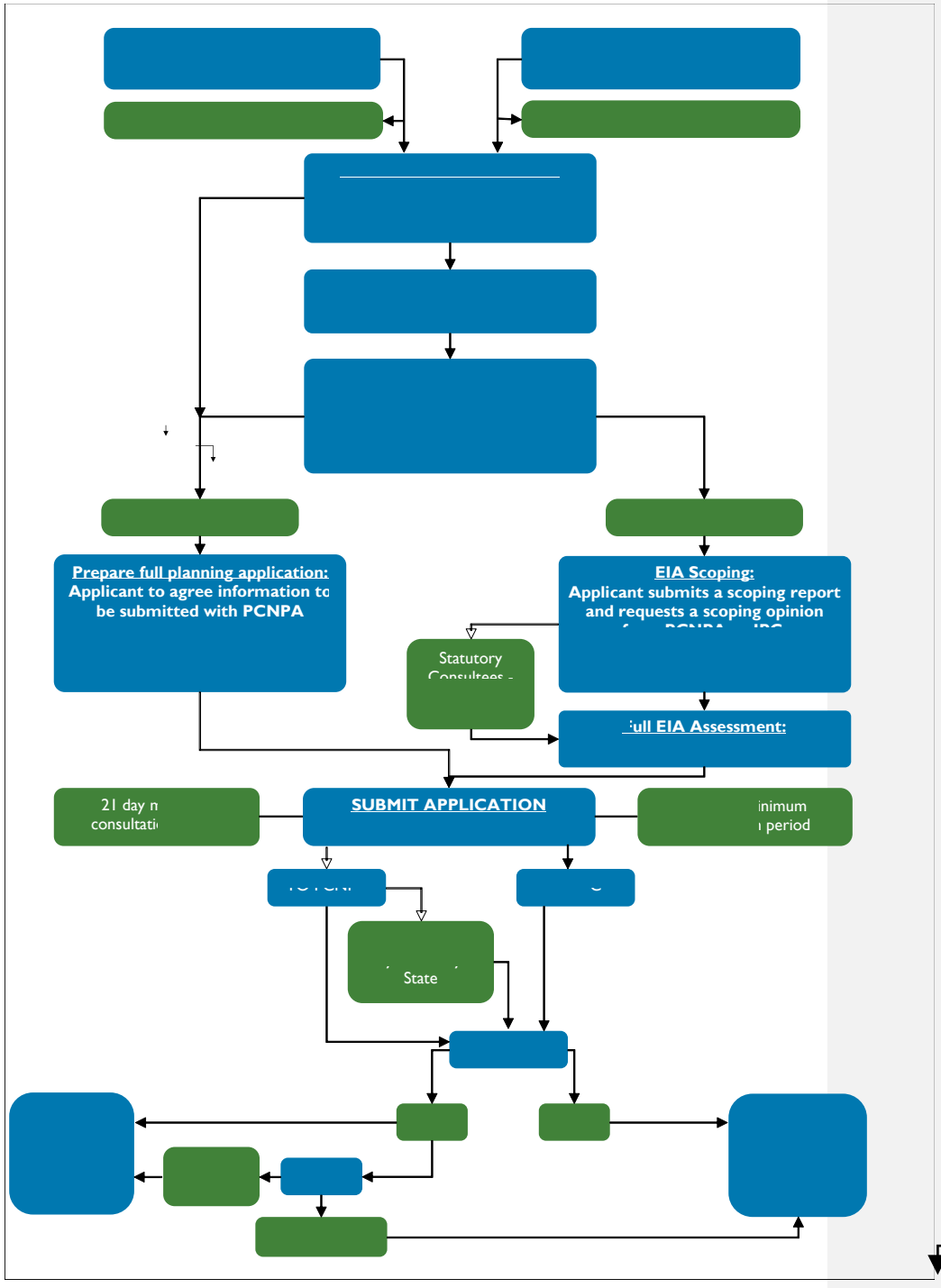
Planning process

11.2 There are three broad categories of renewable energy installation which are relevant to the PCNP:

- Small-scale renewable technology installations which are classed as permitted development, and for which planning permission is not required – See **Table 11.1.**
- Medium-scale renewable technology installations of less than 50MW which require planning permission from the National Park Authority.
- Large-scale renewable technology installations of more than 50MW, which are unlikely to be suitable within the National Park, with the possible exception of off-shore wind farms.

11.3 The flow diagram in **Figure 11.1** outlines the key stages of the planning process for medium and large scale renewable technology installations. A summary of planning requirements by renewable technology is provided in **Table 11.1**.

Figure 11.1: Planning process for renewable energy installations



Environmental Impact Assessment

11.4 Some renewable energy development proposals require an Environmental Impact Assessment (EIA) under Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (known as the 'EIA Regulations'). These regulations implement the EU's Environmental Impact Assessment Directive 85/337/EEC as amended by 97/11/EC and 2003/35/EC.

11.5 EIA may be required for any renewable energy development falling under Schedule 2 of the Regulations, as set out in **Table 11.2**. As such, an Environmental Impact Assessment (EIA) is not mandatory but Pembrokeshire Coast National Park Authority will provide a 'screening opinion' on request, indicating whether an EIA is required, based on whether the development is likely to give rise to significant environmental effects. It is likely that most Schedule 2 developments proposed within the National Park will require an EIA, as national parks are identified as 'sensitive areas' which triggers the need for an EIA. Development proposals are also more likely to require an EIA if the area of the development exceeds 0.5 hectare (as outlined in the EIA Regulations). DETR Circular 2/99 states that significant effects are more likely for developments which:

- are of more than local importance;
- are in particularly vulnerable or sensitive locations;
- have unusually complex and potentially hazardous environmental effects.

11.6 In judging the likelihood of significant effects, the Planning Authority will also have regard to the thresholds and criteria set out in the Regulations. **Table 11.2** outlines the thresholds and circumstances in which an EIA may be required for different types of renewable energy development. Where the 'applicable thresholds and criteria' in column 2 are not met, EIA will not normally be required, although it may still be necessary for development in an 'environmentally sensitive area' or when directed by the Secretary of State. Where the 'indicative thresholds and criteria' in column 3 are exceeded, EIA is more likely to be required.

Table 11.1: Planning permission requirements

Technology	Permitted development	Planning permission required if:	EIA required (See Table 11.2 for more details)
Solar	Roof-mounted panels that do not protrude by more than 200mm. Stand alone panels that are not: - More than 4 metres in height - Above a maximum array area of 9m2	• Roof-mounted panels that protrude more than 200mm • Installation would result in the highest part of the solar panel/Solar Hot Water equipment being higher than the highest part of the roof (excluding chimney) • A stand-alone installation would be larger than 9m^2 • A stand-alone installation would result in the presence of more than one ground mounted solar installation within the curtilage of the dwelling • A stand-alone installation would be situated within 5m of the boundary of a dwelling house, and would be either more than 2m in height, or within 5m of a highway • In a conservation area or World Heritage Site, where installation would be on the wall forming a principal or side elevation of the dwelling house and visible from a highway.	• The area of the development exceeds 0.5 hectare. • The proposed development is located in a sensitive area.
Anaerobic digestion	None	All anaerobic digestion installations	• Installation where the development area exceeds 0.5 ha • Installation where the area of works exceeds 1 ha (Schedule 2.3(a) or 2.3 (b) of the EIA Regulation 1999)

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Technology	Permitted development	Planning permission required if:	EIA required (See Table 11.2 for more details)
			• If the installation will process waste, it could also fall under Schedule 2.11 (c) of the Regulations.
Biomass	The installation of a flue forming part of a biomass heating system on a dwelling house	An installation where the height of the flue would exceed the highest part of the roof by 1 metre or more. In conservation areas and World Heritage Sites, where the flue would be mounted on a wall or roof forming the principal or side elevation of a dwelling house and be visible from a highway	• Installation where the development area exceeds 0.5 ha • Installation where the area of works exceeds 1 ha • (Schedule 2.3(a) or 2.3 (b) of the EIA Regulation 1999) • If the installation will process waste, it could also fall under Schedule 2.11 (c) of the Regulations.
Micro-hydro	None	All small scale hydro-electricity installations	• The installation is designed to produce more than 0.5MW. • The proposed development is located in a sensitive area
Ground/air source heat pumps	Ground source heat pumps within the curtillage of a dwelling house	Air source heat pumps within the curtilage of a dwelling house	• The proposed development is located in a sensitive area.
District Heating	None	Heat only, or CHP district heating schemes of below 50MW	• Installation where the development area exceeds 0.5 ha • Installation where the area of works exceeds 1 ha (Schedule 2.3(a) or 2.3 (b) of the EIA Regulation 1999)
	None	All wind energy installations	• The development involves installation of

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Technology	Permitted development	Planning permission required if:	EIA required (See Table 11.2 for more details)
Wind			more than two turbines; or • The hub height of any turbine or height of any other structure exceeds 15 metres.
On-shore connectors for off-shore wind	None	All on-shore connectors and associated cables	• Installation where the development area exceeds 0.5 ha (Schedule 2.3(a) or 2.3 (b) of the EIA Regulation 1999)

Table 11.2: EIA Thresholds for Schedule 2 Developments

Type of development	Applicable thresholds and criteria	Indicative thresholds and criteria
Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)	The area of the development exceeds 0.5 hectare.	EIA will normally be required for power stations which require approval from the Secretary of State, i.e. those with a thermal output of more than 50 MW.
Installations for hydroelectric energy Production	The installation is designed to produce more than 0.5MW.	In addition to the physical scale of the development, particular regard should be had to potential wider impacts on ecology and hydrology. EIA is more likely to be required for new developments which have more than 5 MW generating capacity.
Installations for the harnessing of wind power for energy production (wind farms)	(i) The development involves the installation of more than two turbines; or (ii) The hub height of any turbine or height of any other structure exceeds 15 metres.	The likelihood of significant impacts will generally depend on the scale of development, and its visual impact, as well as potential noise impacts. EIA is more likely to be required for commercial developments of five or more turbines, or more than 5 MW of new generating capacity.

CONSULTATION

11.7 Renewable energy developers are advised to consult the National Park Planning Authority prior to preparing an application. As part of this pre-application process, the developer may also consult with the statutory consultation bodies, the general public, and relevant non-statutory stakeholders, in order to identify potential areas of concern and address them at an early stage in the project planning process.

11.8 Once the Planning Authority has received and confirmed receipt of an application and supporting information, it will publicise and consult on the application. The statutory consultation bodies are set out by Government within Town and Country Planning (General Development Procedure) Orders. **Table 11.3** lists a number of statutory and non-statutory consultation bodies and relevant areas of interest. This list is not exhaustive and the Pembrokeshire Coast National Park Authority Planning Team will be able to advise on additional consultees depending on the type of renewable energy proposed and the location.

Table 11.3: Organisations to be consulted on renewable energy proposals

Organisation	Areas of interest
Statutory Consultees	
Cadw (Historic environment department of WAG)	Historic environment
Countryside Council for Wales	Natural environment, access and recreation
Environment Agency Wales	Water environment, pollution control, flooding
Highways Agency	Access to highways and traffic changes
Pembrokeshire County Council	Developments that may have effects beyond the boundaries of the National Park
Pembrokeshire Coast National Park Authority	Various
Non-statutory consultees	
Community Councils	Proposals affecting that community
Forestry Commission Wales	Woodland and forestry
The Wildlife Trusts of South and West Wales	Wildlife and countryside

The role of planning conditions and planning obligations

Planning conditions

11.9 Planning conditions are conditions attached to a planning permission. They are imposed by a consenting authority such as the local planning authority – in this case the Pembrokeshire Coast National Park Authority. The purpose of planning conditions is to enhance the quality of development, enabling development proposals to proceed where planning permission may have otherwise been refused.

11.10 National policy guidance[38] requires planning conditions to be:

(i) necessary;

(ii) relevant to planning;

(iii) relevant to the development to be permitted;

(iv) enforceable;

(v) precise; and

(vi) reasonable in all other respects.

[38] Welsh Office Circular 35/95 (The Use of Conditions in Planning Permissions)

11.11 Examples of model conditions can be found in Appendix A of Welsh Office Circular 35/95 and on the Planning Inspectorate's website. Circular 35/95 includes guidance on attaching conditions limiting noise levels at particular properties. More detailed guidance on planning conditions for onshore wind energy development is available from the Department for Business, Enterprise and Regulatory Reform (BERR)'s Onshore Wind Energy Planning Conditions Guidance Note (2007).

11.12 Key matters to be addressed by planning condition, as listed in the WAG *Practice Guidance for Planning Implications of Renewable Energy*, include[39]:

- *Conditions relating to transport movements e.g. routeing, times of delivery/construction work, hours of operation.*
- *Highway works, e.g. creation or improvement of access to the site, temporary works to enable delivery of large components etc.*
- *Design of development, including provision for submission and agreement by the local planning of detailed design of particular parts of the development.*
- *Mechanism to agree a detailed 'Method Statement' for construction, operation or management, e.g. detailed construction details, pollution control measures, procedures for phasing development of a district heating main.*
- *Set limits for noise levels at the nearest properties (e.g. for wind energy development) or for particular plant/buildings on site (e.g. energy from waste processing plant).*
- *Monitoring requirements, e.g. for noise levels, odour, percentage of renewable energy used by a development, protected species monitoring etc.*
- *Management requirements, e.g. preparation, agreement and implementation of an Environmental Management Plan.*

Planning obligations

11.13 Planning obligations, also known as Section 106 (s.106) agreements[40], are private contracts agreed between a developer and the local planning authority, which are designed "*to make acceptable developments which would otherwise be unacceptable in planning terms*"[41]. The aim of the planning obligations is to ensure a proposed development adheres to local or national planning policy. Where possible, conditions should be used in preference to planning obligations. Examples of the types of aspect of a development that might be covered by planning obligations include:

- to stipulate the nature of a development (e.g. by specifying the colour or style of wind turbine);
- to secure a financial contribution to compensate for loss or damage created by a development (e.g. loss of open space);

[39] WAG (2011) Practice Guidance: Planning Implications of Renewable and Low Carbon Energy Development
[40] Section 106 of the Town and Country Planning Act 1990.
[41] Department of Communities and Local Government (2005) Circular 5/2005: Planning Obligations

- to mitigate a development's impact beyond the boundary of a development site (e.g. through appropriate planting to reduce visibility of a development within the landscape).

11.14 The purpose and process of a planning obligation is contained in Section 106 of the Town and Country Planning Act 1990 as amended by Section 12 of the Planning and Compensation Act 1991. Similarly to planning conditions, national policy[42] requires planning obligations to be:

(i) relevant to planning;

(ii) necessary to make the proposed development acceptable in planning terms;

(iii) directly related to the proposed development;

(iv) fairly and reasonably related in scale and kind to the proposed development; and

(v) reasonable in all other respects.

11.15 Planning Policy Wales (2011) highlights that planning obligations may be used to:

- Restrict development or use of the land.
- Require operations or activities to be carried out in, on, under or over the land.
- Require the land to be used in a specified way.
- Require payments to be made to the authority either in a single sum or periodically (Para 3.7.1)

11.16 Additional guidance on the use of planning obligations is provided in Annex B of TAN 8 Planning for Renewable Energy[43].

11.17 As outlined in Section 122 of the Community Infrastructure (CIL) Regulations 2010[44], to constitute a reason for granting planning permission, a planning obligation should be:

(a) Necessary to make the development acceptable in planning terms.

(b) Directly related to the development.

(c) Fairly and reasonably related in scale and kind to the development.

Further information

11.18 The following documents provide further information on relevant policy and useful guidance in relation to renewable energy developments:

[42] Welsh Office Circular 13/97 Planning Obligations (this is identical to the English Circular 1/97) now superseded in England only by Circular 05/2005).
[43] *Planning Policy Wales*. Technical Advice Note (TAN) 8: Planning for Renewable Energy. (2005), Welsh Assembly Government.
[44] The Community Infrastructure Levy Regulations 2010, http://www.opsi.gov.uk/si/si2010/draft/ukdsi_9780111492390_en_1

- WAG (2011) Practice Guidance: Planning Implications of Renewable and Low Carbon Energy Development (and supporting information on planning implications of renewable development): http://wales.gov.uk/topics/planning/policy/guidanceandleaflets/planningimplications/?lang=en
- Welsh Office Circular 35/95 (The Use of Conditions in Planning Permissions)
- Section 3 of Planning Policy Wales – Edition 4 (2011)

Annex 1: Landscape sensitivity and guidance for field scale solar PV development by LCA – to follow

Annex 2: Landscape sensitivity and guidance for wind energy development by LCA

This Annex provides a summary of landscape sensitivity to wind energy development for each Landscape Character Area (LCA) within the Pembrokeshire Coast National Park. LCAs 2, 17 and 23 are excluded as the assessment has focussed on predominantly rural LCAs.

Landscape sensitivity levels and definitions

Sensitivity Level	*Definition*
High	Key characteristics of the landscape would be adversely affected by the renewable energy development. Such development would result in a significant change in character. Likely to be unsuitable for the renewable energy development.
Moderate-high	Many of the key characteristics of the landscape would be adversely affected by the renewable energy development. Such development would result in a noticeable change in character. There may be some limited opportunity to accommodate the renewable energy development without changing landscape character. Great care would be needed in locating infrastructure.
Moderate	Some of the key characteristics of the landscape are vulnerable and may be adversely affected by the renewable energy development. Although the landscape may have some ability to absorb some development, it is likely to cause some change in character. Care would be needed in locating infrastructure.
Low-moderate	Few key characteristics of the landscape would be adversely affected by the renewable energy development. The landscape is likely to be able to accommodate development without only minor change in character.
Low	Key characteristics of the landscape are robust and would not be adversely affected by the renewable energy development. The landscape is likely to be able accommodate development without a significant change in character.

The sizes of wind turbine that have been considered are:

Size	**Height to blade tip**
Large	65m – 125m
Medium	25m – 65m
Small	<25m

Where the assessments have made reference to 'small clusters' of wind turbines, these comprise groups of 2-3 turbines.

LCA1: SAUNDERSFOOT SETTLED COAST

Landscape attribute	Sensitivity				
Overview	The area is already densely settled, and this indicates that this is landscape already affected by human impact and could therefore, in theory, accommodate additional built elements. However, the prominent undeveloped skylines, relative sense of tranquillity away from urban areas, the area's rich archaeology, and open views along the coast indicate that this landscape would be sensitive to wind turbine development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that could be sensitive to any scale of wind turbine development are: • The open views along the coast, particularly south towards Tenby. • The relative sense of tranquillity away from the urban areas. • The prominent undeveloped skylines, especially as viewed from the coast. • High historical value of industrial features and remains. • The ecological value of the semi-natural habitats. • The historic value of the parkland / estate around Hean Castle and Coppet Hall. • The character and appearance of the Saundersfoot Conservation Area.				
Guidance	• Locate any wind energy developments away from the most prominent rural skylines and consider the impact of tracks and ancillary buildings. There may be some opportunity for single or small clusters of small scale wind turbines within or on the edges of existing urban areas. • Utilise existing woodlands and the rolling topography to integrate any infrastructure associated with any turbine development into the landscape. • Ensure that development does not adversely affect the character and appearance of Saundersfoot's Conservation Area. • Consider the open views along the coast when siting any wind turbines. • Ensure the church spire, seen above Monkstone Point, remains the prominent landmark in the view southwards from Amroth towards Tenby and turbines do not compete or conflict with this landmark. • New development within Saundersfoot may provide opportunities for integrating renewable energy structures such as wind turbines. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[45].				

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[45] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA3: CALDEY ISLAND

Landscape attribute	Sensitivity				
Overview	This landscape's open aspect would provide great potential to harness wind energy. However, the high visibility of the island from the mainland, its strong sense of tranquillity, nationally significant archaeological and historic features, along with its high value for biodiversity (including sea bird colonies and cliff top habitats) mean it has an overall **high** sensitivity to wind turbine developments of any size or scale.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that make it unsuitable for wind technology development are: • Its high visual prominence from the mainland (including the island's lighthouse) and its flat terrain. • The small scale character of the island's landscape. • Its tranquil and lightly settled character. • Nationally important archaeological and historic remains, including the island's medieval priory and the potential of the inter-tidal zone. • The Conservation Area status of the eastern part of the island. • Important coastal habitats and species, including sea bird colonies on the cliffs.				
Guidance	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.				

LCA4: MANORBIER / FRESHWATER EAST

Landscape attribute	Sensitivity				
Overview	Although this LCA contains some development impacting on its otherwise open feel, the presence of an enclosed small-medium scale traditional agricultural landscape, internationally important habitats, and a strong historic sense of place means that it would have an overall **moderate-high** sensitivity to the development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that make it sensitive to wind turbine development are: • Its traditional enclosed farmland character with a strong historic sense of place. • The open skyline with views across the coast and beyond to Caldey Island. • Presence of internationally important habitats and bird species (e.g. peregrine falcon, chough). • Wealth of historic and archaeological sites including the preserved manorial landscape of Manorbier (a landscape of outstanding historic importance) • Two Conservation Areas at Manorbier and Portclew.				
Guidance	• This LCA is unsuitable for large scale turbines. • Single or small clusters of small scale turbines are likely to be most appropriate in this relatively small scale, rolling traditional farmed landscape. There may be opportunity for the single or small clusters of medium-scale turbines where sensitively sited, particularly inland. • Link any development to existing points of focus in the landscape, such as building clusters or industrial sites. • Consider the visual impact of tracks and ancillary buildings. There may be some opportunity for small scale wind turbines (below 25 metres) within or on the edges of existing or new urban development. • Utilise existing woodlands, the rolling topography and overgrown hedges to integrate any infrastructure associated with any turbine development into the landscape. • Site turbines away from the coastal edge so that they do not intrude into coastal views, particularly to Caldey Island and the coastal cliffs to the east. Consider views to the Preselis when siting any turbine development. • Protect the internationally important ecology by locating turbines away from sites of interest. • Protect historic and archaeological sites including the preserved manorial landscape of Manorbier (a landscape of outstanding historic importance). • Protect the character and setting of the Conservation Areas at Manorbier and Portclew. • Ensure that any turbine developments do not detract from the prominent landmarks at Manorbier; its castle, church and dovecote. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[46].				

[46] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA5: STACKPOLE

Landscape attribute	**Sensitivity**				
Overview	This LCA's nationally important cultural and historic designed landscape, its enclosed and confined character, the outstanding ecological importance of its diverse habitats, its lack of built forms and the presence of important buried archaeology, make it highly sensitive to wind turbine developments. It is therefore assessed as having an overall **high** sensitivity to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that make it sensitive to wind turbine development are: • The strong historic sense of place. • The tranquil nature of the area. • Enclosed, intimate valley landscape • Diverse habitats of international importance. • The nationally important historic and archaeological features. • Scenic beaches with strong cultural presence. • The presence of breeding sea bird colonies on the cliffs.				
Guidance	• This LCA is unsuitable for large and medium scale turbines. • Single small scale turbines are likely to be most appropriate in this enclosed and intimate landscape. • Link any development to existing points of focus in the landscape, such as building clusters. • Utilise existing woodlands and the steep valley sides to integrate any infrastructure associated with any turbine development into the landscape. • Protect the strong historic character of the Stackpole Estate and ensure the location of any turbines does not detract from this. • Site turbines away from the coastal edge and outside of views to and from the beaches at Broad Haven and Barafundel Bay. • Protect the internationally important ecology, including breeding bird sites. • Protect historic and archaeological sites including the character and setting of the designed Stackpole Estate and the wealth of archaeological features associated with Stackpole Warren. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[47].				

[47] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA6: CASTLEMARTIN / MERRION RANGES

Landscape attribute	Sensitivity				
Overview	The large scale of the landscape, the presence of military structures on the skyline, and the intrusive sound of gunfire in an otherwise tranquil landscape could indicate that this landscape might be able to accommodate additional man-made structures such as wind turbines. However, its open and wild landscape character, sense of relative remoteness, unsettled nature, long views along the coast, strong archaeological interest and the presence of important habitats supporting a range of wildlife species all pose constraints to the development of turbines and their associated infrastructure.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that could be sensitive to wind turbine development of any scale are: • Its wild landscape character, with a sense of relative remoteness. • Its open and exposed character with long views across the coast. • Its largely undeveloped character. • The ridgetop skyline of prominent lines of church towers and spires. • The presence of nationally important historic and archaeological sites. • Valued coastal habitats and species, including coastal grassland and heathland.				
Guidance	• The majority of this LCA is unsuitable for large or medium scale turbines. There may, however, be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below. • Elsewhere, this landscape is most suitable for single or small clusters of small scale turbines. • Site turbines well away from the coastal edge to conserve the open views along the coast and the naturalistic character of the coastal edge. • Turbines would be most appropriately sited alongside existing built development (e.g. adjacent to buildings). • Ensure turbines do not compete with the church towers and spires as landmarks on the skyline. • Protect the internationally important coastal ecology, including semi-natural habitats and breeding bird sites and feeding areas. • Protect historic and archaeological sites from infrastructure associated with turbines. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[49].				

Deleted: There may, however, be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below.¶
Elsewhere, this landscape is most suitable for single or small clusters of small scale turbines.

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Deleted: <#>The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[48].¶

[49] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA 7: ANGLE PENINSULA

Landscape attribute	Sensitivity				
Overview	The small scale field patterns, open undeveloped skylines, important coastal views, strong historic sense of place and the presence of important archaeological features and wildlife habitats all pose constraints to the development of turbines and their associated infrastructure.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that could be sensitive to wind turbine development of any scale are: • Its exposed and undeveloped skyline, with sensitive coastal views, including to St Ann's Head. • The small scale of the landscape with a strong sense of tranquillity. • The outstanding historical and cultural value including presence of nationally important historic and archaeological sites, including the Milford Haven Waterway and Angle Conservation Area. • Valued estuarine habitats and species, including overwintering wildfowl and waders.				
Guidance	• The majority of this LCA is unsuitable for large or medium scale turbines. There may, however, be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below. • There may be limited opportunity for single small scale turbines only on land close to the existing developed areas and built features, as long as they are sited sensitively following the guidance below. • Site turbines away from the undeveloped coastal edge to protect coastal views, including to St Ann's Head. • Site well away from the planned Medieval village of Angle. • Ensure traditional agricultural field patterns with hedges and hedgebanks are not affected. • Protect valued habitats and species, including Angle Bay for its overwintering bird species. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[50].				

Deleted: . There may, however, be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below.

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[50] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA8: FRESHWATER WEST / BROWNSLADE BURROWS

Landscape attribute	**Sensitivity**				
Overview	This LCA's remote and undeveloped character, and the presence of a rare dune system and nationally important wildlife habitats, indicates that this LCA has a **high** sensitivity to any scale of wind turbine.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The landscape attributes that will be sensitive to turbine development of any scale are: • Its remote and undeveloped character. • Rare dune system. • Diverse semi-natural habitats supporting a range of important plant and animal species. • Historic and archaeological sites, including Iron Age hillforts.				
Guidance	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.				

LCA 9: MARLOES

Landscape attribute	Sensitivity				
Overview	The undeveloped skylines, sparse settlement, predominantly rural character, inter-visibility with off-shore islands, and strong cultural heritage and valued wildlife habitats indicate that this LCA has a **high** sensitivity to large and medium scale turbines and a **moderate-high** sensitivity to small-scale turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are sensitive to turbine development are: • Its strong sense of rural tranquillity and undeveloped skylines. • Coastal views, including to and from Skomer and Stockholm islands. • Strong sense of tranquillity and relative remoteness, particularly at St Ann's Head. • Lighthouses that form landmarks on an otherwise open skyline. • Heathland and shoreline habitats of international importance supporting species such as peregrine falcon and grey seal. • Important historic features and cultural landscapes, including prehistoric sites and the Milford Haven Waterway.				
Guidance	• This LCA is unsuitable for large or medium scale turbines. • There may be limited opportunity for single or small clusters of small scale turbines close to existing built elements (such as farm buildings), as long as they are sited sensitively following the guidance below. • Site turbines away from the coastal edge to protect views, and the important relationship between land and sea. • Do not locate turbines on St Ann's Head, or where they may affect the sense of relative remoteness at St Ann's Head. • Consider views to and from the offshore islands, St Bride's Bay and the Angle Peninsular. • Ensure turbines do not compete with, or detract from, lighthouses as landmarks on the skyline. • Ensure ancillary development is well integrated into the landscape. • Protect historic and archaeological sites and their setting, including prehistoric sites and monuments, and medieval features. • Avoid affecting any heathland and shoreline habitats and protect valued habitats and species. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[51].				

[51] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA 10: SKOMER AND SKOKHOLM

Landscape attribute	**Sensitivity**				
Overview	The islands' open aspect would provide great potential to harness wind energy. However, their high visibility from the mainland, open skylines, defining wilderness qualities, internationally significant archaeological and historic features, internationally important natural heritage and lack of human disturbance mean they have a **high** sensitivity to wind turbine developments of any size or scale.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that are sensitive to wind turbines are: • Open and exposed character with panoramic sea views. • Strong wilderness qualities. • High visibility in views from most of the local mainland. • Absence of human disturbance. • Internationally important colonies of sea birds and natural habitats. • Internationally significant archaeological remains, including prehistoric agricultural and settlement features. • Constant relationship between the islands and the sea.				
Guidance	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included				

LCA 11: HERBRANDSTON

Landscape attribute	Sensitivity				
Overview	The dominating presence of industry on land in and immediately adjacent to this LCA indicates that it could accommodate additional man-made structures on the skyline. However, the landscape's peaceful, rural qualities, its lightly settled character, its outstanding historic and cultural heritage and valued estuarine habitats all increase sensitivity to the development of turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The landscape attributes that are sensitive to turbine development are: • Its peaceful, agricultural character. • Valued estuarine habitats along Sandy Haven Pill and Milford Haven. • Important historic features and cultural landscapes, including structures associated with the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales. • Views from St Ishmael's across Sandy Haven Pill and views across the Milford Haven Waterway.				
Guidance	• This LCA is unsuitable for large scale turbines. • . There may, however, be limited opportunity for a single or a small cluster of medium or large (under 100m to bade tip) scale turbines on land close to existing oil refinery chimneys to provide a new point of focus as long as they are sited sensitively following the guidance below. There may be opportunities for single or small clusters of small-scale turbines sited within or adjacent to existing or new building clusters in the LCA. • Site turbines away from important estuarine habitats. • Ensure development does not adversely affect the setting of the nationally significant historical sites. Particularly consider how any development appears in views from and to Sandy Haven Pill. Great Castle and St Ann's Head (LCA 9) and across the Milford Haven Waterway towards the Angle Peninsular (LCA 7). • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[52].				

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LCA12: ST BRIDE'S BAY

Landscape attribute	Sensitivity				
Overview	Although this is a large scale landscape, the open skylines, the remote and undeveloped coastal edge, and presence of historical and archaeological features all pose constraints to development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that could be sensitive to wind turbine development of any scale are: • The strong relationship between land and coast and the constant sight and sound of the sea. • The views across St. Brides Bay and along the undeveloped coastline. • The sense of remoteness/ tranquillity associated with the higher ground and the cobble beach at Newgale Sands. • Landscapes of high ecological value.				
Guidance	• This LCA is unsuitable for large or medium scale turbines. • There may be some limited opportunity for single or small clusters of small scale single turbines in areas of the rolling farmed landscape, associated with existing buildings, for example farm buildings. • Avoid siting turbines on the undeveloped coastline within views across St. Brides Bay. • Avoid siting turbines in the most tranquil areas i.e. on the higher ground and the cobble beach of Newgale Sands. • Consider views to and from the Marloes coast, St David's headland and the off-shore islands. • Protect habitats of high ecological value. • Protect historical and archaeological features and the relationship with their surrounding landscape, including prehistoric sites and monuments. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[53].				

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[53] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA13: BRANDY BROOK

Landscape attribute	Sensitivity				
Overview	The presence of the main A487 cutting across the west of this LCA introduces a human form which could indicate the landscape could accommodate further man-made structures. In addition, the woodland and vegetation cover may indicate some structures could be hidden from view. However, its small scale, strong sense of peace and tranquillity, strong visual relationship with Roch Castle, valued river habitats and species and archaeological remains all pose constraints to the development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The main landscape attributes that would be sensitive to wind turbine developments are: • Its small scale, intimate character. • The relative sense of tranquillity and peacefulness. • Strong visual relationship with Roch Castle as a prominent skyline feature. • Views to sea from hilltops. • Valued riparian habitats supporting species such as the otter. • Important prehistoric remains.				
Guidance	• Large scale turbines would not be appropriate in this landscape due to its small scale and tranquil character. • Single small scale turbines are likely to be most appropriate where sensitively sited – e.g. near existing groups of buildings. • Ensure that Roch Castle remains the dominant skyline feature, making sure that the siting of turbines does not conflict with this local landmark. • Use the area's woodlands to provide screening against any turbines or related infrastructure. • Maintain coastal views to and from St David's Headland and St Bride's Bay. • Protect the area's valued semi-natural habitats and archaeological remains when considering the location of turbines and infrastructure. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[54].				

[54] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA 14: SOLVA VALLEY

Landscape attribute	Sensitivity				
Overview	The area's industrial past, presence of built features/ buildings and high woodland cover indicate that this LCA could accommodate well sited man-made structures. However, its small scale, tranquil character, Solva's strong historic sense of place, the presence of an outstanding historic and archaeological heritage, and the presence of valued habitats and species all increase sensitivity to the development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to wind turbine development are: • The small scale, intimate character of the valley landscape and its relative sense of tranquillity. • Solva's historic sense of place and special historic, cultural and architectural interest (as recognised by its Conservation Area status). • The strong link between the harbour at Solva and the coast. • Outstanding historic and archaeological features, particularly lime kilns by Solva harbour. • Internationally important heathland habitats along the valley floor supporting priority species such as the peregrine falcon and chough.				
Guidance	• Large or medium scale turbines would not be appropriate in this landscape due to its small scale. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account of the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape. • Use the area's woodlands to provide screening for related infrastructure. • Protect the area's valued heathland habitats and species they support. • Do not allow the location of turbines and associated infrastructure to affect the character and setting of the Conservation Areas within the village and valley. • Ensure turbines do not affect Solva's historic sense of place and special historic, cultural and architectural interest (as recognised by its Conservation Area status). • Protect the importance of historic and archaeological features, for example the lime kilns at Solva. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[55].				

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LCA 15: DOWROG & TRETIO COMMONS

Landscape attribute	Sensitivity				
Overview	This landscape's large scale, presence of man-made features (airfield and main road) and lack of prominent skylines within the LCA indicate that this landscape may be able to accommodate well sited built features, such as wind turbines. However, its relative sense of tranquillity, inter-visibility with the Carn Llidi mountains and St David's, outstanding historic and cultural significance, and presence of highly valued semi-natural habitats all increase sensitivity to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The main landscape attributes that would be sensitive to wind turbine developments are: • Its open, undeveloped skylines and inter-visibility with the Carn Llidi mountains. • The strong rural and relative sense of tranquillity, particularly away from the main road through the LCA. • The large areas of unenclosed common land with internationally valued heathland habitats. • Outstanding historic and cultural interest, particularly the prehistoric sites and early Christian monuments, linking to the wider St David's Headland & Ramsey Island Registered Historic Landscape, and the Caerfarchell Conservation Area.				
Guidance	• Large and medium scale turbines would not be appropriate in this open landscape due to its inter- visibility with surrounding areas. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site single small scale turbines in areas where they can relate to existing buildings or built structures in the landscape. • Consider views from the Carn Llidi mountains and St David's headland when siting small turbines • Protect areas of greatest tranquillity (there may be some opportunity to site small turbines close to the main road). • Ensure turbines and infrastructure do not affect the area's valued heathland habitats and commons. • Ensure that turbine development does not affect the character and setting of the Caerfarchell Conservation Area. • Ensure that turbine development does not affect the prehistoric significance of this landscape or the value of the St David's Headland & Ramsey Island Registered Historic Landscape. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[56].				

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[56] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA16: CARN LLIDI

Landscape attribute	Sensitivity				
Overview	The distinctive open rocky skylines, strong feeling of remoteness with little human disturbance, and the wealth of outstanding archaeology and internationally important habitats all pose serious constraints to this type of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that make it unsuitable for wind turbines are: • Its distinctive open, rocky skylines and inter-visibility with lower land including St David's and the Dowrog and Tretio Commons • Its strong sense of tranquillity and remoteness, with little human development. • Its nationally important archaeology, displaying thousands of years of use and settlement (recognised as part of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales). • Its internationally important heathland and maritime habitats.				
Guidance	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.				

LCA18: ST DAVID'S HEADLAND

Landscape attribute	Sensitivity				
Overview	This landscape's rural remote character, open and undeveloped skylines, extensive coastal views, wealth of outstanding archaeology and internationally important habitats all pose serious constraints to this type of renewable energy development. However, inland cultivated areas are a little less sensitive.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The main landscape attributes that would be sensitive to wind turbine developments are: • Its peaceful, rural character with few built intrusions, particularly along the coast and on the headland. • Its open, undeveloped skylines, with St David's Cathedral a prominent local landmark. • The extensive unspoilt coastal views, including those to and from Ramsey Island. • Its outstanding historic and cultural value, including prehistoric features such as the Clegyr Boia Neolithic settlement and early Christian sites. • The presence of internationally important heathland, grassland and wetland habitats.				
Guidance	• Large and medium scale turbines would not be appropriate in this open landscape. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site single small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, well away from the coastal edge. • Maintain the open views along the coast and to Ramsey Island, Carn Llidi, St Bride's Bay and south to the Marloes Coast – consider views from these landscapes when siting turbines. • Ensure St David's Cathedral remains prominent on the skyline, and that the siting of turbines does not conflict with this important local landmark. • Ensure small turbines and any associated infrastructure do not affect the area's valued heathland and wetland habitats. • Ensure small turbines and any associated infrastructure do not affect the area's archaeology, including the Clegyr Boia Neolithic settlement. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[57].				

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[57] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA19: RAMSEY ISLAND

Landscape attribute	Sensitivity				
Overview	This landscape's open aspect and exposed character would provide great potential to harness wind energy. However, its pervading sense of wildness, spectacular natural heritage, high visibility of the island from the mainland, lack of human disturbance and internationally significant archaeological and historic features, along with its high value for nature conservation all pose severe constraints to the development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The key landscape attributes that make it unsuitable for wind turbines are: • Its pervading sense of wildness, spectacular natural heritage and lack of human disturbance/settlement. • Its high visual prominence from the mainland, and open, undeveloped skylines. • The presence of internationally important archaeological and historic remains, including the Medieval chapel and prehistoric round barrows. • Its highly valued wildlife habitats, including heathland and maritime cliffs, along with the presence of sea bird colonies.				
Guidance	This LCA is assessed as being unsuitable for any size of scale of wind turbine development; therefore no guidance has been included.				

LCA20: TREFIN

Landscape attribute	Sensitivity				
Overview	This landscape's large scale, open aspect, settled character, and past industrial activity may indicate that features such as wind turbines may be accommodated within the LCA if sensitively sited. However, its open undeveloped skylines, extensive coastal views, relative sense of remoteness on the coastal edge, highly valued coastal and heathland habitats, and presence of nationally important archaeological and historic sites all increase sensitivity to wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to wind turbines are: • Its large scale, open aspect and undeveloped skylines. • The extensive views along the coast. • The area's strong relative sense of remoteness, particularly on the coastal edge. • The wealth of nationally important archaeological sites, particularly related to the area's industrial heritage such as lime kilns and the famous Blue Lagoon quarry. • The character of the Conservation Areas at Trefin and Porthgain. • Its highly valued habitats, particularly along the coastal cliffs and the areas of lowland heathland.				
Guidance	• Large and medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single or small clusters of small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape. • Maintain open views along the coastline by siting turbines and related infrastructure away from the coastal edge. Protect views to this coastline from the inland LCAs (15 and 16) by sensitively siting turbines. • Ensure turbines and related infrastructure do not affect the area's valued heathland and cliff-top habitats. . • Ensure turbines do not adversely affect the character or setting of the Conservation Areas at Trefin and Porthgain. • Ensure turbines do not adversely affect the area's valued historic and archaeological features, including lime kilns and other features linked to its industrial heritage. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[58].				

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[58] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA21: PEN CAER / STRUMBLE HEAD

Landscape attribute	Sensitivity				
Overview	This landscape's open aspect would make it well suited for harnessing wind energy. However, its open, undeveloped skylines, extensive coastal views, strong sense of tranquillity and remoteness, valued habitats and species, and the presence of nationally important archaeological and historic sites all pose constraints to the development of turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to the development of wind turbines are: • The undeveloped and characterful skylines of jagged coastal cliffs and rocky hill summits. • The landmarks of Strumble Head lighthouse and Iron Age hillfort at Garn Fawr . • The extensive views along the coast and intervisibility with the Preseli Hills. • The strong sense of tranquillity and remoteness, with sparse settlement and lack of intrusive development. • The presence of nationally important archaeological sites, including the prominent hill forts at Garn Fawr and Garn Fechen and early Christian sites. • Its valued habitats, particularly along the coastal cliffs and the open hill summits.				
Guidance	• Large and medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, preferably adjacent to existing farm buildings, and well away from the coastal edge. • Ensure turbines do not affect the undeveloped and characterful skylines of jagged coastal cliffs and rocky hill summits. • Consider views to and from the Preseli Mountains in the east when siting any turbines. • Ensure turbines do not conflict with views to important land mark features, namely the hillforts on Garn Fawr and Garn Fechen, and the lighthouse on Strumble Head. • Do not site turbines of any size on Strumble Head, or along the landscape's distinctive coastline. • Ensure turbines and related infrastructure do not affect the area's valued heathland and cliff-top habitats or the area's valued historic and archaeological features, particularly its prehistoric and early Christian sites and monuments. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[59].				

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[59] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA22: MYNYDD CARNIGLI

Landscape attribute	Sensitivity				
Overview	This landscape's distinctive rocky and undeveloped skylines, strong sense of tranquillity and remoteness, internationally valued habitats, and nationally important archaeological and historic sites indicate that this LCA has a **high** sensitivity to any scale of wind turbine development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to the development of wind turbines are: • Its undeveloped skylines with distinctive rock formations and Iron Age hillfort, which are dominant features when viewed from the surrounding landscape. • The intervisibity of the area with the coast and the Preseli Hills. • Its strong sense of tranquillity and remoteness and relative inaccessibility. • Its sparse settlement and lack of intrusive development. • The presence of nationally important archaeological sites, including the prominent hill forts at Garn Fawr and Garn Fechen and early Christian sites. • Its valued habitats (including open moorland and heathland), particularly along the coastal cliffs and the open hill summits.				
Guidance	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.				

LCA24: DINAS HEAD

Landscape attribute	Sensitivity				
Overview	Although this landscape has a large scale landform and settled character, its relative sense of tranquillity, open undeveloped skyline, coastal views and valued prehistoric archaeology all present sensitivities to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to wind turbines are: • The prominent headland of Dinas Head and the rocky coastline, visible in many views from within the LCA. • The relative sense of tranquillity away from the A487 road. • The scattered, traditional settlement pattern. • The distinctive views to, and inter-visibility with. Mynydd Carningli and the Preseli Hills. • Nationally valued prehistoric remains including Carrig y Gof chambered tomb, as part of the Newport and Carningli Registered Landscape of Special Historic Interest.				
Guidance	• Large and medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site single small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, including adjacent to existing farm buildings, and well away from the coastal edge. • Ensure turbines do not affect the characteristic undeveloped skylines of rocky coastal cliffs and the distinctive feature of Dinas Head. Do not site any turbines on Dinas Head. • Consider views to and from the Preseli Mountains and Mynydd Carningli when siting any turbines. • Ensure turbines and related infrastructure does not affect the area's prehistoric remains within the Newport and Carningli Registered Landscape of Special Historic Interest, particularly Cerrig y Gof Neolithic tomb. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[60].				

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[60] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA25: CEMAES HEAD

Landscape attribute	Sensitivity				
Overview	Although this landscape has a large scale landform, its relative sense of tranquillity, open undeveloped skylines, coastal views and valued prehistoric archaeology all present sensitivities to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The landscape attributes that would be particularly sensitive to the development of wind turbines are: • The landscape's sparse settlement pattern, lack of visible development and strong sense of tranquillity. • Its open, undeveloped skylines including distinctive burial mounds and tumuli on the high outcrop of Crugiau Cemmaes. • The open and exposed coastal edge and important coastal views. • Inter-visibility with the adjacent Mynydd Carningli and Mynydd Preseli. • The presence of nationally valued prehistoric remains including burial mounds and tumuli on the high outcrop of Crugiau Cemmaes.				
Guidance	• Large and medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single or small clusters of small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, e.g. adjacent to existing farm buildings, and well away from the coastal edge. • Take advantage of the screening effects of the area's woodlands and hedgerows when locating wind turbine infrastructure. • Ensure turbines do not affect the undeveloped skylines of the high coastal cliffs or skylines as seen along the coast. • Consider views to and from Mynydd Preseli and Mynydd Carningli when siting any turbines. • Ensure turbines and related infrastructure do not affect the area's prehistoric remains including burial mounds and tumuli on the high outcrop of Crugiau Cemmaes. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[61].				

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[61] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA26: CWM GWAUN / AFON NYFER

Landscape attribute	Sensitivity				
Overview	The small and intimate scale of the valleys, high levels of tranquillity, sparse settlement, and the presence of valued semi-natural habitats and historic sites all pose constraints to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	Landscape attributes that are particularly sensitive to the development of wind turbines are: • The small scale and intimate character of the valley landscapes. • The landscape's sparse settlement pattern, lack of recent development and sense of tranquillity. • Its wooded, undeveloped skylines and views to the adjacent uplands of Mynydd Carningli and Mynydd Preseli. • Valued woodland and meadow habitats, particularly in the Cwm Gwaun valley. • The landscape's nationally significant archaeology, including Iron Age hillforts and Neolithic tombs around Nevern.				
Guidance	• Large or medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, preferably adjacent to existing buildings. • Take advantage of the screening effect of the area's woodlands and overgrown hedges when locating any infrastructure associated with small scale turbines. • Ensure turbines do not affect the undeveloped skylines of the valleys, or views to the adjacent Mynydd Preseli and Mynydd Carningli. • Ensure turbines and related infrastructure do not affect the area's historic and archaeological features, particularly Iron Age hillforts on the valley ridges and Neolithic tombs around Nevern. • Ensure turbines and related infrastructure do not affect the area's internationally designated sites for nature conservation interest and do not result in any woodland loss. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[62].				

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[62] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA27: MYNYDD PRESELI

Landscape attribute	Sensitivity				
Overview	This landscape's conspicuous landform, undeveloped skylines, absence of settlement and built development, and nationally valued prehistoric remains all pose significant constraints to the development of wind turbines.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The landscape attributes that would be particularly sensitive to the development of wind turbines are: • Its open moorland character with an overriding sense of tranquillity and remoteness. • The lack of development and woodland cover. • The strong visual prominence of the hills in the wider landscape of northern Pembrokeshire. • The extensive views to the coast and across the surrounding landscapes. • Its nationally valued archaeological resource, particularly the breadth and range of prehistoric remains.				
Guidance	• This landscape would be highly sensitive to the development of all sizes and scales of turbine. There may be very limited potential for single or small clusters of small scale turbines, providing the guidance below is followed. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, preferably adjacent to existing farm buildings. • Take advantage of the screening effects of the area's plantations when locating wind turbine infrastructure. • Ensure turbines do not affect the undeveloped skylines and views across the surrounding landscape towards the coast. • Do not site turbines in prominent positions which could be visible from surrounding areas. • Ensure turbines and related infrastructure does not affect the area's prehistoric remains within the Preseli Registered Landscape of Outstanding Historic Interest in Wales. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[63].				

Deleted: very limited potential for single or small clusters

[63] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

LCA28: DAUGLEDDAU

Landscape attribute	Sensitivity				
Overview	Although there are signs of former industry (small scale mining industry and limestone quarrying), this landscape's sheltered and intimate rural character, undeveloped skylines, great sense of tranquillity, characterful views across the river, and semi-natural habitats present sensitivities to this form of renewable energy development.				
	Low	**Low-Moderate**	**Moderate**	**Moderate-High**	**High**
Large turbines					
Medium turbines					
Small turbines					
Key sensitivities	The landscape attributes that would be particularly sensitive to the development of wind turbines are: • The landscape's lightly settled character and high levels of tranquillity. • Its intimate and enclosed landscape character with strong historic sense of place. • Its undeveloped, wooded skylines. • The presence of historic features including Bronze Age barrows, Iron Age hillforts and parkland. • The presence of valued semi-natural habitats.				
Guidance	• Large and medium scale turbines would not be appropriate in this landscape. • There may be limited opportunity for single or small clusters of small scale turbines as long as they are sensitively sited and take account the guidance below. • Only site small scale turbines in areas where they can relate to existing buildings or built structures in the landscape, preferably adjacent to existing farm buildings, and away from the estuary edges. • Take advantage of the screening effect of the area's woodlands when locating wind turbine infrastructure. • Ensure turbines do not adversely affect the characterful views from shoreline settlements across and along the river. • Ensure turbines and related infrastructure does not affect the area's prehistoric remains – including the including Bronze Age barrows and Iron Age hillforts. • Ensure turbines and related infrastructure does not affect the area's valued semi-natural habitats. • The National Park Authority should ensure that any wind turbine development located within this LCA does not sacrifice the essential integrity, coherence and character of the landscape or the special qualities of the National Park[64].				

Deleted: single or small clusters of

[64] 'Integrity' refers to how the landscape reads as a whole, whilst 'coherence' relates to how the individual components of the landscape connect together. 'Character' relates to the combination of essential landscape elements which make one landscape distinctive from another.

This Supplementary Planning Guidance was prepared on behalf of the Pembrokeshire Coast National Park Authority by Land Use Consultants.
www.landuse.co.uk

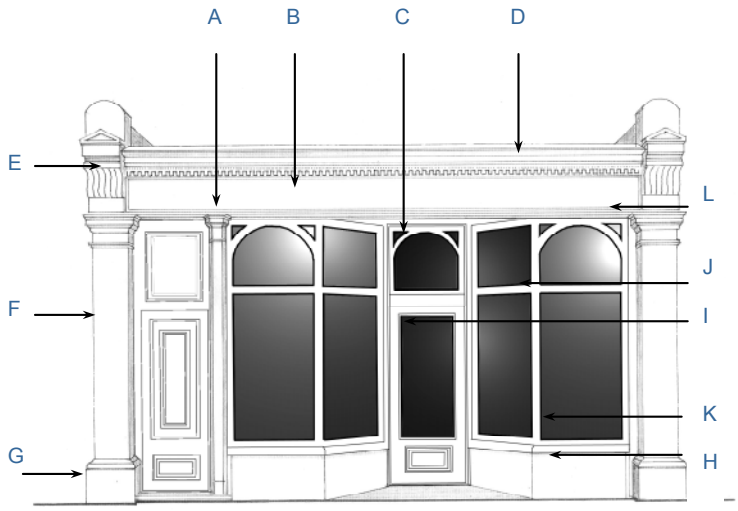
Pembrokeshire Coast National Park Local Development Plan (LDP)

1.7 The Pembrokeshire Coast National Park Local Development Plan was adopted by the Authority in September 2010. This guidance is in particular, supplementary to Policies 8 'Special Qualities', 14 'Protection of Buildings of Local Importance' and 29 'Sustainable Design'.

1.8 This Supplementary Planning Guidance will be a material consideration in the determination of appropriate planning applications.

2.0 Design Principles

2.1 **Good design is good business: shopfronts and signage have a major impact on a places character. Poorly designed shopfronts are bad for trade and detract from an area – good design is a good advertisement. The various elements of a typical shopfront are illustrated below.**



A. Architrave
B. Fascia
C. Fanlight
D. Cornice
E. Console Bracket (corbel)
F. Pilaster
G. Plinth
H. Stallriser
I. Recessed Door
J. Mullion
K. Cill
L. Transom

Elements of a shopfront

2.2 The design of a shopfront will be most effective if it considers the whole building and not just the display window within the streetscape. The character of the surrounding area should also be considered.

2.3 Traditional shopfronts should always be repaired, or reinstated where altered. High quality modern design is generally appropriate for modern buildings and can also be a more appropriate solution for historic buildings than 'pastiche'.

3.0 Retaining Existing Shopfronts

3.1 Where the existing shopfront contributes to the character of the building or the area, it should normally be repaired rather than replaced. Often, some details such as a cornice or

brackets survive and should be repaired or replicated. Old photographs can be helpful in reinstating historic detail.

3.2 In some cases (e.g. Listed Buildings, Conservation Areas), grant aid may be available for repairs or reinstatement.

3.3 The removal or unsympathetic alteration to historic shopfronts on Listed Buildings or buildings which make a contribution to the overall character of the Conservation Area in which it is sited will not be permitted.

4.0 Replacement Shopfronts

4.1 The general aim of this policy is to ensure that any investment made in shops reinforces the traditional quality and image of shopping areas and in particular those located in Conservation Areas.

4.2 When applications for planning permission are made to replace or alter a shopfront, the replacement of poor quality shopfronts by more appropriate designs will be encouraged.

4.3 Replacement shopfronts should reflect the design of the original (old photographs can be useful). Where they exist, traditional details such as corbels or pilasters should be incorporated or replicated 'like for like'.

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4.4 Where historic interior features survive such as cornices, fireplaces and joinery, there will be a presumption in favour of their retention.

4.5 Steel columns to support the upper floors were traditionally employed and are acceptable providing that they relate well to structural members of the shopfront itself.

5.0 Modern Shopfronts

5.1 Modern design can produce innovative, individual and eye catching shopfronts. However proposals for modern shopfronts in historic areas, such as Conservation Areas should follow the broad design principles and considerations contained in this guide to ensure a high standard of design is achieved that enhances the street scene.

5.2 Modern shopfronts should be of high architectural quality, with particular consideration being made to scale, massing, context, and the use of appropriate materials which draw out local distinctiveness.

5.3 Modern design can be used to good effect where shopfronts are integrated into a new development with a consistent design principle running throughout. Any new retail development should always respond to the character of the whole area, as well as adjacent buildings and seek to preserve and enhance its surroundings.

5.4 Shopfronts of modern design can also be successfully incorporated into traditional facades if respect is paid to the architectural form of the building and its surroundings.

6.0 The Character Of The Street

6.1 The design of a shopfront should take into account the rhythm and characteristics of the street as well as the proportions of the building itself. The majority of shops traditionally occupy narrow frontages giving a vertical rhythm two or three windows wide, with shopfronts of varying rather than uniform designs.

6.2 Exceptions to this policy would include a terrace of shops designed as a single composition or Victorian 'emporium' style shops which occupy wider or multiple frontages and sometimes upper floors too.

6.3 New shopfronts which extend over two or more buildings and ignore the rhythm of the streetscape will not be acceptable. The character and identity of each building should be retained e.g. by using individual shopfronts/windows.

6.4 Not every shopfront follows the typical pilaster-and-cornice design. Many shops evolved from domestic front rooms, either retaining the original doors and windows or providing a small shop window, relying on modest signage for custom. The provision of formal shopfronts in such cases is rarely appropriate.

7.0 The Building

7.1 There are no shopfronts in Pembrokeshire predating the late 1700s, when shops typically had small-paned bow windows, a design much reproduced in the 1960s and 70s. By the early 1800s, shopfronts became larger and symmetrical, articulated with pilasters or columns. Victorian and Edwardian shopfronts were similarly composed, with more elaborate detailing and increasingly, large plate-glass windows. In some cases, the glazing bars of the old windows were removed.

7.2 In many cases, shopfronts were inserted into earlier buildings and replacement/new shopfronts should respect this 'continuity' rather than to attempt an earlier pastiche.

7.3 A well designed shopfront should combine careful design and materials which respect the scale and character of its host building.

7.4 Pilasters, fascia, cornice and stallriser should be used to enclose the shop window and entrance rather like a picture frame that sets off a painting.

7.5 Pilasters identify the vertical division between the shopfronts; the fascia provides the space for advertising; the cornice gives a strong line at the top of the shopfront and offers protection from the weather; the stallriser gives protection at ground level and provides a solid base; and all of these elements form a frame which suggests, visually, a method of support for the building façade above. These principles are as valid for new shops as for traditional ones. Proposals for 'modern' shopfront designs, which do not involve loss of existing traditional features, may be acceptable if the traditional frame or fascia, corbel and pilaster are retained or re-introduced.

8.0 Detailed Design Elements

Windows and Doors

8.1 A skilled design will enhance the building and attract customers. Windows should be looked through and not at; windows stickers should be avoided – the emphasis should be on an attractive display of the goods themselves.

8.2 Door and window patterns should reflect the traditional design of the area. Small-paned windows are appropriate to earlier buildings and larger plate-glass windows for later Victorian and Edwardian ones.

8.3 Glazing should be emphasized vertically rather than horizontally, matching the proportions of the building above and should normally be set flush with the front of the building. Only in exceptional cases (e.g. butchers shops) were opening windows provided.

8.4 In most cases, traditional timber construction (using timber from proven sustainable sources) is appropriate with modern materials such as coated aluminium or bronze acceptable for modern buildings. In some cases, modern materials are appropriate for historic buildings where pastiche is to be avoided.

8.5 The enlargement of existing upper windows for display purposes will not normally be permitted.

8.6 Mouldings e.g. of mullions and glazing bars are usually bold.

8.7 Where the door is recessed, it provides depth and relief to the shopfront and invites the customer into the premises.

8.8 Recesses should be limited to the shop entrance which should usually be centrally positioned.

8.9 Doors were traditionally half or three-quarter glazed with a solid moulded panel below. Where they survive, they should be repaired/replicated. Doors should open inwards and not outwards onto the highway/pavement. Usually separate doors to upper floors had solid panels.

8.10 Door furniture should be easy to manipulate for all users, located no higher than 950mm above floor level.

8.11 Where ventilation is required, this is best provided in the form of an inward-opening overlight above the door or a traditionally patterned continuous grille set above the glazing.

8.12 Entrance doors should have a door opening width of not less than 800mm and a clear opening of at least 1000mm where the historic character of the building is not compromised. Automatic doors will not normally be appropriate in historic or listed buildings as they may detract from their character. For new shops on a sloping site, it is better to site the door to one side, so as to gain the benefit of the gradient.

Pilasters and Corbels

8.13 Pilasters provide a strong 'framing' to the shop, both to hold attention and give visual support to the upper floors. Pilasters usually taper slightly towards the top, with a plinth at the bottom and decorative capital or corbel/finial above.

8.14 Traditionally, pilasters were of timber construction or render. Ceramic tiles and textured coatings are not acceptable.

Stallrisers

8.15 These raise the goods on display to a convenient level, protect the base of the window from damage and are capable of being kept clean. They should be at least 500mm high. Traditional finishes include glazed tiles/bricks or painted render. Plastic and unglazed brick are not appropriate finishes. Stall risers faced with timber, stone, tiles or brickwork that matches the existing may be considered appropriate for areas outside of the National Park.

Fascias and Cornices

8.16 Traditional fascias assumed the place and proportions of the frieze and cornice of classical architecture. Fascia depth should always be around a fifth of the shopfront height (to the bottom of the fascia) and should always be lower than the first floor cills above. An angled fascia politely directs its message downwards and is free from perspective distortion.

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8.17 The cornice mouldings should be exaggerated slightly and project well to create depth. Cornices should not be 'planted' directly onto the façade – they should project and have return mouldings unless terminated by finials. The upper moulding should be simply dressed in lead with no scallops or similar effects.

8.18 Traditional fascias and cornices should be retained and refurbished where they exist and introduced where absent.

8.19 Bulky, internally illuminated fascia boxes or glossy acrylic/plastic fascia boards are not acceptable. Traditional fascia boards of timber or enamelled metal are preferable.

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8.20 Standardized or corporate fascias or logos may not be acceptable unless they are modified to fit within or compliment the traditional scale and design of the shopfront, as well as the character of the area.

8.21 It is not acceptable to increase the depth of a fascia to conceal a suspended ceiling or structural beam.

8.22 Within the National Park, consent will not be granted for signage mounted onto the original fascia.

9.0 Advertisements and Signs

9.1 Signs should be simple, direct and stated with clarity. There is a limit to what the eye can absorb and by repeating a message, its value is reduced. A proliferation of signs on a building brings a confusing sense of 'clutter' to a street and can look brash.

Fascia Lettering

9.2 Fascia lettering should be clean and direct. Dark fascias with light lettering and words in capitals and italics (as opposed to capitals only) are more traditional and easier to read. The proportion of lettering to fascias should usually be less than half. Lettering should not be too widely spaced or cramped together.

9.3 Hand-painted lettering on timber fascias is the preferred form, or alternatively, vinyl lettering stuck onto the fascia. In some cases, individually mounted lettering is an acceptable solution, where the provision of a fascia is not possible or desirable. Lettering on historic shopfronts or within Conservation Areas should be appropriately slim and elegant.

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Adverts on Shop Windows

9.4 Where retail premises have no fascia or where there is no conventional window display of goods for sale, the best solution is usually to sign-write on the display windows e.g. in gold lettering. Gold lettering is traditionally applied to upper windows to indicate other users.

9.5 Where there is a need to display information relating to special offers etc, this is best done by mounting posters on boards set back from the windows. Blocking the inside of a shop window with inward-facing shelving or counters should be avoided.

Projecting and Hanging Signs

9.6 Well-designed hanging signs can add to the visual interest of a street, although too many can amount to visual clutter. Shops should be limited to one hanging/projecting sign and should be suspended from plain or decorative metal brackets.

9.7 Projecting signs at fascia level should be a maximum 0.2 square metres (e.g. 500mm x 400mm). As a general rule, hanging signs should not exceed 600mm wide by 800mm high and should be positioned no higher than the mid-point of the first floor of the building. As an alternative to textual signs, a pictorial sign or symbol offers opportunities for making a positive contribution to the character and identity of a street. Internally illuminated box signs are generally unacceptable.

Individual Lettering

9.8 In some cases individual lettering (e.g. metal or resinous) may be fixed directly onto the façade of a building, but care is necessary to ensure that the scale and typeface of the lettering is appropriate to the building and its surroundings.

A Boards and Menus

9.9 A-boards are rarely acceptable and should never obstruct pedestrians.

9.10 Menu boards should not proliferate and should be well-related to the building. Often, one or two well-designed menu boards can be more legible than a mass of them. Plastic signs with demountable plastic lettering are not appropriate within the historic built environment. All detachable signs such as menu boards should complement the character of the shopfront and/or host building.

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10.0 Illumination

10.1 Illumination of signs or fascias is only permissible where it is shown to be absolutely necessary (e.g. for the international 'green cross' pharmacy logo). The use of large floodlights, spot-lamps and 'swan-neck' lamps are not acceptable.

10.2 On modern shopfronts, internal illumination of signs where only the lettering is back-lit, or where lighting is concealed to give a 'halo' effect, may be acceptable. The use of internally illuminated box signs where the background of the whole fascia is illuminated will not be granted permission.

10.3 The most appropriate means of external illumination is by a narrow strip-light discreetly sited under the cornice, or by sensitively located small spotlights.

11.0 Colour

11.1 In addition to black and white, colours were traditionally full and plain gloss, usually in dark shades. The most appropriate colour-schemes are single-colour, but a bicolour approach can work well if the pilasters, corbels and cornice are painted in the darker colour. Colour schemes for shopfronts should complement the host building.

11.2 Stripped or stained timber, along with pastel shades are not generally appropriate.

12.0 Canopies and Blinds

12.1 Retractable roller/folding fabric blinds with a recessed blind box are usually the best option. Blind boxes should be recessed and not project forward of the fascia. The bottom edge of any blind should be at least 2.4 metres above ground level.

12.2 Glossy blinds are not acceptable, neither are fixed 'Dutch' blinds which look inappropriate.

Deleted: 12.3 There is a general presumption against using canopies or blinds on Listed Buildings.¶

13.0 Disabled Access

13.1 New shopfronts should accommodate the needs of disabled people and the elderly, partially sighted and/or pushchairs, buggies. Dimensions should comply with relevant building regulations and codes of practice.

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13.2 As a general principle, steps should be avoided and doors should be capable of being opened by people in wheelchairs. Doors should be recessed and the entrance ramp surface should be in a non-slip material and should be to a maximum fall of 1:12. On sloping sites the door should be located to provide a flat entrance.

13.3 Where substantial alterations to a shopfront or a replacement shopfront is proposed the Local Planning Authority will require door location and design to be such as to permit disabled access and the Local Planning Authority may refuse permission where access requests are not incorporated in the submitted plans.

13.4 With Listed Buildings the needs of disabled people can in the majority of cases, be addressed by a sensitive and imaginative scheme, taking into account the need to preserve the special character of the building.

14.0 Shopfront Security

14.1 Before proceeding to install shop security measures, shop owners are advised to contact the Planning Section for advice before starting work, as the key policies to note are that:

- On Listed Buildings or within Conservation Areas external roller grilles and external roller shutters are not acceptable.
- In Conservation Areas external roller grilles may be acceptable away from the main shopfront subject to stringent design criteria.
- Elsewhere a different approach is adopted.

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14.2 Laminated glass provides security without affecting the appearance of the property. This is the first solution that should be considered. Permission for security grills will not normally be acceptable unless special glass is shown to be inappropriate. No additional installations or fixings are required and therefore planning permission is not required merely to install laminated safety glass.

14.3 In large areas of glazing, particularly traditional shopfronts, the introduction or restoration of glazing bars may further strengthen the glazing panels and prove less of a temptation to wilful damage than large sheets of plate glass, and be cheaper to replace.

14.4 The quality of the glass should be stated on it as a deterrent. Wiring the glass with an alarm system can provide additional security.

Internal Grilles

14.5 The use of internal grilles does not require planning permission. This is generally the next most favourable solution. Permission for external grilles will not normally be acceptable unless it can be shown that internal grilles are inappropriate.

14.6 Internal grilles can be installed immediately behind the windows and in this location they should be of the open weave, scissor or chain link construction. However, where the shop is part of the Listed Building, Listed Building Consent may be required if they affect any of the original features.

14.7 Internal 'glass' or 'see through transparent' screens will generally be acceptable. Screens that depend on internal lighting for their see-through effect are not acceptable. Solid screens with 'pin hole' visibility are not considered to be transparent.

14.8 In some premises it may be possible to incorporate a floor to ceiling shutter set behind the window displays within the sales area. Such locations permit the use of more heavy duty protection than open weave grilles. Another internal option is to place removable grille panels against the inside of the window each evening, but this is not often easy to do.

Removable or Demountable Grilles

14.9 All external grilles require planning permission. In some circumstances these grilles may be acceptable where security glass or internal grilles are inappropriate.

They should: