Landscape Sensitivity Assessment for Renewables in the Pembrokeshire Coast National Park



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LANDSCAPE SENSITIVITY ASSESSMENT FOR RENEWABLES IN THE PEMBROKESHIRE NATIONAL PARK

SCOPE OF THE METHODOLOGY

- This landscape sensitivity study for renewable developments forms part of the wider study of Renewable Developments and Low Carbon Technologies within the Pembrokeshire Coast National Park, undertaken by Land Use Consultants (LUC) and the National Energy Foundation (NEF) 2008.
- This landscape sensitivity assessment was undertaken for those renewables that, if developed, could have landscapescale impacts, namely, bioenergy crops (Short Rotation Coppice and Miscanthus), and single or small clusters¹ of wind turbine developments at the three different size scales:
 - Small (up to 25m to blade tip)
 - Medium (25m 65m to blade tip)
 - Large (over 65m to blade tip)
- 3. For these technologies / plantings the landscape sensitivity study has resulted in two outputs:
 - Maps showing the landscape sensitivites of each Landscape Character Area in the National Park to each technology / planting

- Guidance contained in this report that describes these sensitivities in greater detail to inform planning decisions.
- 4. For the other main renewable technologies resulting in the development of specific plants (anaerobic digestion, biomass, biogas and hydrogen) and for small scale hydro and on-shore connection sites for marine renewables, generic guidance has been prepared to be applied on a site by site basis. For other domestic-scale technologies, including building-mounted wind turbines, photovoltaics and ground/air source heat pumps, landscape guidance has not been prepared as the impact of these technologies, where relevant, will be dealt with through building conservation policies.
- 5. This guidance, with assessment criteria that could be used by PCNPA and developers, is included from paragraph 21. A full description of these technologies is provided in Chapters 3 to 8 of the main report..

Approach to Landscape Sensitivity Assessment

6. Landscape attributes/characteristics may indicate the suitability of a landscape to accommodate renewable energy development. In devising the criteria for judging sensitivity, suggestions and guidance in the Landscape

I Small clusters comprise two to five turbines.

Character Assessment Guidance² promoted by the Countryside Agency and Scottish Natural Heritage have been followed, as well as that in Topic Paper 6 that accompanies the Guidance³. Definitions of landscape character and sensitivity used in this study have also been drawn from this guidance.

Landscape character is defined in the landscape character assessment guidance as:

'the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how these are perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement'.

7. Topic Paper 6 suggests that judging landscape character sensitivity 'requires professional judgement about the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on character'

Para 4.2 goes on to say:

'Judging landscape character sensitivity requires professional judgement about the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on character. This involves making decisions about whether or not significant characteristic elements of the

8. This landscape sensitivity assessment is unrelated to any Government targets and is based on an assessment of landscape character using carefully defined criteria.

Landscape Character Baseline

9. Since landscape character forms the basis of the approach to the landscape sensitivity assessment, this work is based on the Pembrokeshire Coast National Park Landscape Character Assessment Study (2007)⁴. This divided the National Park into 28 separate Landscape Character Areas (LCAs), three of which centre on the developed centres of Tenby, St. David's and Newport. This assessment has concentrated on the predominantly rural LCAs, which are most likely to be the location of wind turbine developments and bioenergy plantings at a landscape scale.

CRITERIA FOR DETERMINING SENSITIVITY

10. Criteria for determinig landscape sensitivity to wind turbines and bioenergy crop planting are based on attributes of the landscape most likely to be affected by their developement. These are detailed below for both wind energy and bioenergy crops.

landscape will be liable to loss... and whether important aesthetic aspects of character will be liable to change'

² Countryside Agency and Scottish Natural Heritage (2002) Landscape Character Assessment: Guidance for England and Scotland CAX 84

³ The Countryside Agency and Scottish Natural Heritage (2002) Landscape Character Assessment Guidance for England and Scotland. Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity.

⁴ Accessed from: http://www.pcnpa.org.uk/webSite/applications/dev_plans/LCAv6Introduction.pdf

Wind energy

II. Landscape attributes that may indicate the sensitivity of a landscape to wind turbine development include:

Landform and scale - the scale and form of the landscape may indicate whether a landscape could accommodate large structures such as wind turbines and how these structures would relate to the overall `shape' and form of the physical landscape. It can also indicate what scale of wind turbine cluster may be appropriate.

Landscape pattern – the scale of the landscape pattern overlying the landform may inform sensitivity to large scale structures. It may also inform guidance for accommodating wind turbines into the landscape in the most suitable configuration.

Sense of enclosure - the sense of enclosure provided by topography or vegetation may indicate the ability of the landscape to accommodate the low level features associated with wind developments.

Sense of tranquillity/remoteness - turbines introduce a strong human element to the landscape and this can have an impact upon experiential qualities such as sense of remoteness and 'stillness'. It is important therefore that these elements are considered in order to inform landscape sensitivity.

Settlement /transport network - this will help to indicate the extent of human impact on the landscape and therefore sensitivity to additional man-made elements.

Skyline - the character of the skyline will indicate where new elements could provide new interest, where they

might threaten existing interest or where they may result in visual clutter. For example, a landscape with prominent, undeveloped skylines is likely to be more sensitive to wind turbine development than a landscape with non-prominent skylines (e.g. a flat lowland) that is already affected by built development...

Inter-visibility - the location of a turbine on the edge of one landscape type may adversely affect the perceptual character of an adjacent landscape. It is therefore essential to consider views into and from adjacent landscapes to understand the sensitivity of a landscape to wind turbine development.

Sensitive/rare landscape features - the density of sensitive and/or rare landscape features, such as important archaeological sites, can provide an insight into the potential sensitivity of a landscape and can indicate constraints that are likely to arise in more detailed site selection studies.

Nature of the coastal edge – the relationship of the land with the marine environment contributes to the character of coastal landscapes and can provide insight into the potential sensitivity of the coastal edge.

Bioenergy crops

12. Landscape attributes that may indicate the sensitivity of a landscape to growth of energy crops (SRC and Miscanthus) include:

Landform – steep landforms are generally more sensitive due to increased opportunity to view the geometric crops in plan form, and from a distance.

Landcover/ landuse – the existing landcover and landuse of a landscape may indicate which landscapes could accommodate biomass crops. Miscanthus is likely to be more easily absorbed into a landscape that is characterised by large scale cropping systems whereas it would be less easily accommodated in areas that are predominantly pastoral in character. SRC may be more easily absorbed into landscapes characterised by woodland.

Landscape pattern – landscape pattern may indicate where geometric shapes (such as growth of biomass crops) may be suitable. For example, biomass crops may be absorbed into a landscape that is dominated by large scale rectilinear field systems whereas unenclosed moorland or small scale, irregular field patterns are likely to be adversely affected by the introduction of large scale crop plantations.

Sense of enclosure – open landscapes would be changed by the introduction of tall biomass crops whereas landscapes enclosed by hedgerows/hedgerow trees, woodland or landform would absorb biomass crops more easily.

Sense of 'naturalness' – non-native crops and harvesting operations could affect the perceived 'naturalness' of a landscape. Crops are likely to be better integrated into landscapes that are already in cropping use or affected by man-made features such as roads and

industry. Coasts and moorlands are particularly valued for their wild and natural character.

Inter-visibility/important views – some areas may be more sensitive because they are overlooked by sensitive landscapes or viewpoints.

Sensitive/rare landscape features - the density of sensitive and/or rare landscape features can provide an insight into the potential sensitivity of a landscape and can indicate constraints that are likely to arise in more detailed site selection studies.

Nature of the coastal edge – the relationship of the land with the marine environment contributes to the character of coastal landscapes and can provide insight into the potential sensitivity of the coastal edge.

13. Bioenergy field crops should only be planted in fields already in arable production rather than converting permanent pasture to cropping – pastoral landscapes therefore have a higher sensitivity than arable landscapes. In the National Park – a predominantly pastoral landscape – this automatically places a constraint on the widespread planting of bioenergy crops.

UNDERTAKING THE LANDSCAPE SENSITIVITY ASSESSMENT

Applying the criteria

14. The above criteria were used for each LCA drawing on the descriptive information contained in the LCA study (2007). As a National Park, condsideration was also given

to the special qualities of the landscape that underpin this national designation. These are described in the National Park Management Plan Draft (January 2008), and applied to each LCA where applicable.

Undertaking the sensitivity assessment

- 15. The landscape sensitivity assessement was initially conducted as a desk based exercise using the Pembrokeshire Coast National Park Landscape Character Assessment Study supplemented by Google Earth and aerial photographs provided by the National Park Authority. Draft maps illustrating the results of the initial desk based assessment were presented to the National Park Authority at a steering group meeting on July 23 2008.
- 16. Fieldwork was undertaken in the summer of 2008 to verify the results add information as necessary.
- 17. The assessment is presented in tabular form by LCA and technology type (see the assessment tables at the back of this document). Reading from left to right across four columns, the tables are structured as follows:
 - Ist column: contains the landscape attributes of the LCA applied against the assessment criteria (as described above).
 - **2**nd **column**: lists the LCA's special qualities, taken from the LCA description and, where relevant, the National Park Management Plan.

- **3**rd **column**: summarises the sensitivity judgement and lists the key landscape attributes that would be sensitive to the development of the technology concerned. The overall assessment is based on different levels of impact (see Table 2.1. below).
- 4th column: provides specific guidance on the siting of the renewable technology concerned within the LCA.
- 18. The tables therefore provide a logical sequence across the columns; linking the generic guidance and assessment 'score' back to the LCA's key landscape attributes and its special qualities in the National Park context. The sensitivity score is based on the different levels of impact that renewables are likely to have on the landscape concerned. **Table 2.1**. sets out this sensitivity scoring.

Table 2.1: Sensitivity levels and defininitons

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.

19. Because the National Park is recognised as a nationally important landscape, in reality none of the sensitivity assessment scores fall below 'moderate', with the majority of LCAs being judged as either 'moderate-high' or 'high' sensitivity to wind turbine developments and bioenergy crop planting. The assessment therefore recognises the national importance of this landscape and places it within the UK context – i.e. it uses a sensitivity score applicable

- to the whole of the UK, with national parks at the top end of this scale.
- The guidance in the 4th column of the assessment tables is 20. particularly important. This gives locational information relating to the sensitivity assessment. In most cases, the sensitivity 'score' for each technology type relates to the LCA as a whole. There are two LCAs that are exceptions to this rule - LCA 6 Castlemartin/Merrion Ranges and LCA 7 Angle Peninsula. Both of these LCAs are judged to be of 'high' sensitivity to large and medium scale wind turbine developments. However, some locations along their boundaries abut the prominent oil refineries of the southern shores of the Milford Haven Waterway. The guidance therefore states that large or medium scale turbines might be appropriately located along these boundaries to form a renewable energy 'screen' to the highly visible petroleum industry.
- 21. In terms of numbers of turbines for the majority of the National Park, large or medium scale turbines would only ever be appropriate as single structures. The exceptions to this are the LCAs bordering industrial areas (see previous paragraph), where small clusters of up to five turbines of medium or large scale could be used to screen the existing industry. Elsewhere, small clusters of the smallest turbine size might be appropriate but only where linked to existing or new development. Again, this information is brought out in the guidance column of the assessment tables.

CRITERIA AND GENERIC GUIDANCE FOR OTHER RENEWABLE ENERGY TECHNOLOGIES

22. As explained in paragraph 4, an LCA-scale assessment has not been undertaken for those technologies where the landscape impacts associated with their development will vary on a site-specific basis. For these, generic guidance has been prepared to enable the National Park Authority, along with potential developers, to understand what to look for when siting such technologies in terms of potential landscape impacts, and how these can be reduced.

Biomass, hydrogen, biogas and anaerobic digestion plants

- 23. These plant-level technologies are considered together, as they are likely to be operating at a similar scale and with similar infrastructure requirements.
- 24. The <u>landscape attributes</u> that may indicate the sensitivity of a landscape to biomass, hydrogen, biogas and anaerobic digestion plants are:

Landform and scale - the scale and form of the landscape may indicate whether a landscape could accommodate plant development. Smaller scale, decentralised plants are likely to be more successfully accommodated in a wider range of landscapes than larger plants.

Sense of enclosure - the sense of enclosure provided by topography or vegetation may indicate the ability of the landscape to accommodate new built development.

Sense of tranquillity/remoteness – new buildings developed for these renewable technolgies would introduce a human element to the landscape, with this impact increasing in line with the scale of the plant. The sense of tranquillity or remoteness associated with a landscape may therefore indicate suitability of the landscape to accommodate such structures. Increased traffic to and from the installation will also have an impact on tranquillity.

Settlement /transport network – these types of installation may require access for deliveries of fuel (e.g. biomass, waste). The larger installations will be more industrial in nature; smaller plants could be integrated into farms, and in the case of biomass plants, housing complexes, schools, hospitals etc. The type of settlement, presence of industry, and the transport infrastructure could therefore indicate the suitablity of an area to accomomdate the different scales of these installations.

Important views / skyline – these types of development may require vents / stacks. It is important therefore to consider whether these new vertical elements might threaten existing interest or introduce visible structures on the skyline. The impact on important views and landmark features also needs consideration.

Sensitive/rare landscape features - the density of sensitive and/or rare landscape features can provide an insight into the potential sensitivity of a landscape and can indicate constraints that are likely to arise in more detailed site selection studies.

Nature of the coastal edge – the relationship of the land with the marine environment contributes to the character of coastal landscapes and can provide insight into the potential sensitivity of the coastal edge.

- 25. <u>Generic guidance</u> that should be applied in siting such plants is as follows:
 - There may be opportunities for accommodating small scale anaerobic digester plants on or adjacent to existing farm buildings or on existing waste sites.
 - Larger biomass or digester plants, which typically have larger buildings and chimneys, should only be accommodated in existing business parks, commercial/industrial areas or on existing waste sites.
 - Avoid locating 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 existing landmarks.
 - Ensure installations are not prominent in key views, particularly those along the coastline.
 - Ensure installations do not affect the historical value of industrial features and remains, or the ecological value of semi-natural habitats.
 - Ensure installations do not adversely affect the character and appearance of any Conservation Areas.

 Suitable materials should be used to facilitate the integration of structures with their surroundings, for example, the cladding of buildings and finish colour.

Small scale hydro

26. <u>Landscape attributes</u> that may indicate the sensitivity of a landscape to small scale hydro schemes include:

Landform scale and enclosure - the scale and containment of the landscape may indicate whether a landscape could accommodate a hydro scheme. A hydro development will be most apporpriate where it appears as a minor element in a larger scale open landscape, or a larger scale element in an enclosed area.

Sense of tranquillity/remoteness – a hydro scheme would introduce a human element to the landscape which may be inappropriate in the most remote landscapes.

Sensitive landscape features – the construction of a hydro scheme will alter river flows and, where located on estuarine watercourses, disrupt levels of salinity. It is therefore important to account for the location of sensitive habitats and species (including fish) within or on the edge of watercourses.

Built features within the landscape - a hydro scheme would introduce a built element into the landscape. A hydro scheme is more likely to be integrated into a landscape that already contains built elements.

Important views – schemes may be very prominent if located on hillsides in important views. It is therefore

important to consider whether there are any particualry important views in the area to inform siting.

- 27. <u>Generic guidance</u> that should be applied in siting hydro schemes is as follows:
 - Use local materials for weirs and built structures.
 - Integrate pipes (penstocks) into the landscape consider burying pipes (in areas where vegetation is
 likely to successfully re-establish), or colouring pipes
 to relate to the shades and hues of the surrounding
 landscape through the seasons.
 - In general, open channels (leats) may be more appropriate than pipes (penstocks).
 - In some locations it is important to screen the modern structures associated with hydro schemes from view, while in other locations the hydro scheme could be a feature of tourist or industrial interest, perhaps relating to the history of an old mill, or to the modern use of an industrial site.
 - Where possible, structures relating to hydro schemes should be located on banks with existing development or built structures, rather than on undeveloped sides.
 - Use should be made of existing features such as weirs, sluices, locks and mill buildings to create a head of water and to house hydro plant and pipes etc. Where possible schemes should incorporate the restoration of historic water features such as weirs, mill ponds,

- millraces or leats, sluice gates, tailrace outlets and derelict mill buildings.
- Integrate turbine housing into the landscape through careful siting, use of landform (for example partially buried buildings), green roofs, use of existing vegetation or trees, and use of local materials/ architectural features.
- Only use vegetation screening in areas within which vegetation cover is characteristic.
- Although the micro-hydro options being put forward as part of this study are run of river (i.e. water passes through a penstock and back to the stream / river) it will be important to ensure that the construction of a weir will not reduce water levels downstream to the detriment of local amenity and sites of nature conservation importance.
- Aim for a high standard of design in all cases, but particularly in visible locations.
- Ensure fencing is appropriate to the surroundings stock fencing is more appropriate than industrial style fencing in rural locations.
- Minimise hard surfacing and formal planting associated with any hydro scheme to ensure successful integration into the rural landscape.
- Consider the appearance of hydro schemes in longer distance views, particularly in views along the coast.

- Ensure structures do not adversely impact on the ecological value of the semi-natural habitats, or the high historical value of industrial features and remains.
- Ensure structures do not adversely impact on the character and appearance of Conservation Areas.
- Incorporate environmental and landscape improvements into the development, for example restoration of natural riverside habitats, or replacing riparian woodland in the vicinity of the proposed development.

On-shore connection infrastructure related to marine technologies

28. <u>Landscape attributes</u> that may indicate the sensitivity of a landscape to on-shore connection infrastructure for marine renewables include:

Sense of enclosure - the sense of enclosure provided by topography or vegetation may indicate the ability of the landscape to accommodate the low level features associated with onshore marine technologies.

Sense of tranquillity/remoteness – onshore components of marine technologies may introduce a strong human element to the landscape.

Sensitive/rare landscape features - the density of sensitive and/or rare landscape features can provide an insight into the potential sensitivity of a landscape and can indicate constraints that are likely to arise in more detailed site selection studies.

Nature of the coastal edge – the relationship of the land with the marine environment contributes to the character of coastal landscapes and can provide insight into the potential sensitivity of the coastal edge.

- 29. <u>Generic guidance</u> that should be applied in siting the onshore connections for marine renewables is as follows:
 - Cable holes should preferably be drilled in locations where coastal vegetation is characteristic, to minimise visual impacts in open coastal locations. This should be outside designated areas for nature conservation and geological diversity (e.g. SSSIs, SACs).
 - Connection chambers should be screened by coastal vegetation where possible, or located in areas where the regeneration of coastal heath is encouraged, to minimise visual impacts.
 - Inspection hatches for connection chambers should be constructed using suitable materials and colours, to blend in with their surroundings.

LANDSCAPE SENSITIVITY TABLES

There are some habitats of

international importance here,

contributing to some parts of the

landscape having a high ecological

• Sense of tranquillity/

remoteness - Urban

development at Saundersfoot;

coastal caravan parks intrusive at

crit	dscape attributes based on eria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
		WIND T	URBINES	
•	Landform and scale – Relatively small scale, rolling landform with small river valleys (steep in places), running to a broad bay backed by cliffs and a steep coastal slope. Landscape pattern –Blocks and linear swathes of woodland along valleys (deciduous and plantations) set within a wider agricultural landscape of irregular pastoral fields (mainly small- medium scale).	 Although substantially settled, the area contains some attractive farmland and woodland patches which intersperse the smaller settlements and farmsteads. There is a coastal feel with an open nature and attractive views along the coast, the view southwards from Amroth towards Tenby being notable for the prominent landmark of the church spire in the distance, seen above Monkstone Point in the middle 	The area's relatively densely settled character 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 archaeological resource and open views along the coast indicate that this landscape would be sensitive to wind turbine development.	 Ensure any development does not adversely affect the area's important archaeological sites, particularly those relating to its industrial heritage. Preserve the agricultural and woodland mosaic character, especially that of the estate landscape and parkland around Hean Castle and Coppet Hall. This landscape is not suitable for large scale wind turbines. Single or small clusters of small
•	Sense of enclosure – relatively high amounts of woodland cover, tall hedgebanks and the rolling topography provide enclosure. Long views from higher ground.	ground. Inland, the country estate landscape and parkland character around Hean Castle and Coppet Hall is very attractive and locally distinctive.	This LCA is therefore assessed as having a moderate overall sensitivity to this type of renewable energy development. This LCA has a high sensitivity to development of large scale wind	 single or small clusters of small scale turbines are likely to be most appropriate in this relatively small scale, rolling landscape. There may be some opportunities for single medium scale turbines in

turbines; a moderate-high

to small scale wind turbines.

sensitivity to medium scale wind

turbines; and a moderate sensitivity

sensitively sited locations.

such as building clusters.

Link any development to existing

points of focus in the landscape,

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Trevayne and New Hedges reduce sense of tranquillity, although landcover and landform ensure tranquil landscape away from this development. • Settlement / transport network – Relatively densely settled, but development concentrated at Saundersfoot and Tenby. Small villages within the agricultural landscape. coastal caravan parks at Trevayne and New Hedges. • Skyline – Prominent, wooded rural skylines on hills, less prominent skylines in valleys and around settlements (although higher parts of Saundersfoot affected by urban development on the skyline). Highly visible church spire seen above Monkstone Point • Inter-visibility – Open views along the coast, and across the bay. Strong visual link between the seafront and centre of Saundersfoot and the coast. • Sensitive/rare landscape features – Many nationally significant prehistoric	 The historical and archaeological features recorded here are such that the whole area merits a high historical value, especially industrial relics, such as the tramway and incline, which are comparatively rare surviving elements of local extractive industries. This industrial past is a historical quality possessed by many of the coastal towns and villages in the National Park. The recent changes in holiday trends have eroded the original seaside town character, but the essential feel is not yet lost. Saundersfoot has a Conservation Area centred on the old town area along the sea front and the harbour (designated in September 1995). 	 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 seminatural habitats. The historic value of the parkland / estate around Hean Castle and Coppet Hall. The character and appearance of the Saundersfoot Conservation Area. 	 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 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

crit	ndscape attributes based on ceria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	monuments and post-medieval buildings and structures. Old mine adits and tunnels along coast of high value.			opportunities for integrating renewable energy structures such as wind turbines.
•	Nature of coastal edge – Resort development at Saundersfoot. Away from development: broad sandy and rocky beaches backed by cliffs. Sea defences at Saundersfoot and Tenby. Coastal caravan parks at New Hedges and Trevayne.			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.
		BIOMASS: EN	IERGY CROPS	
•	Landform - Relatively small scale, rolling landform with small river valleys (steep in places), running to a broad bay backed by cliffs and a steep coastal slope. Landcover/land use — Wooded valleys (deciduous and plantations) set within a small to medium scale predominantly pastoral landscape. Scrub and rocky/sandy shores on coast. Landscape pattern — Strong field pattern of small to medium sized, irregular fields bounded by	 Although substantially settled, the area contains some attractive farmland and woodland patches which intersperse the smaller settlements and farmsteads There is a coastal feel with an open nature and attractive views along the coast, the view southwards from Amroth towards Tenby being notable for the prominent landmark of the church spire in the distance, seen above Monkstone Point in the middle ground Inland, the country estate 	Although within some parts of this LCA the mixed agricultural land use and sense of enclosure indicates that the landscape could accommodate some limited amounts of bioenergy crop, the exposed ridge tops, open coastal views, presence of seminatural habitats, predominantly pastoral land use, heritage features and large areas of estate parkland increases its sensitivity to bioenergy crop planting. This LCA is therefore judged to have a moderate-high sensitivity to the growth of bioenergy crops.	 Focus bioenergy crops in fields already affected by cropping systems rather than conversion of pastoral areas to cropping. Ensure bioenergy crop planting does not encroach onto areas of semi-natural habitat and estate parklands. There may be opportunity to link some SRC with existing woodlands. Ensure crops and harvesting machinery do not affect the survival of hedgebanks or historic

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
hedgebanks and interspersed by swathes or blocks of woodland and small settlements. Sense of enclosure – relatively high amounts of woodland cover, tall hedgebanks and the rolling topography provide enclosure. Exposed ridge tops. Sense of 'naturalness' – seminatural woodlands, scrub, rocky/sandy coastal shores and estate parklands form a mosaic of different habitats. Agricultural land is predominantly pastoral, with some areas of cropping. Inter-visibility / important views – Open views along the coast, and across the bay. Strong visual link between the seafront and centre of Saundersfoot and the coast. Sensitive/rare landscape features – Many nationally significant prehistoric monuments and post-medieval buildings and structures. Old mine adits and tunnels along coast of high value. Nature of coastal edge –	landscape and parkland character around Hean Castle and Coppet Hall is very attractive and locally distinctive There are some habitats of international importance here, contributing to some parts of the landscape having a high ecological value The historical and archaeological features recorded here are such that the whole area merits a high historical value, especially industrial relics, such as the tramway and incline, which are comparatively rare surviving elements of local extractive industries. This industrial past is a historical quality possessed by many of the coastal towns and villages in the National Park The recent changes in holiday trends have eroded the original seaside town character, but the essential feel is not yet lost. Saundersfoot has a Conservation Area centred on the old town area along the sea front and the harbour (designated in September	The key landscape attributes that could be sensitive to bioenergy crop planting are: The exposed ridge tops and cliffs/ open coastal edge. The wooded estate parkland and wood pasture. Open coastal views. Semi-natural habitats and sites of high ecological value. Prehistoric monuments, postmedieval buildings/structures and the area's industrial heritage.	 features/archaeology. Plant at the field scale to maintain landscape pattern. Maintain a diversity of crop types/ land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Aim for irregular patterns of planting rather than geometric blocks. Plant at least one field back from the coastal edge to maintain its open coastal character and seminatural habitats. When planting, consider views along the coastline, particularly of the church spire seen above Monkstone Point when looking south from Amroth towards Tenby.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
Resort development at Saundersfoot. Away from development: broad sandy and rocky beaches backed by cliffs. Sea defences at Saundersfoot and Tenby Coastal caravan parks at New Hedges and Trevayne.	1995)	

LCA 3: CALDEY ISLAND

andscape attributes based on riteria for each technology type from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
Landform and scale – Flat or gently sloping terrain with low cliffs. Small scale island landscape. Landscape pattern – Irregular pastoral fields, with large areas of wooded plantation surrounding the island's group of buildings. Sense of enclosure – Small scale agricultural landscape but the flat terrain affords extensive views out to sea and to the mainland. Sense of tranquillity/ remoteness – More settled than other off-shore islands but retains a strong sense of quiet and tranquillity. Settlement / transport network – Traditional buildings linked to the agricultural land use. Medieval priory, lighthouse and associated buildings are key features. Skyline – Lighthouse at Chapel	 Small scale settled agricultural area offering a close contact with the coastal environment, with a more cultivated feel than that of the other offshore islands within the National Park Caldey Island is unique amongst the off-shore islands of Pembrokeshire in that it has a long, continuous history of human settlement with formal religious associations. There is a strong historical and spiritual aspect provided by the long established church and monastery buildings Caldey Island Conservation Area (designated in August 1997) covers much of the eastern section of the island, running from The Quay in the north to the south coast at Chapel Point, encompassing the Abbey, the settlement and the lighthouse. 	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. 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.	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Point is a prominent feature in the flat landscape. Inter-visibility – Island and particularly the lighthouse prominent in views from the mainland. The coastline from Penally to Tenby, and west towards Manorbier, are highly visible in views from the island. Sensitive/rare landscape features – Conservation Area covers the built part of the island. Medieval priory, lighthouse and associated buildings of national significance. Enormous archaeological of intertidal zone; prehistoric monuments on island. Breeding sea bird colonies.		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.	
 Nature of coastal edge – Strong relationship between land and sea, with sea visible in most, if not all views. Sand dunes in NE of island; rock cliffs and sandy beaches. 			

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
 Landform- Flat or gently sloping terrain with low cliffs. Landcover/ land use - Pastoral farmland interspersed with plantations and rough coastal grassland Landscape pattern Small to medium scale, irregular, geometric fields. Sense of enclosure -flat terrain and open coastal edges afford extensive views out to sea and to the mainland. Sense of 'naturalness' - Maritime cliff and slope, sand dunes, rocky and sandy foreshores. Pastoral agricultural land interspersed with woodland plantations. Inter-visibility/ important views - Island and particularly the lighthouse prominent in views from the mainland. Sensitive/rare landscape features - Conservation Area covers the built part of the 	 Small scale settled agricultural area offering a close contact with the coastal environment, with a more cultivated feel than that of the other offshore islands within the National Park Caldey Island is unique amongst the off-shore islands of Pembrokeshire in that it has a long, continuous history of human settlement with formal religious associations. There is a strong historical and spiritual aspect provided by the long established church and monastery buildings Caldey Island Conservation Area (designated in August 1997) covers much of the eastern section of the island, running from The Quay in the north to the south coast at Chapel Point, encompassing the Abbey, the settlement and the lighthouse. 	Although the presence of woodland indicates that there may be small scale opportunity for some SRC linked to existing woodland, the pastoral nature of the landscape, the open and exposed, character, sense of 'naturalness', strong relationship between land and sea and large numbers of sensitive landscape features means that the LCA has a high sensitivity to planting of energy crops, and particularly Miscanthus. The key landscape attributes that could be sensitive to bioenergy crop planting are: The pastoral character of the agricultural landscape. Strong historic and archaeological significance. The open and exposed, character of the island with prominent views to and from the mainland. The strong sense of 'naturalness', particularly on the coastal edge.	 There is no opportunity for Miscanthus due to the pastoral nature of the island. Any SRC should be linked with existing woodland and should be small in scale, relating to the small scale landscape pattern. Aim for irregular patterns of planting rather than obvious geometric blocks. Plant well back from the coastal edge to maintain its open and character and views. Consider the prominent position of the lighthouse and medieval priory by planting away from their landscape settings and key viewpoints. Avoid semi-natural habitats (e.g. sand dunes, maritime cliff).

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
lighthouse and associated		land and sea.	
buildings of national significance. Enormous archaeological of intertidal zone; prehistoric monuments on island. Breeding sea bird colonies.		 The large numbers of sensitive landscape features including important maritime habitats. 	
Nature of coastal edge – Strong relationship between land and sea, with sea visible in most, if not all, views. Sand dunes in NE of island; rock cliffs and sandy beaches.			

LCA 4: MANORBIER / FRESHWATER EAST

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND TO	URBINES	
 Landform and scale – Rolling lowland with indented cliff coastline. Landscape pattern – Small-medium scale medieval field pattern interspersed with settlements and scattered farmsteads Sense of enclosure – Fields often enclosed by overgrown hedges. Views to the coastal cliffs and the sea beyond give the area a coastal feel. Exposed cliff tops and open coastal edge. Sense of tranquillity/remoteness – Caravan sites and modern developments particularly on the slopes at Freshwater East. Elsewhere the LCA has a remote feel, particularly along the coast, and a strong cultural sense of place. The A4139 erodes tranquillity locally. Settlement pattern/transport network – 	 This area of farmland landscape with traditional built forms predominant in the villages and agricultural buildings is pleasant, with a coastal feel, enhanced by attractive views of coastal cliffs to the east. Hedgerows are especially important landscape elements, providing a tangible link to earlier settlement The exposed nature of the cliff tops contrasts strongly with the sheltered coves There are some internationally important habitats present, contributing to the outstanding ecological value of some landscapes There is a very strong historical and cultural sense of place here, which is very different from that encountered in north and west Pembrokeshire, typified by the Mediaeval open field system which has survived remarkably well in 	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. This LCA has a high sensitivity to development of large scale wind turbines; a moderate-high sensitivity to medium scale wind turbines; and a moderate sensitivity to small scale wind turbines. 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.	 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 groups 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Scattered farmsteads and villages with traditional buildings and strong sense of place. Modern and holiday development around Freshwater East. The main A4139 cuts through the area. • Skyline – Open skyline with views to the coast. The castle, church and dovecote are prominent features in the landscape at Manorbier. The Ridgeway is a prominent undeveloped ridge that follows the northern boundary of the LCA. Beyond the ridge, pylons and chimneys relating to the industry at Milford Haven are visible on the skyline. • Inter-visibility – Fine views out to sea and to Caldey Island to the south east. The Presli hills are visible on the northern horizon. • Sensitive/rare landscape features – internationally important habitats and species, including chough, peregrine falcon and rare plants. Wealth of historic and archaeological sites; particular value of the	the area – the strip-fields which lie either side of the Ridgeway between Lamphey and to the south of St Florence. The wealth of historical and archaeological sites documented means that extensive areas of historic landscapes have an outstanding value attributed to them. Of particular note are the Mediaeval buildings: the Lamphey Bishop's Palace, a moated house site at Hodgeston and the extremely well preserved manorial landscape of Manorbier, with its imposing castle dominating the village scene, the prominent church and a dovecote The historical value in turn supports the cultural value of this landscape as being outstanding. This has been formally recognised by its inclusion in the Manorbier Registered Landscape of Special Historical Interest in Wales. The present day landscape is one almost wholly shaped by mediaeval territorial organisation, settlements and land use. It has associated historical cultural value as the home of Gerald of Wales	 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. 	 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
medieval landscape around Manorbier. • Nature of coastal edge – Impressive cliffs at Lydstep Point and Proud Giltar. Varied coastline including sand dunes, cliffs, sandy beaches and rocky shores.	 There are Conservation Areas at Manorbier (designated in September 2001) and Portclew (designated in February 2002). 		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.
·	BIOMASS: BIO	NERGY CROPS	
 Landform-Rolling lowland with indented cliff coastline. Landcover / land use - Mainly pastoral land use with some areas of arable cultivation interspersed with woodland and scrub. Landscape pattern - Small-medium scale regular medieval field pattern interspersed with settlements and scattered farmsteads. Preserved stripfields between Lamphey and to the south of St Florence. Large / open fields along the coast. Sense of enclosure - Fields often enclosed by overgrown hedges. Views to the coastal 	 This area of farmland landscape with traditional built forms predominant in the villages and agricultural buildings is pleasant, with a coastal feel, enhanced by attractive views of coastal cliffs to the east. Hedgerows are especially important landscape elements, providing a tangible link to earlier settlement The exposed nature of the cliff tops contrasts strongly with the sheltered coves There are some internationally important habitats present, contributing to the outstanding ecological value of some 	Although the area has some arable cultivation meaning that it has the potential to incorporate energy crop planting, its predominantly pastoral land use, defined medieval field pattern, open coastline and strong cultural and historic sense of place increase sensitivity to planting. This LCA is therefore assessed as having a moderate-high sensitivity to bioenergy crops. The key landscape attributes that would be sensitive to bioenergy crops are: The medieval field pattern and strong historic sense of place. The open views along the coast and beyond to Caldey Island.	 SRC should be linked with existing woodland, and planting should form irregular patterns rather than obvious geometric blocks. Focus bioenergy crops in fields already affected by cropping systems rather than conversion of pastoral areas to cropping. Plant at the field scale to maintain the small scale landscape pattern inland. Ensure crops and harvesting machinery do not affect the survival of hedgerows, hedgebanks, stone walls or historic features/archaeology. Maintain a diversity of crop types/land uses in adjoining fields to

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Sense of 'naturalness' – Diverse semi-natural habitats including sand dunes, cliffs, sandy beaches, rocky shores, reed beds (at Freshwater East), scrub, bracken, deciduous woodland and dry heathland. Inter-visibility/ important views – Extensive views along the open coastline and from / to Caldey Island. The Presli hills are visible on the northern horizon. Sensitive/rare landscape features – internationally important habitats and species, including chough, peregrine falcon and rare plants. Wealth of historic and archaeological sites; particular value of the medieval landscape around Manorbier. Nature of coastal edge – Impressive cliffs at Lydstep Point and Proud Giltar. Varied coastline including sand dunes, cliffs, sandy beaches and rocky shores. 	There is a very strong historical and cultural sense of place here, which is very different from that encountered in north and west Pembrokeshire, typified by the Mediaeval open field system which has survived remarkably well in the area – the strip-fields which lie either side of the Ridgeway between Lamphey and to the south of St Florence. The wealth of historical and archaeological sites documented means that extensive areas of historic landscapes have an outstanding value attributed to them. Of particular note are the Mediaeval buildings: the Lamphey Bishop's Palace, a moated house site at Hodgeston and the extremely well preserved manorial landscape of Manorbier, with its imposing castle dominating the village scene, the prominent church and a dovecote The historical value in turn supports the cultural value of this landscape as being outstanding. This has been formally recognised by its inclusion in the Manorbier Registered Landscape of Special	internationally important habitats and species. • Wealth of historic and archaeological sites including the preserved manorial landscape of Manorbier (a landscape of outstanding historic importance) • The naturalistic coastal edge. • Two Conservation Areas at Manorbier and Portclew.	pattern - avoid vast swathes of Miscanthus or SRC. Plant at least one field back from the uncultivated coastal edge to maintain its open and character and views.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
	Historical Interest in Wales. The present day landscape is one almost wholly shaped by mediaeval territorial organisation, settlements and land use. It has associated historical cultural value as the home of Gerald of Wales	
	There are Conservation Areas at Manorbier (designated in September 2001) and Portclew (designated in February 2002).	

LCA 5: STACKPOLE

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Lowland incised river valley system with steep sides; associated coastal dune system with low cliffs. Intimate cultural landscape. Landscape pattern – Valley system artificially designed with a series of lagoons. Backed by densely wooded valley sides. Sense of enclosure – Sheltered landscape with high woodland cover and estate plantings giving strong sense of enclosure. Mature dunes and a raised rocky outcrop at the coast gives the majority of the area a sheltered feel. Sense of tranquillity/ remoteness – Strong sense of 	 This area is made up of a naturalistic yet previously much landscaped series of wooded valleys that are generally very sheltered and pleasant. There is a distinct feel of being within a long-established estate parkland and woodland landscape within the confines of the river valley The diverse range of habitats present, some of international importance, include landscapes of outstanding ecological value The historical and archaeological value of the area is also outstanding, with evidence of long-term continuous management of landed estates since feudal times. The Registered Landscape of Special Historic Interest in Wales 	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. It would have a high sensitivity to large and medium scale turbines and a moderate-high sensitivity to small scale turbines. The key landscape attributes that make it sensitive to wind turbine development are: • The strong historic sense of place.	 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.
 tranquillity and cultural sense of place. Settlement / transport network – Quiet villages at Bosherston and Stackpole. The majority of the LCA comprises 	at Stackpole Warren contains a rare survival in Wales of buried archaeological landscape - covered by wind-blown sand which is extremely well preserved. It includes horizons and deposits	 The tranquil nature of the area. Enclosed, intimate valley landscape Diverse habitats of international 	 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
the historic designed landscape of the Stackpole Estate. Skyline – Undeveloped skyline, with semi-natural woodlands covering most of the valley ridge tops. Inter-visibility – Mainly an enclosed landscape with limited views in and out. Views open up along the coast on the summit of dunes on Stackpole Warren. Sensitive/rare landscape features – Important historic landscape with Prehistoric settlements and buried archaeology, an Iron Age fort and Post-Medieval estate buildings, all of national significance. Internationally important diverse range of habitats including the freshwater lake systems and coastal sand dunes. Breeding sea bird colonies on the cliffs. Nature of coastal edge – Flooded coastal valley system with sand dunes forming barrier with the sea. Scenic sandy beaches at Barafundel Bay and	representing diverse land use and ritualistic activity from the Mesolithic to the Iron Age/Romano-British periods, with a proven and exceptional potential for further study The beaches of Pembrokeshire form a very important part of the coastline and the concept of the National Park. Culturally they hold high significance in the minds of local inhabitants and visitors The National Trust's Stackpole Estate is set in an area of outstanding natural beauty, and much of it is designated as a Site of Special Scientific Interest. Some 202 of its 810 hectares are also designated National Nature Reserves managed jointly with the National Trust and The Countryside Council for Wales. These factors underpin the outstanding cultural landscape value attributed to this area.	 importance. The nationally important historic and archaeological features. Scenic beaches with strong cultural presence. The presence of breeding sea bird colonies on the cliffs. 	 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. 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.

Landscape attributes based on criteria for each technology type (from LCA) Broad Haven.	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
		NERGY CROPS	There are a construition for the
 Landform – Lowland incised river valley system with steep sides; associated coastal dune system with low cliffs. Intimate cultural landscape. Landcover/ land use – No agricultural land use – this LCA comprises the designed landscape of the Stackpole Estate. Landscape pattern – Valley system artificially designed with a series of lagoons. Backed by densely wooded valley sides. Sense of enclosure – Sheltered landscape with high woodland cover and estate plantings giving strong sense of enclosure. Mature dunes and a raised rocky outcrop at the coast gives the majority of the area a sheltered feel. 	 This area is made up of a naturalistic yet previously much landscaped series of wooded valleys that are generally very sheltered and pleasant. There is a distinct feel of being within a long-established estate parkland and woodland landscape within the confines of the river valley The diverse range of habitats present, some of international importance, include landscapes of outstanding ecological value The historical and archaeological value of the area is also outstanding, with evidence of long-term continuous management of landed estates since feudal times. The Registered Landscape of Special Historic Interest in Wales at Stackpole Warren contains a rare survival in Wales of buried 	Although the densely wooded and enclosed nature of the landscape indicates that it might be able to accommodate some bioenergy crops (for example, SRC), the sense of 'naturalness' and presence of many sensitive landscape features make this landscape sensitive to growth of such crops. This LCA has been assessed as having a high sensitivity to bioenergy crop planting such as Miscanthus and a moderate to high sensitivity to SRC. The landscape attributes judged as being sensitive to bioenergy crops are: The strong historic sense of place of the estate parkland and woodlands. The outstanding ecological value of the landscape. The presence of nationally	 There are no opportunities for the planting of miscanthus within this designed, wooded landscape. Any small scale SRC should be linked and integrated with existing woodland. SRC planting should be sited in locations that do not disrupt the natural flow of the landscape's woodlands and are not visible in key viewpoints. Any planting should be sited well away from the 'naturalistic' coastal edge. Any SRC planting and related infrastructure / access routes should not impact on the setting of historic built features, habitats of importance for wildlife, or . Archaeological features and sites, particularly at Stackpole Warren.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Sense of 'naturalness' – Area has the appearance of a naturalistic landscape with large areas of semi-natural woodland and diverse habitats, although previously heavily landscaped. The fringing areas of mainly pastoral farmland have a marginal influence on landscape character. Inter-visibility / important views – Mainly an enclosed landscape with limited views from and to the LCA. Views open up along the coast. Sensitive/rare landscape features – Important historic landscape with Prehistoric settlements and buried archaeology, an Iron Age fort and Post-Medieval estate buildings, all of national significance. Internationally important diverse range of habitats including the freshwater lake systems and coastal sand dunes. Breeding sea bird colonies on the cliffs. Nature of coastal edge – Flooded coastal valley system 	archaeological landscape - covered by wind-blown sand which is extremely well preserved. It includes horizons and deposits representing diverse land use and ritualistic activity from the Mesolithic to the Iron Age/Romano-British periods, with a proven and exceptional potential for further study The beaches of Pembrokeshire form a very important part of the coastline and the concept of the National Park. Culturally they hold high significance in the minds of local inhabitants and visitors The National Trust's Stackpole Estate is set in an area of outstanding natural beauty, and much of it is designated as a Site of Special Scientific Interest. Some 202 of its 810 hectares are also designated National Nature Reserves managed jointly with the National Trust and The Countryside Council for Wales. These factors underpin the outstanding cultural landscape value attributed to this area.	important historic and archaeological features, particularly at Stackpole Warren. The 'naturalistic' character of the landscape, and particularly the coastal edge.	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
with sand dunes forming barrier with the sea. Scenic sandy beaches at Barafundel Bay and Broad Haven.		

I CA A. CASTI EMARTIN / MERRION RANGES

church towers and spires along the ridge dominates the horizon,

Landscape attributes based on criteria for each technology type (from LCA)		Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
Landform and scale – Broad expanse of rolling landform with small shallow valleys and high cliffs with steep slopes.	settled feel with strong coastal character. There are extensive	The large scale of the landscape, the presence of military structures on the skyline, and the intrusive sound of gunfire in an otherwise tranquil	The majority of this LCA is unsuitable for large or medium scale turbines. However, they could be used as a screen from
 Landscape pattern – Organi pattern of unenclosed coastal grassland with patches of heathland. 	views of the open sea from much of the higher ground and along the coast from the coastal path • The prominent line of church	landscape could indicate that this landscape might be able to accommodate additional man-made structures such as wind turbines.	adjacent oil refineries to the north at Rhoscrowther. Therefore single or small clusters of medium or large turbines may be appropriately located north of
Sense of enclosure – Open, exposed and mostly unenclosed landscape.	Twynnells and St. Petrox are	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. This LCA has a high sensitivity to large and medium scale turbines and a moderate-high sensitivity to small	Neath at the LCA's north-eastern boundary.
Sense of tranquillity/ remoteness – Tranquil, wild landscape with little human disturbance. This tranquillity is broken by live firing due to its	locally distinctive features which still dominate the horizon, in spite of the insensitive siting of military range observation towers at intervals along parts of the same ridge The periodic noise of heavy gunfire is discordant and intrusive but when absent, this is a highly exposed, wild and rather tranquil		 Site turbines well away from the coastal edge to conserve the open views along the coast and the naturalistic character of the coastal edge.
 Settlement / transport network – Prominent ridge to villages. Scattered former 			 Turbines would be most appropriately sited alongside existing built development (e.g. adjacent to buildings).
villages and quarries are feature of the ranges. Ranges are large undeveloped. • Skyline – prominent line of church towers and spires along		scale turbines. The key landscape attributes that could be sensitive to wind turbine development of any scale are:	 Ensure turbines do not compete with the church towers and spires as landmarks on the skyline.

• Its wild landscape character,

with a sense of relative

Protect the internationally

consequence

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
with military observation towers also located along same ridge. Oil refineries visible on the northern horizon, Inter-visibility – Long views across this open, exposed landscape and along the south coast. Views north towards Milford Haven. Sensitive/rare landscape features – prehistoric monuments, Iron Age hill forts, medieval and post-mediaeval buildings and sites, all of national significance. Valued coastal grassland and cliff habitats supporting numerous birds (including peregrine falcon), invertebrates, seals and sea bird colonies. Nature of coastal edge – Series of rocky cliffs and steep slopes with some small sheltered coves on the south coast. Range of classic geomorphological features including caves, stacks and arches. Very little foreshore.	 Some of the limestone cliff coast has fine examples of rock formations, notably at Elegug Stacks, underlining the outstanding geological landscape value in parts of the area The recorded historical and archaeological features are of national significance, justifying the high value attributed to the historical landscape, of which the churches are the most obvious elements The long-established military training area and ranges co-exist uneasily with the National Park status, but contribute to wildlife conservation by reducing human disturbance, and public access along the coastal path is permitted when live-firing is not in progress. 	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.	 important coastal ecology, including semi-natural habitats and breeding bird sites and feeding areas. Protect historic and archaeological sites from infrastructure associated with turbines. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)					
BIOMASS: BIONERGY CROPS								
 Landform- Broad expanse of rolling landform with small shallow valleys and high cliffs with steep slopes. Landcover/ land use - Expanse of coastal grassland with patches of heathland Landscape pattern - mostly an unenclosed, open landscape - organic landscape pattern from vehicle tracks across the ranges Sense of enclosure - Open, exposed landscape. Sense of 'naturalness' - Very naturalistic in character - large swathes of coastal grassland and heathland. Unimproved seminatural habitats characterise the LCA. Inter-visibility / important views - Long views across this open, exposed landscape and along the south coast. Sensitive/rare landscape features - prehistoric monuments, Iron Age hill forts, medieval and post-mediaeval 	 This large tract of exposed open coastal grassland landscape has a settled feel with strong coastal character. There are extensive views of the open sea from much of the higher ground and along the coast from the coastal path The prominent line of church towers and spires along the ridgeline villages of Warren, St. Twynnells and St. Petrox are locally distinctive features which still dominate the horizon, in spite of the insensitive siting of military range observation towers at intervals along parts of the same ridge The periodic noise of heavy gunfire is discordant and intrusive but when absent, this is a highly exposed, wild and rather tranquil area of the National Park There are habitats of international importance here and areas are of outstanding ecological value as a consequence Some of the limestone cliff coast has fine examples of rock 	The open and exposed, naturalistic character of this landscape indicates that it has a high sensitivity to any type of bioenergy crop planting. The landscape attributes judged as being sensitive to bioenergy crop planting are: Its open, unenclosed character. Its naturalistic character — including large expanses of coastal grassland and other semi-natural habitats. The wealth of historic and archaeological sites. Presence of internationally important ecology including sea bird colonies, peregrine falcons, and invertebrates. The open and exposed coastal edge, including important geomorphological features.	It is unlikely that bioenergy crops will be able to be incorporated into this open, agriculturally unimproved landscape without a significant impact on landscape character. The following guidelines should be followed if planting is considered: • Focus bioenergy crops in areas already agriculturally improved or on the edge of woodlands, rather than through converting open semi-natural grassland areas to cropping. • Ensure crops and harvesting machinery do not affect the survival of historic features/archaeology. • Aim for small, irregular patterns of planting rather than obvious geometric blocks; • Plant well back from the coastal edge to maintain its open and character and views. • Protect wildlife sites and areas of important semi-natural habitats from planting or related infrastructure.					

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	& Key	Guidance (drawing on the LCA Management Guidelines)
buildings and sites, all of national significance. Valued coastal grassland and cliff habitats supporting numerous birds (including peregrine falcon), invertebrates, seals and sea bird colonies. • Nature of coastal edge — Series of rocky cliffs and steep slopes with some small sheltered coves on the south coast. Range of classic geomorphological features including caves, stacks and arches. Very little foreshore area.	formations, notably at Elegug Stacks, underlining the outstanding geological landscape value in parts of the area The recorded historical and archaeological features are of national significance, justifying the high value attributed to the historical landscape, of which the churches are the most obvious elements The long-established military training area and ranges co-exist uneasily with the National Park status, but contribute to wildlife conservation by reducing human disturbance, and public access along the coastal path is permitted when live-firing is not in progress.		

ICA 7. ANGLE PENINSHI AR

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND TO	URBINES	
 Landform and scale – Rolling lowland with low cliffs and estuarine frontage at Angle Bay. Landscape pattern – Distinctive small scale field pattern create a mosaic of agricultural land, scattered farmsteads and small wooded valleys. Sense of enclosure – Exposed hill tops with coastal views. Open, exposed feel in the west and south; sheltered character of Angle Bay. Sense of tranquillity/ remoteness – Strong coastal feel with high levels of tranquillity and traditional agricultural sense of place. Settlement / transport network – Scattered farmsteads. Planned medieval village of Angle – the only village. Skyline – Open, undeveloped skyline (although oil refineries of Milford Haven are visible from 	 The area of Angle village and its surroundings is characterised by traditional agricultural field patterns with hedges and hedgebanks, interspersed with small wooded valleys There is a strong coastal feel imparted by the peninsula and the views out over the mouth of Milford Haven to the headland of St Ann's Head, with its lighthouses and cottages, and up the estuary to the oil terminal piers. This atmosphere is enhanced by the traditional building character within Angle village Areas to the west and south are very exposed, contrasting with the more sheltered areas of West Angle Bay, and particularly Angle Bay, which is inward-looking and an integral part of the Milford Haven estuary shoreline There are some shoreline habitats of international importance which result in areas of high ecological 	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. This LCA is judged to have a high sensitivity to large and medium scale turbines, a moderate-high sensitivity to small scale turbines. 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	 The majority of this LCA is unsuitable for large or medium scale turbines. However, they could be used as a screen from adjacent industry to the east. Therefore single or small clusters of medium or large turbines may be appropriately located around the Sawdern area along the LCA's eastern boundary. There may be limited opportunity for single or small clusters of small scale turbines only on brownfield 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Inter-visibility – Attractive views to St Ann's Head. Area is highly visible from the north coast across the Milford Haven Waterway. Sensitive/rare landscape features – Outstanding historic value, particularly the medieval settlement and strip fields of Angle (a Conservation Area), defensive features along the coast, including Chapel Bay fort, and the Milford Haven Waterway. Important seminatural habitats including Angle Bay for overwintering birds and semi-natural woodlands along north coast. Nature of coastal edge – Strong relationship between land and sea – coastline and Milford Haven Waterway visible in many views. 	 The recorded historical and archaeological sites are of such importance that the landscape throughout is of outstanding historical value. Of particular note is that Angle is a great survival of a planned Mediaeval village, with a single main street, the magnate core at one end (with many buildings having survived, including the dovecote, the church, the 'nunnery' and the tower house), and strip-fields running back from burgage plots along the village street The outstanding cultural landscape value is underpinned by its historical and archaeological wealth. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses the northern section of this LCA including Angle Bay. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry 	and archaeological sites, including the Milford Haven Waterway and Angle Conservation Area. Valued estuarine habitats and species, including overwintering wildfowl and waders.	field patterns with hedges and hedgebanks are not affected. Protect valued habitats and species, including Angle Bay for its overwintering bird species. 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.

crit	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
		spanning the prehistoric to modern periods. • Angle village has a Conservation Area designated in August 1997, extending to the edges of West Angle Bay and Angle Bay, and encompassing much of the relict Mediaeval field system.		
		BIOMASS: BIO	NERGY CROPS	
•	Landform – Rolling lowland with low cliffs and estuarine frontage at Angle Bay. Landcover / land use: Predominantly pastoral with small valley woodlands, wooded coastal edge and estuary flats. Landscape pattern – Distinctive small scale field pattern, including survival of Medieval strip-fields. Unenclosed areas around Angle Bay.	 The area of Angle village and its surroundings is characterised by traditional agricultural field patterns with hedges and hedgebanks, interspersed with small wooded valleys There is a strong coastal feel imparted by the peninsula and the views out over the mouth of Milford Haven to the headland of St Ann's Head, with its lighthouses and cottages, and up the estuary to the oil terminal piers. This 	The pastoral land use, semi-natural habitats, distinctive small scale field patterns, important coastal views, and valued historic and archaeological sites indicate that this area has a high sensitivity to bioenergy crop planting such as Miscanthus, and a moderate-high sensitivity to SRC. The landscape attributes judged as being sensitive to bioenergy crop planting are: The predominantly pastoral land use.	 This LCA is unsuitable for crops such as Miscanthus. There may be limited opportunity for planting of SRC, perhaps to help screen existing industrial structures and despoiled land, as long as the following guidance is observed. Ensure crops and harvesting machinery do not affect the survival of historic features/archaeology and hedgerows.
•	Sense of enclosure – Exposed hill tops with coastal views. Open, exposed feel in the west and south; sheltered character of Angle Bay. Sense of 'naturalness' – High - Pastoral character with	 atmosphere is enhanced by the traditional building character within Angle village Areas to the west and south are very exposed, contrasting with the more sheltered areas of West Angle Bay, and particularly Angle 	 Its exposed hill tops and intervisibility, for example with St Ann's Head. The distinctive small scale field patterns, including with Medieval 	 Aim for small, irregular patterns of planting rather than obvious geometric blocks. Keep well away from the linear strip fields of Angle. Maintain a diversity of crop types/

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
deciduous valley woodlands, semi-natural wooded coastal edge, inter-tidal estuary flats and rocky cliffs. Inter-visibility / important views — Attractive views to St Ann's Head. Area is highly visible from the north coast across the Milford Haven Waterway. Sensitive/rare landscape features — Outstanding historic value, particularly the Medieval settlement and strip fields of Angle (a Conservation Area), defensive features along the coast, including Chapel Bay fort, and the Milford Haven Waterway. Important seminatural habitats including Angle Bay for overwintering birds and semi-natural woodlands along north coast. Nature of coastal edge — Strong relationship between land and sea — coastline and Milford Haven Waterway visible in many views.	Bay, which is inward-looking and an integral part of the Milford Haven estuary shoreline There are some shoreline habitats of international importance which result in areas of high ecological value The recorded historical and archaeological sites are of such importance that the landscape throughout is of outstanding historical value. Of particular note is that Angle is a great survival of a planned Mediaeval village, with a single main street, the magnate core at one end (with many buildings having survived, including the dovecote, the church, the 'nunnery' and the tower house), and strip-fields running back from burgage plots along the village street The outstanding cultural landscape value is underpinned by its historical and archaeological wealth. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses the northern section of this LCA	 strip fields at Angle. The presence of nationally important historic and archaeological sites, including the Milford Haven Waterway and Angle Conservation Area. Valued semi-natural woodlands, including along the northern coastal edge. 	land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Plant well back from the coastal edge to maintain its open and exposed character and views, including views to and from St Ann's Head, and along the Milford Haven Waterway. Avoid planting on skylines to preserve their exposed character. Ensure that bionergy crop planting does not affect the character and setting of Angle Conservation Area. Ensure planting does not threaten or displace existing wildlife sites and areas of important seminatural habitats, including woodlands along the coastal edge.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
	including Angle Bay. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods.	
	 Angle village has a Conservation Area designated in August 1997, extending to the edges of West Angle Bay and Angle Bay, and encompassing much of the relict Mediaeval field system. 	

LCA 8: FRESHWATER WEST/ BROWNSLADE BURROWS

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – An area of exposed rolling lowland, with associated coastal areas of fixed sand dunes, low sea cliffs and bays. Landscape pattern – Extensive sand dune system backed by a shallow lowland valley managed as marshy grassland at Castlemartin Corse. Sense of enclosure – Open and exposed landscape with strong relationship with the sea. Sense of tranquillity/ remoteness – Strong sense of remoteness. Settlement / transport network – Largely devoid of settlement and built features, apart from old military installations. Skyline – Low lying – naturalistic hummocky dune skyline – no built features Inter-visibility – Inter-visible 	 This LCA was defined by its vast stretch of sand beach backed by an extensive system of fixed sand dunes, which are very rare in the National Park. These are in turn backed by a broad, shallow lowland valley managed for pastoral agriculture on land largely reclaimed from marsh. It is a landscape of outstanding geological value There is a highly exposed feel to this landscape with a constant awareness of the wind and the sea, sharpened by the sound of crashing of waves along the beach when the prevailing southwesterly winds reach sufficient strength Although there is a well-used paved public road passing through the dune system, its alignment and the scale of the adjacent sand dunes mean that it is not visible for much of its length along the low ground, thus contributing to the sense of remoteness of this 	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. 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.	 This LCA is unsuitable for large scale turbines due to its open and exposed, undeveloped character. Single or small clusters of small scale turbines are likely to be most appropriate in this exposed and undeveloped landscape. Site turbines away from the coastal edge to protect views, and the important relationship between land and sea. Protect historic and archaeological sites and their setting, including military structures and Iron Age hillforts. Protect valued habitats and species. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
with the adjacent Castlemartin Ranges. Texaco oil refinery visible on the north-east horizon. • Sensitive/rare landscape features – Nationally significant habitats including sand dunes, fens, purple moor grass, lowland calcareous grassland, maritime cliffs. Important species include chough, over-wintering lapwings, waders, grey seal, and rare invertebrates. Abandoned military installations and Iron Age forts are valued features. • Nature of coastal edge – constant awareness of the wind and the sea, sharpened by the sound of crashing of waves along the beach when the prevailing south-westerly winds reach sufficient strength.	 The high level of exposure, together with its relative isolation and lack of settlement, contribute strongly to a pervading sense of remoteness and wilderness here, evoked by the wind-swept undulating sand dune landscape. This in spite of the proximity of the Castlemartin firing ranges and the tops of high stacks at the Texaco oil refinery which intrude above the horizon to the northeast The range of habitats present is of nationally significant importance Old military installations provide reminders of the historical national importance of the nearby Milford Haven as a sea port and the need to protect its installations against attack. The elevated cultural value is supported by the presence of a tract of National Trust land in the northern section on part of Broomhill Burrows. 		

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – An area of exposed rolling lowland, with associated coastal areas of fixed sand dunes, low sea cliffs and bays. Land cover / land use: Nonagricultural landscape defined by sand dues and wetlands. Landscape pattern – Extensive sand dune system backed by a shallow lowland managed as marshy grassland at Castlemartin Corse. Sense of enclosure – Open and exposed landscape with strong relationship with the sea. Sense of 'naturalness' – High - area defined by its diverse range of coastal semi-natural dune and wetland habitats. Inter-visibility / important views – inter-visible with the adjacent Castlemartin Ranges. Sensitive/rare landscape features – Nationally significant habitats including sand dunes, fens, purple moor grass, lowland 	 This LCA was defined by its vast stretch of sand beach backed by an extensive system of fixed sand dunes, which are very rare in the National Park. These are in turn backed by a broad, shallow lowland valley managed for pastoral agriculture on land largely reclaimed from marsh. It is a landscape of outstanding geological value There is a highly exposed feel to this landscape with a constant awareness of the wind and the sea, sharpened by the sound of crashing of waves along the beach when the prevailing southwesterly winds reach sufficient strength Although there is a well-used paved public road passing through the dune system, its alignment and the scale of the adjacent sand dunes mean that it is not visible for much of its length along the low ground, thus contributing to the sense of remoteness of this place 	The LCA's unenclosed, non-agricultural landscape of high biodiversity interest means that it would have a high sensitivity to bioenergy crop planting of any type. The landscape attributes judged as being sensitive to bioenergy crop planting are: Its unenclosed character and lack of cultivated land. Its remote and undeveloped character. Strong relationship between land and sea. Diverse semi-natural habitats supporting a range of important plant and animal species. Its high sense of naturalness. Historic and archaeological sites, including Iron Age hillforts.	It is unlikely that bioenergy crops will be able to be incorporated into this open, uncultivated landscape without a significant impact on landscape character. The following guidelines should be followed if planting is considered: • Focus bioenergy crops in areas already agriculturally improved (i.e. Castelmartin Corse) or on the edge of woodlands, rather than through converting open seminatural grassland areas, or other habitats, to cropping. • Ensure crops and harvesting machinery do not affect the survival of historic features/archaeology. • Aim for small, irregular patterns of planting rather than obvious geometric blocks. • Plant well back from the coastal edge to maintain its open and character and views. • Protect wildlife sites and areas of important semi-natural habitats from planting or related

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
calcareous grassland, maritime cliffs. Important species include chough, over-wintering lapwings, waders, grey seal, and rare invertebrates. Abandoned military installations and Iron Age forts are valued features. Nature of coastal edge — constant awareness of the wind and the sea, sharpened by the sound of crashing of waves along the beach when the prevailing south-westerly winds reach sufficient strength.	 The high level of exposure, together with its relative isolation and lack of settlement, contribute strongly to a pervading sense of remoteness and wilderness here, evoked by the wind-swept undulating sand dune landscape. This in spite of the proximity of the Castlemartin firing ranges and the tops of high stacks at the Texaco oil refinery which intrude above the horizon to the northeast The range of habitats present is of nationally significant importance Old military installations provide reminders of the historical national importance of the nearby Milford Haven as a sea port and the need to protect its installations against attack. The elevated cultural value is supported by the presence of a tract of National Trust land in the northern section on part of 		infrastructure.

LCA 9: MARLOES

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Rolling lowland occasionally incised by small valleys backed by cliffs to the north and west, and estuarine land along northern shores of Milford Haven. Landscape pattern – Variety of field shapes and sizes with small linear wooded valleys and scattered farmsteads. Sense of enclosure – Open landscape with prominent coastal views – high hedgebanks and woodland belts provide 	The Marloes peninsula features attractive open rolling farmland contrasting with more sheltered wooded valleys, notably south of St. Brides, around Dale, St. Ishmael's and bordering the Sandy Haven Pill The high proportion of coastal views, including those out to the islands of Skomer and Skokholm, contribute greatly to the sense of place and the often outstanding visual and sensory landscape value of this large area	The undeveloped skylines, sparse settlement, predominantly rural character, inter-visibility with offshore 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. Landscape attributes that are sensitive to turbine development are: Its strong sense of rural tranquillity and undeveloped skylines.	 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.
 Sense of tranquillity/ remoteness – Sparse settlement and strong coastal feel gives the area a strong sense of rural tranquillity. Settlement / transport network – A handful of small villages, linked by a network of minor roads and accessed via the B4327. Elsewhere settlement is sparse with scattered farms. 	 There are heathland and shoreline habitats of international importance which result in some landscapes of high ecological value The recorded historical and archaeological features are of national importance and are such that much of this area is of outstanding historical landscape value. The long-established defensive role of the peninsula is underlined by the range of 	 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 	 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
Disused airfields at Talbenny and south of Marloes. Skyline – Open skyline with extensive views to the coast giving the area a strong sense of place. Lighthouses and navigation marks are landmark features, particularly on St Ann's and Great Castle Heads. The industry at Milford Haven is visible on the skyline. Inter-visibility – Views to and from the off-shore islands of Skomer and Stockholm, across to St Bride's Bay and over the Milford Haven Waterway to the Angle Peninsular. Sensitive/rare landscape features – Heathland and shoreline habitats of international importance with notable species including chough, peregrine falcon and grey seal. Valued wetlands at Marloes Mere. Prehistoric sites and monuments, medieval features and parkland. Outstanding historic significance of the Milford Haven Waterway. Nature of coastal edge –	archaeological features recorded, ranging from the iron Age through to modern military installations. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses a large arc of land in the southern part of this LCA, including St. Ann's headland, the villages of Dale and St. Ishmael's, up to the LCA boundary at Sand Haven Pill. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods. The historical landscape attributes also support an outstanding cultural aspect evaluation, in addition to the influence of the large areas of National Trust land to the west of Marloes village and on the western side of the St. Ann's headland. St. Ann's Head is particularly atmospheric with an enhanced maritime cultural awareness raised by the attractive	peregrine falcon and grey seal. Important historic features and cultural landscapes, including prehistoric sites and the Milford Haven Waterway.	 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. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Strong cultural relationship between land and sea. Undeveloped coastline.	range of lighthouse structures and cottages present.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Rolling lowland occasionally incised by small valleys backed by cliffs to the north and west, and estuarine land along northern shores of Milford Haven. Landcover / land use: Mixed agriculture with small woodlands. Landscape pattern – Variety of field shapes and sizes with small linear wooded valleys and scattered farmsteads. 	 The Marloes peninsula features attractive open rolling farmland contrasting with more sheltered wooded valleys, notably south of St. Brides, around Dale, St. Ishmael's and bordering the Sandy Haven Pill The high proportion of coastal views, including those out to the islands of Skomer and Skokholm, contribute greatly to the sense of place and the often outstanding visual and sensory landscape value of this large area 	The presence of areas of arable cultivation, as well as small woodlands, indicate that this area could accommodate some bioenergy crops. However, its open and naturalistic coastal edge, views to and from offshore islands, valued coastal and wetland habitats and the presence of important historic features all pose constraints to bioenergy crops. This LCA is judged as having a moderate sensitivity to bioenergy crop planting.	 Focus bioenergy crops in fields already affected by cropping systems rather than conversion of pastoral areas to cropping. Ensure bioenergy crop planting does not encroach onto areas of semi-natural habitat, particularly along the coast or the wetlands of Marloes Mere. There may be opportunity to link some SRC with existing woodlands, providing it does not alter their shape and form within
 Sense of enclosure – Open landscape with prominent coastal views – high hedgebanks and woodland belts provide enclosure at ground level. Sense of 'naturalness' – Predominantly agricultural landscape with fields of arable 	 There are heathland and shoreline habitats of international importance which result in some landscapes of high ecological value The recorded historical and archaeological features are of national importance and are such that much of this area is of 	Landscape attributes that are particularly sensitive to bioenergy crop planting include: The strong rural character. Heathland and shoreline habitats of international importance and wetland habitats at Marloes	the landscape (ie avoid geometric blocks of planting). • Ensure crops and harvesting machinery do not affect the survival of hedgebanks, historic features and cultural landscapes, including prehistoric sites and monuments, medieval features

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
cultivation mixed with pasture. Small valley woodlands, woodland belts, and semi-natural coastal edge with heath, mudflats, saltmarsh and rocky cliffs contribute to the sense of naturalness. Inter-visibility / important views – Views to and from the off-shore islands of Skomer and Stockholm, across to St Bride's Bay and over the Milford Haven Waterway to the Angle Peninsular. Sensitive/rare landscape features – Heathland and shoreline habitats of international importance with notable species including chough, peregrine falcon and grey seal. Valued wetlands at Marloes Mere. Prehistoric sites and monuments, medieval features and parkland. Outstanding historic significance of the Milford Haven Waterway. Nature of coastal edge – Strong cultural relationship between land and sea. Undeveloped coastline.	outstanding historical landscape value. The long-established defensive role of the peninsula is underlined by the range of archaeological features recorded, ranging from the Iron Age through to modern military installations. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses a large arc of land in the southern part of this LCA, including St. Ann's headland, the villages of Dale and St. Ishmael's, up to the LCA boundary at Sand Haven Pill. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods. The historical landscape attributes also support an outstanding cultural aspect evaluation, in addition to the influence of the large areas of National Trust land to the west of Marloes village and on the western side of the St.	 Mere. The naturalistic character of the coastal edge. Important historic features and cultural landscapes, including the prehistoric sites and monuments, medieval features and Monk Haven parkland. Views to and from Skomer and Stockholm islands. 	 and Monk Haven parkland. Plant at the field scale to maintain landscape pattern. Maintain a diversity of crop types/ land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Maintain the heathy / scrubby character of the landscape, particularly along the southern coastal edge. Plant at least one field back from the coastal edge to maintain its open character and views to Skomer and Stockholm Islands, St Bride's Bay and the Angle Peninsular. Ensure planting does not affect the historic maritime atmosphere of St. Ann's Head.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
	Ann's headland. St. Ann's Head is particularly atmospheric with an enhanced maritime cultural awareness raised by the attractive range of lighthouse structures and cottages present.	

LCA 10: SKOMER AND STOCKHOLM

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale –Two islands defined by their dramatic sea cliffs, rocky shores and inland plateaux. Small scale island landscapes. Landscape pattern – Islands dominated by coastal grassland with patches of heath and scrub. Sheltered plateaux are covered by large areas of bracken. Sense of enclosure – Remains of prehistoric field systems on both islands. Otherwise the islands are open and exposed, with little or no tree cover. Sense of tranquillity/ remoteness – The wilderness quality of the islands is one of their defining, and most valued, attributes. Settlement / transport network – Absence of settlement as both islands are unoccupied and virtually undisturbed. Skyline – Open skyline with 	 These islands are highly attractive coastal wilderness areas, virtually undisturbed and rich in wildlife There are extensive sea views and, although visible from much of the local mainland, they remain out of site from the main embarkation landing at St. Martin's Haven, which adds a sense of mystery and heightens the arousal of curiosity and the desire to travel out to explore them Evidence of old stone walls gives an indication of the islands' culture and history of human occupation, a landscape of outstanding historical and cultural value. Skomer can be regarded as being worthy of international value in view of the quality of its archaeological sites Skomer Island is a Registered Landscape of Outstanding Historic Interest in Wales, significant in that it shows human activity in a closed microcosm, with extensive, 	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. 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.	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 panoramic views across the islands and out to sea. Inter-visibility –The islands are visible from much of the local mainland. Sensitive/rare landscape features – Islands are home to large populations of sea birds (and as such are defined as bird sanctuaries), rare species of lichen and are surrounded by a Marine Nature Reserve. The islands' archaeological and cultural heritage, including prehistoric field systems, dwellings and standing stones, is of international importance. Nature of coastal edge – the relationship between the islands and the sea is ever present. Both islands have rocky cliffs and limited foreshores. 	well-preserved,, relict remains of prehistoric settlements, field systems and recent farming activity The offshore islands of the Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Skomer and Skokholm have long been recognised as such, with their status as bird sanctuaries and the designation of a Marine Nature Reserve in the surrounding waters Uniquely, these islands have a preponderance of outstanding values recorded across all five evaluated landscape Aspects.	 Internationally significant archaeological remains, including prehistoric agricultural and settlement features. Constant relationship between the islands and the sea. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale –Two islands defined by their dramatic sea cliffs, rocky shores and inland plateaux. Small scale island landscapes. Landcover / land use: Natural habitats dominate the islands, with no agricultural land uses. Landscape pattern – Islands dominated by coastal grassland with patches of heath and scrub. Sheltered plateaux are covered by large areas of bracken. Sense of enclosure – Remains of prehistoric field systems on both islands. Otherwise the islands are open and exposed, with little or no tree cover. Sense of 'naturalness' – the islands are characterised by naturalistic landscape with swathes of semi-natural coastal grassland defining the landcover. Inter-visibility / important views—The islands are visible from much of the local mainland. Marine views are key aspects of 	 These islands are highly attractive coastal wilderness areas, virtually undisturbed and rich in wildlife There are extensive sea views and, although visible from much of the local mainland, they remain out of site from the main embarkation landing at St. Martin's Haven, which adds a sense of mystery and heightens the arousal of curiosity and the desire to travel out to explore them Evidence of old stone walls gives an indication of the islands' culture and history of human occupation, a landscape of outstanding historical and cultural value. Skomer can be regarded as being worthy of international value in view of the quality of its archaeological sites Skomer Island is a Registered Landscape of Outstanding Historic Interest in Wales, significant in that it shows human activity in a closed microcosm, with extensive, well-preserved, relict remains of prehistoric settlements, field 	The islands are judged to be of high sensitivity to any type or scale of bioenergy planting, due to their naturalistic land cover, high visibility from the mainland, defining wilderness qualities, internationally significant archaeological and historic features, internationally important natural heritage and lack of human disturbance. The key landscape attributes that make it unsuitable for bioenergy planting are: Naturalistic landscape with seminatural maritime grassland the dominant land cover. Nopen and exposed character with panoramic sea views. High visibility in views from most of the local mainland. Absence of human disturbance. Internationally important colonies of sea birds and natural habitats.	The area is assessed as being unsuitable for any bioenergy planting, as outlined in the sensitivity judgement. Guidance has therefore not been prepared for this LCA for this renewable energy type.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
character. • Sensitive/rare landscape features – Islands are home to large populations of sea birds (and as such are defined as bird sanctuaries), rare species of lichen and are surrounded by a Marine Nature Reserve. The islands' archaeological and cultural heritage, including prehistoric field systems, dwellings and standing stones, is of international importance. • Nature of coastal edge – the relationship between the islands and the sea is ever present. Both islands have rocky cliffs and limited foreshores.	 systems and recent farming activity The offshore islands of the Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Skomer and Skokholm have long been recognised as such, with their status as bird sanctuaries and the designation of a Marine Nature Reserve in the surrounding waters Uniquely, these islands have a preponderance of outstanding values recorded across all five evaluated landscape Aspects. 	archaeological remains, including prehistoric agricultural and settlement features. Constant relationship between the islands and the sea.	

LCA II: HERBRANDSTON

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	'
 Landform and scale – lowland landscape cut by stream valleys in the north to give an undulating surface. Landscape pattern – Mixed, farmland forming a mosaic within medium scale fields and wooded stream valleys. Estuarine fringes along Milford Haven and Sandy Haven Pill. Sense of enclosure – Overgrown hedgebanks provide a sense of enclosure in this landscape. Sense of tranquillity/ remoteness – Peaceful farmland but an overwhelming presence of nearby large scale oil refinery and industrial plants in the east. Settlement / transport network – Scattered settlement pattern with small nucleated villages, hamlets and scattered farmsteads. Main settlement at Herbrandston. 	 The farmland in the western section of this area is peaceful and pleasant but there is an overwhelming presence of the nearby very large scale oil refinery and industrial plants which completely dominate the scene, especially the refinery on the higher ground to the north east of the area. Only in views to the west does the refinery cease to have this influence over the sense of place. There are habitats of high value along the shore of the estuary. The low visual and sensory values of this landscape belie the outstanding historical and cultural value of much of the area, especially in relation to the shoreline of Milford Haven, which is of national significance. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses all of this 	The dominating presence of industry on land in and immediately adjacent to this LCA indicate 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. This LCA is judged as having a moderate-high sensitivity to large scale turbines, a moderate sensitivity to medium and small scale turbines. 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	 This LCA is unsuitable for large scale turbines. There may be limited opportunity for medium or large (under 100m) scale turbines on brownfield land close to existing industrial areas in the east (where they may form a new point of focus), as long as they are sited sensitively following the guidance below. There may be opportunities for single or small groups 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
 Skyline – The adjacent oil refinery and industrial plants have a dominating influence on the eastern skyline. Inter-visibility – Views from and to Sandy Haven Pill, Great Castle and St Ann's Head (LCA 9) and across the Milford Haven Waterway to the Angle Peninsular (LCA 7). Sensitive/rare landscape features – Valued estuarine habitats fringing Sandy Haven Pill and Milford Haven. Lies within the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales. Extensive array of military fortifications. Nature of coastal edge – Valued estuarine edge to Milford Haven dominated by industry. 	LCA including Sandy Haven Pill. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods.	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.	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). 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, for example restoration or rehabilitation of traditional field boundary hedgebanks.

Landscape attributes based on
criteria for each technology type
(from LCA)

Special Qualities relevant to this area (from LCA and Management Plan)

Sensitivity Judgement & Key Landscape Sensitivities

Guidance (drawing on the LCA Management Guidelines)

BIOMASS: BIONERGY CROPS

- Landform and scale –
 Lowland landscape cut by stream valleys in the north to give an undulating surface.
- Landcover / land use: Mixed, but predominantly pastoral agriculture forming a mosaic with wooded stream valleys.
- Landscape pattern Mosaic of medium scale, regular fields and wooded stream valleys.
- Sense of enclosure –
 Overgrown hedges provide a sense of enclosure in this landscape.
- Sense of 'naturalness' The area's stream-side woodlands, estuarine fringes and overgrown hedges introduce natural elements into this agricultural landscape. Industry dominates the skyline to the east.
- Inter-visibility / important views – Views from and to Sandy Haven Pill, Great Castle and St Ann's Head (LCA 9) and across the Milford Haven

- The farmland in the western section of this area is peaceful and pleasant but there is an overwhelming presence of the nearby very large scale oil refinery and industrial plants which completely dominate the scene, especially the refinery on the higher ground to the north east of the area.
- Only in views to the west does the refinery cease to have this influence over the sense of place.
- There are habitats of high value along the shore of the estuary.
- of this landscape belie the outstanding historical and cultural value of much of the area, especially in relation to the shoreline of Milford Haven, which is of national significance. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses all of this LCA including Sandy Haven Pill. This river valley and estuary

The agricultural land use, enclosure provided by woodlands and overgrown hedges and the presence of visually detracting industry suggest that this LCA could accommodate some biomass planting. However, the predominantly pastoral land use, presence of valued naturalistic habitats, important views across estuarine areas and the presence of valued historic features increase sensitivity to energy crop planting.

Overall, this LCA is therefore judged as having a **moderate – high** sensitivity to bioenergy crop planting.

Landscape attributes that are particularly sensitive to bioenergy crop planting are:

- Its predominantly pastoral character.
- The naturalistic estuarine and coastal fringes and valued estuarine habitats.
- The views from St Ishmael's across Sandy Haven Pill and views across Milford Haven

- Focus bioenergy crops in fields already affected by cropping systems rather than conversion of pastoral areas to cropping.
- There may be opportunity to link some SRC with existing woodland, providing it does not alter the shape and form of woodland within the landscape (i.e. planted in irregular rather than geometric blocks).
- Ensure crops and harvesting machinery do not affect the survival of hedgerows and hedgebanks or historic features/archaeology including structures associated with the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales.
- Plant at the field scale to maintain landscape pattern.
- Maintain a diversity of crop types/ land uses in adjoining fields to

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Waterway to the Angle Peninsular (LCA 7). Sensitive/rare landscape features – Valued estuarine habitats fringing Sandy Haven Pill and Milford Haven. Lies within the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales. Extensive array of military fortifications. Nature of coastal edge – Valued estuarine edge to Milford Haven dominated by industry.	landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods.	Important historic features and cultural landscapes, including structures associated with the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales.	 maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Aim for irregular patterns of planting rather than geometric blocks. Plant at least one field back from the coastal and estuarine edges to maintain views across Sandy Haven Pill and the Milford Haven Waterway. Consider using planting along edges of industrial installations to integrate them into the landscape.

LCA 12: ST BRIDE'S BAY

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance
	WIND TO	URBINES	
 Landform and scale - Large expanse of rolling lowland with rocky headlands and inlets incised by small wooded valleys Landscape pattern – Agricultural and woodland mosaic - organic pattern of open grassland, scrub, deciduous woodland, rocky and sandy shores, marshy grassland and reed bed. Sense of enclosure - Generally open with a particular sense of exposure on the coast. Some wooded valleys and overgrown hedges provide enclosure at ground level. Sense of tranquillity/remoteness — Coastal location enhances remote/wild character. Settlement / transport network - Scattered villages and farmsteads, some caravan parks. Few main roads. Skyline - Open skylines with development located on lower 	 This is a very large tract of landscape with a strong visual relationship to the coast from the broad views across St. Brides Bay and along the coastline, which is mostly undeveloped. There is a high degree of exposure, especially along the higher ground and along the wide expanse of cobble beach that is Newgale Sands; there is more shelter within the lower areas of the rolling farmed landscape. The sight and sound of this expanse of sea is a constant presence, a perception heightened by the sound of waves breaking onto the cobble beach when there is sufficient wind to raise the swell, and apparent in short, medium and long distance views. There are some landscapes of high ecological value with habitats of international importance. The historical and archaeological features present result in a 	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. This LCA has a high sensitivity to development of large and medium scale wind turbines and a moderate-high sensitivity to small scale wind turbines. 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.	 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. There may be some limited opportunity for small scale single turbines in areas of the rolling farmed landscape, associated with existing buildings, for example farm buildings. Seek opportunities to achieve wider landscape management obiectives identified in the

cri	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance
	Inter-visibility – Extensive views along the coast across the bay and to the Marloes coast, St David's headland and the offshore islands. Sensitive/rare landscape features – Pre-historic ritual sites, round houses, standing stones, Iron Age hill forts, and medieval earthworks. Nature of coastal edge – Undeveloped and exposed rocky cliffs with rocky and sandy shores – the land has a close visual relationship to the sea which is a constant presence.	historical landscape with mostly high value and some outstanding value, which underpins the outstanding cultural value. The cultural value is further supported by the continuous tract of open access National Trust land along the northern stretch of coast running eastwards from Solva almost to the northern tip of Newgale Sands.		Pembrokeshire Coast National Park Landscape Character Assessment Study in association with any proposed development.
		BIOMASS: BIO	NERGY CROPS	
•	Landform: Gently undulating landform with coastal cliffs Landcover/ land use – Mixed agriculture (mostly pastoral) with heath, grassland (including marshy grassland and reedbed on floodplain), deciduous woodland and scrub. Landscape pattern – A variety of sizes and shapes of fields	 This is a very large tract of landscape with a strong visual relationship to the coast from the broad views across St. Brides Bay and along the coastline, which is mostly undeveloped. There is a high degree of exposure, especially along the higher ground and along the wide expanse of cobble beach that is Newgale Sands; there is more 	Although the gently undulating landform and presence of woodland and agricultural land use indicates that the landscape could accommodate some sensitively sited bioenergy crops, the naturalistic land cover on the coast, the irregular landscape pattern, exposed character and extensive views (particularly along the coast), increases the landscape's sensitivity. In addition, the presence	 Focus bioenergy crops in fields already affected by cropping systems rather than conversion of pastoral areas to cropping. There may be some opportunity to link SRC with existing woodland, providing it does not alter the shape and form of woodland within the landscape (i.e. broadly confined to the

crit	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance
•	inland enclosed by hedgebanks. Area fringed by a naturalistic, unenclosed coastal edge. Sense of enclosure – Open coastal heath, some small valley woodlands and overgrown hedgerows inland. Sense of 'naturalness' –Seminatural habitats, particularly on the coast and flood plain areas, with scrub and heath contributing to the natural character. Some tourism-related developments along coast. Inter-visibility / important views – There are extensive views along the coastline and across St.Bride's Bay from the coastal villages and many of the local roads and footpaths. Important views to the Marloes coast, St David's headland and the off-shore islands. Other key features - prehistoric ritual sites, round houses, standing stones, Iron Age hill forts, medieval earthworks. Nature of coastal edge –	 shelter within the lower areas of the rolling farmed landscape. The sight and sound of this expanse of sea is a constant presence, a perception heightened by the sound of waves breaking onto the cobble beach when there is sufficient wind to raise the swell, and apparent in short, medium and long distance views. There are some landscapes of high ecological value with habitats of international importance. The historical and archaeological features present result in a historical landscape with mostly high value and some outstanding value, which underpins the outstanding cultural value, including the relic lime kilns at Solva. The cultural value is further supported by the continuous tract of open access National Trust land along the northern stretch of coast running eastwards from Solva almost to the northern tip of Newgale Sands. Natural rock formations, views 	of internationally important habitats and outstanding archaeological features adds to the sensitivity of this landscape. This LCA is therefore judged to have a moderate-high sensitivity to the growth of bioenergy crops. The key landscape attributes that could be sensitive to bioenergy crop planting are: Open and exposed character of the coastal edge Semi-natural habitats, particularly on the coast and flood plain areas - heath, grassland (including marshy grassland and reedbed on floodplain), deciduous woodland and scrub. Extensive views along coastline and across St Bride's Bay. Archaeological features, particularly pre-historic sites and monuments and relic lime kilns. Close visual relationship between land and sea.	 valleys). Ensure bioenergy crop planting does not encroach onto areas of heath, grassland (including marshy grassland, reedbed on floodplain) and other semi-natural habitats. Ensure crops and harvesting machinery do not affect the survival of hedgebanks or historic features/archaeology. Plant at the field scale to maintain landscape pattern and aim for irregular patterns of planting rather than obvious geometric blocks. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Plant at least one field back from the coastal edge to maintain its open and exposed character. Do not obstruct views along the coastline and across St Bride's Bay to distant landforms and off-shore islands when considering the planting of bioenergy crops.
	-			 Ensure that bioenergy planting

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance
undeveloped and exposed rocky cliffs with rocky and sandy shores – the land has a close visual relationship to the sea which is a constant presence tip of Newgale Sands.	from the cliffs and the ria at Solva. The traditional appearance of the village of Solva with many of the buildings reflecting its past function as an industrial harbour settlement and important post medieval lime works trade.	does not alter the close visual relationship between land and sea.

LCA 13: BRANDY BROOK

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Small scale, steep sided valley system with associated rolling lowland. Landscape pattern – Medium scale, irregular field pattern. Sense of enclosure – The steep valley landform gives this landscape a strong sense of enclosure with restricted views. Areas of woodland, tall hedgebanks and other low-level vegetation provide enclosure. On the higher ground (e.g. Rhyndaston Mountain) is an increased sense of openness. Sense of tranquillity/remoteness – Sheltered, peaceful valley landscape, with an intimate atmosphere in places. Settlement / transport network – Scattered settlement of isolated farmsteads linked by minor roads. The A487 skirts the western edge of the LCA. Skyline –Open, undeveloped skylines. The prominent local 	 This secluded area of low-lying wooded valleys cutting through rolling lowland is very settled sheltered, tranquil and inward-looking, with an intimate atmosphere in places There is a scattered settlement pattern consisting entirely of isolated farmsteads. There is no link to the sea and views of the sea, although not far away, are only possible from the higher ground of the upper valley slopes. Views within the valley are generally short-distance. There is a strong visual relationship with the prominent local landmark of Roch Castle in the south western corner of the LCA, which forms a skyline feature in many views from within the LCA. There are some habitats of international importance, notably wet alder woodland as well as heathland and wet grassland areas 	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. This LCA is therefore judged as having a high sensitivity to large and medium-scale turbines, and a moderate-high sensitivity to small turbines. The main landscape attributes that would be sensitive to wind turbine developments are: Its small scale, intimate character. The relative sense of tranquillity	 Large scale turbines would not be appropriate in this landscape due to its small scale and tranquil character. Single or small clusters of small scale turbines are likely to be most appropriate where sensitively sited – e.g. near existing building clusters. 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 seminatural habitats and archaeological remains when considering the location of

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
landmark of Roch Castle – in many views from within the LCA. • Inter-visibility – Restricted, mainly inward looking views from within the valley. Views to St David's headland and across St Bride's Bay from the higher hilltops. The landmark of Roch Castle is prominent in many views across the landscape. • Sensitive/rare landscape features – Diverse habitats associated with the river valley supporting species such as otter. Prehistoric remains are valued features of the landscape. • Nature of coastal edge – N/A	The incidence of a number of historical and archaeological sites especially the prehistoric survivals results in a landscape of high historical value and outstanding cultural value.	 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. 	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.
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Small scale, steep sided valley system with associated rolling lowland. Landcover / land use: Large areas of woodland along the valley bottom and on valley sides. Elsewhere, mainly pastoral farming with some areas of rough grazing and occasional 	 This secluded area of low-lying wooded valleys cutting through rolling lowland is very settled sheltered, tranquil and inward-looking, with an intimate atmosphere in places There is a scattered settlement pattern consisting entirely of isolated farmsteads. 	The landscape's predominantly pastoral character, irregular field pattern, presence of large areas of naturalistic and valued habitats, hilltop views and valued archaeology all present sensitivities to crop planting. This landscape is judged as having a high sensitivity to bioenergy crops such as Miscanthus and a moderate	 This landscape is not considered to be suitable for bioenergy crops such as Miscanthus. There may be some limited opportunity to link SRC with existing woodland, providing it does not alter their shape and form within the landscape (i.e. planting irregular rather than

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Landscape pattern - Medium scale, irregular field pattern. Sense of enclosure - The steep valley landform gives this landscape a strong sense of enclosure with restricted views. Areas of woodland, tall hedgebanks and other low-level vegetation provide enclosure. On the higher ground (e.g. Rhyndaston Mountain) is an increased sense of openness. Sense of 'naturalness' - Naturalistic riparian habitats, woodlands and heathland occupy much of the valley bottoms, interspersed by mainly pastoral farmland. Bracken and scrub covered hedgebanks also contribute to the sense of naturalness. Little development. Inter-visibility / important views - Restricted, mainly inward looking views from within the valley. Views to St David's headland and across St Bride's Bay from the higher hilltops. The landmark of Roch 	 There is no link to the sea and views of the sea, although not far away, are only possible from the higher ground of the upper valley slopes. Views within the valley are generally short-distance. There is a strong visual relationship with the prominent local landmark of Roch Castle in the south western corner of the LCA, which forms a skyline feature in many views from within the LCA. There are some habitats of international importance, notably wet alder woodland as well as heathland and wet grassland areas The incidence of a number of historical and archaeological sites especially the prehistoric survivals results in a landscape of high historical value and outstanding cultural value. 	 high sensitivity to SRC. Landscape attributes that are particularly sensitive to bioenergy crop planting are: The predominantly pastoral character and irregular field pattern. The high sense of naturalness – including the presence of large areas of riparian, heathland and woodland habitats. Valued prehistoric archaeological remains including the prominent landmark feature of Roch Castle. 	 geometric blocks). Ensure crops and harvesting machinery do not affect the survival of field boundaries (particularly hedgebanks) or archaeological features. Aim for irregular patterns of planting rather than geometric blocks. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of SRC. Plant away from hill summits to maintain the open sea views across to St David's headland and St Bride's Bay. Ensure the landmark feature of Roch Castle dominant key feature in views within and across the landscape.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
Castle is prominent in many views across the landscape.		
Sensitive/rare landscape		
features – Diverse habitats associated with the river valley		
supporting species such as otter. Prehistoric remains are valued		
features of the landscape.		
Nature of coastal edge – N/A		

LCA 14: SOLVA VALLEY

Landscape attributes based of	on
criteria for each technology	type
(from LCA)	

Special Qualities relevant to this area (from LCA and Management Plan)

Sensitivity Judgement & Key Landscape Sensitivities

Guidance (drawing on the LCA Management Guidelines)

WIND TURBINES

- Landform and scale –
 Narrow, small scale river valley incised into the surrounding rolling lowland and coast.
- Landscape pattern Most of the valley is unenclosed. The land surrounding the valley is characterised by small to medium, irregular fields with some larger fields on the plateau top.
- Sense of enclosure Strong sense of enclosure and shelter due to the incised character of the valley. High woodland cover also contributes to the sense of enclosure, particularly on the valley floor and lower slopes.
- Sense of tranquillity/
 remoteness Intimate and
 tranquil atmosphere on the
 valley floor. A quarry near
 Middle Mill does not intrude
 visually into the landscape. Solva
 village has a strong historic sense
 of place. The main A487 cuts

- The Solva Valley is very sheltered by being incised into the surrounding rolling coastal plateau, with an intimate and tranquil atmosphere on the valley floor
- The old core of the village around the western side of the harbour has a strong sense of place and many of the buildings retain a traditional appearance, stemming from its past function as an industrial harbour settlement with an important post- Mediaeval lime works trade
- The valley has several extant reminders of its industrial past, especially the limekilns by the harbour, and there is a working woollen mill at the hamlet of Middle Mill, to which the valley provided an important transport link. Although there is an active hard rock quarry near Middle Mill, it does not intrude visually into the valley landscape
- The historical and archaeological

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.

This LCA is therefore judged as having a **high** sensitivity to large and medium-scale turbines, and **moderate-high** sensitivity to small turbines. 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

- 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
through the bottom of the valley, eroding tranquillity locally. • Settlement / transport network – Historic village at Solva on the western bank of the river, extending in a linear form along the valley bottom. Elsewhere, scattered farmsteads and cottages linked by minor roads. • Skyline – Woodland dominates the skyline across this LCA. • Inter-visibility – Limited views out from this valley landscape. Views from the harbour at Solva out to the coast give a strong sense of place. • Sensitive/rare landscape features – Outstanding historic value associated with the area's industrial heritage – particularly lime kilns by the harbour. Conservation Areas cover much of the LCA. Internationally important valley habitats including heathland supporting priority species including chough and peregrine falcon. • Nature of coastal edge – N/A	sites recorded in the area are such that it has landscapes of outstanding and high historical value The cultural value is high, resulting from a residual Welsh culture in spite of dilution by more recent influx of marine-related recreational pursuits. The cultural value is further supported by the tract of National Trust land along the lower estuary and across the river mouth. There is an extensive Conservation Area (designated in June 1997) covering Lower Solva, an extensive section of the Solva valley and the oldest parts of Upper Solva, reflecting the historical and cultural importance of the settlement.	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.	 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. 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.

Landscape attributes based on
criteria for each technology type
(from LCA)

Special Qualities relevant to this area (from LCA and Management Plan)

Sensitivity Judgement & Key Landscape Sensitivities

Guidance (drawing on the LCA Management Guidelines)

BIOMASS: BIONERGY CROPS

- Landform and scale –
 Narrow, small scale river valley incised into the surrounding rolling lowland and coast.
- Landcover / land use –
 Majority of the valley is covered by woodland and areas of heath fringing the Solva river.

 Surrounding agricultural land is predominantly pasture or rough grazing.
- Landscape pattern Most of the valley is unenclosed. The land surrounding the valley is characterised by small to medium, irregular fields with some larger fields on the plateau top.
- Sense of enclosure Strong sense of enclosure and shelter due to the incised character of the valley. High woodland cover also contributes to the sense of enclosure, particularly on the valley floor and lower slopes.
- Sense of 'naturalness' The valley is defined by woodlands and heathland habitats, giving it a

- The Solva Valley is very sheltered by being incised into the surrounding rolling coastal plateau, with an intimate and tranquil atmosphere on the valley floor
- The old core of the village around the western side of the harbour has a strong sense of place and many of the buildings retain a traditional appearance, stemming from its past function as an industrial harbour settlement with an important post- Mediaeval lime works trade
- The valley has several extant reminders of its industrial past, especially the limekilns by the harbour, and there is a working woollen mill at the hamlet of Middle Mill, to which the valley provided an important transport link. Although there is an active hard rock quarry near Middle Mill, it does not intrude visually into the valley landscape
- The historical and archaeological sites recorded in the area are such that it has landscapes of

Although the landscape's enclosed character and high woodland cover could indicate that it may be suited to SRC where appropriately sited, the naturalistic character, and outstanding historic and archaeological features increase sensitivity to bioenergy planting, particularly Miscanthus.

This landscape is therefore judged to have a **high** sensitivity to Miscanthus, and a **moderate-high** sensitivity to SRC. Landscape attributes that are sensitive to planting are:

- The small scale of the valley and irregular pattern of fields.
- The naturalistic habitats including internationally important heathland habitats along the valley floor and the relative sense of tranquillity.
- Solva's historic sense of place and Conservation Area status.
- The strong link between the harbour at Solva and the coast.
- Outstanding historic and

- This LCA would not be suitable for monoculture bioenergy crops such as miscanthus, due to the absence of existing cropped land.
- There may be opportunity to link some SRC with existing woodland, providing it does not alter the organic shape and form of woodland within the landscape (i.e. aim for irregular rather than geometric blocks of planting).
- Maintain a diversity of crop types/ land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of SRC.
- Ensure such crops/ harvesting do not affect valued semi-natural habitats in the valley, including areas of heathland or wetlands.
- Ensure crops and harvesting machinery do not affect the survival of hedgebanks or archaeological features, particularly those associated with

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
 Inter-visibility / important views – Limited views out from this valley landscape. Views from the harbour at Solva out to the coast contribute to its sense of place. Sensitive/rare landscape features – Outstanding historic value associated with the area's industrial heritage – particularly lime kilns by the harbour. Conservation Areas cover much of the LCA. Internationally important valley habitats including heathland supporting priority species including chough and peregrine falcon. Nature of coastal edge – N/A 	 outstanding and high historical value The cultural value is high, resulting from a residual Welsh culture in spite of dilution by more recent influx of marine-related recreational pursuits. The cultural value is further supported by the tract of National Trust land along the lower estuary and across the river mouth. There is an extensive Conservation Area (designated in June 1997) covering Lower Solva, an extensive section of the Solva valley and the oldest parts of Upper Solva, reflecting the historical and cultural importance of the settlement. 	archaeological features, particularly lime kilns by Solva harbour.	 the area's industrial heritage (e.g. lime kilns at Solva). Ensure that planting or harvesting operations do not affect the character or setting of the Solva Conservation Area. Ensure that the locations of any planting do not interfere with views from Solva harbour to the coast.

LCA 15: DOWROG & TRETIO COMMONS

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Open, large scale landscape with a gently undulating topography. Landscape pattern – Patchwork of medium to large, irregular fields surrounding large areas of open common land. Sense of enclosure – This landscape is open and exposed with large expanses of unenclosed common land and little woodland cover. Sense of tranquillity/ remoteness – The agricultural landscape with sparse settlement, results in a tranquil landscape. However, the former St David's Airfield and main road erode sense o tranquillity/ remoteness locally. Settlement / transport network – Sparse settlement of scattered farmsteads and hamlets linked by minor roads. The A487 dissects the LCA. Skyline –Skyline is not 	 This exposed, slightly undulating area has a largely open character comprised of a mosaic of farmland, marshy grassland and scrub Its character is enhanced by views north-westwards to the distinctive hills of Carn Llidi and south westwards towards the city of St. David's There are internationally significant habitats here which contribute to the high ecological value of much of the area The wealth of historical and archaeological features recorded here is of national significance and result in a landscape of outstanding value. The scattered farmsteads and hamlets have a very strong architectural 'signature' which contributes very strongly to the sense of place here. There are strong archaeological similarities to the adjacent St David's Headland LCA - a historical landscape of 	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. This LCA is therefore judged as having a high sensitivity to large and medium-scale turbines, and moderate-high sensitivity to small turbines. 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	 Large and medium scale turbines would not be appropriate in this open landscape due to its intervisibility 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
particularly prominent within the LCA (due to the relatively lowlying nature of the area) — however, the Carn Llidi mountains to the north-west are distinctive features on the horizon. Skylines are open and undeveloped within this LCA. Inter-visibility — cultural and visual links between this landscape, St David's and the coastline. Also inter-visibility with the Carn Llidi mountains to the north-west. Sensitive/rare landscape features — Outstanding historic interest, particularly the presence of prehistoric sites and early Christian monuments, linking to the wider St David's Headland & Ramsey Island Registered Historic Landscape. Caerfarchell is designated as a Conservation Area. Internationally important wet and dry heathland habitats supporting valued plant and animal species. Nature of coastal edge — N/A	 The prehistoric significance of this landscape is a key attribute, some exceptional survivals indicating that this landscape has been occupied for thousands of years. This has been formally recognised by its inclusion within the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. The cultural value is outstanding by virtue of its position in relation to the cathedral city of St David's. Dowrog and Tretio Commons are important elements in the traditional agricultural management of the landscape. This cultural value is further supported by their acquisition by the National Trust. There is a Conservation Area at 	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.	 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. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	the long-established small hamlet of Caerfarchell (designated in March 1997), which is unusually centred on an open green.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Open, large scale landscape with a gently undulating topography Landcover / land use – The large areas of common land are used for rough grazing. Elsewhere, land use is mainly pasture. Landscape pattern - Patchwork of medium to large, irregular fields surrounding large areas of open common land. Sense of enclosure – This landscape is open and exposed with large expanses of unenclosed common land and little woodland cover. Sense of 'naturalness' – The large areas of common land comprise a mosaic of wet and dry heathland, marshy grassland and purple moor grass. This 	 This exposed, slightly undulating area has a largely open character comprised of a mosaic of farmland, marshy grassland and scrub Its character is enhanced by views north-westwards to the distinctive hills of Carn Llidi and south westwards towards the city of St. David's There are internationally significant habitats here which contribute to the high ecological value of much of the area The wealth of historical and archaeological features recorded here is of national significance and result in a landscape of outstanding value. The scattered farmsteads and hamlets have a very strong architectural 'signature' which contributes very strongly to the sense of place 	This landscape's strong agricultural character indicates that it may be able to accommodate some sensitively sited bioenergy crop planting. However its open character, large tracts of common land, naturalistic habitats, strong historic and cultural heritage, and relative sense of tranquillity increase sensitivity to crop planting and harvesting operations. This landscape is judged as having a high sensitivity to all types of bioenergy crop. Landscape attributes that are particularly sensitive to bioenergy crops are: The open, exposed character and inter-visibility with the Carn Llidi hills and St David's headland. The relative sense of tranquillity	This area is assessed as having a high sensitivity to all types of bioenergy crops. Therefore no guidance is included here.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
contrasts with the surrounding agriculturally improved land. Inter-visibility / important views –cultural and visual links between this landscape, St David's and the coastline. Also inter-visibility with the Carn Llidi mountains to the north-west Sensitive/rare landscape features – Outstanding historic interest, particularly the presence of prehistoric sites and early Christian monuments, linking to the wider St David's Headland & Ramsey Island Registered Historic Landscape. Caerfarchell is designated as a Conservation Area. Internationally important wet and dry heathland habitats supporting valued plant and animal species. Nature of coastal edge – N/A	here. There are strong archaeological similarities to the adjacent St David's Headland LCA - a historical landscape of outstanding value The prehistoric significance of this landscape is a key attribute, some exceptional survivals indicating that this landscape has been occupied for thousands of years. This has been formally recognised by its inclusion within the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. The cultural value is outstanding by virtue of its position in relation to the cathedral city of St David's. Dowrog and Tretio Commons are important elements in the traditional agricultural management of the landscape. This	 away from the main road. The large areas of naturalistic common land, including heathland and grassland habitats of international importance. The area's strong historic and cultural sense of place, as reflected in the Conservation Area status of Caerfarchell and its inclusion in the wider St David's Headland & Ramsey Island Registered Landscape of Outstanding Historic Importance. The presence of prehistoric and early Christian sites and monuments of national importance. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	ey Guidance (drawing on the LCA Management Guidelines)
	cultural value is further supported by their acquisition by the National Trust.	
	There is a Conservation Area at the long-established small hamlet of Caerfarchell (designated in March 1997), which is unusually centred on an open green.	

LCA 16: CARN LLIDI

cri	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
		WIND T	URBINES	
•	Landform and scale – Small area of upland landscape with rocky summits culminating in St David's head at the LCA's western extremity. Landscape pattern – Rocky, unenclosed hilltops; a mixture of medium to large, irregular and regular fields bounded by prominent hedgebanks on lower slopes. Sense of enclosure – A pervading sense of exposure characterises this LCA, with a	There is a pervading sense of exposure created by the bare rocky outcrops on the hill tops and lack of tall vegetation and a feeling of remoteness. The line of scattered farmsteads along a spring line on the lower slopes shows the human response to the exposure to north-westerly winds off the sea. The distinctive north Pembrokeshire vernacular architecture is strongly apparent, as in the adjacent Dowrog & Tretio Commons LCA There are paporamic views of	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. This LCA is therefore judged as having a high sensitivity all sizes and scales of wind turbines. Landscape attributes that make it unsuitable for wind turbines are:	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.
•	lack of tall vegetation and expansive views. Sense of tranquillity/ remoteness – Strong feeling of remoteness with little human disturbance. Settlement / transport network – Sparse settlement with isolated farmsteads and hamlets linked by minor roads. Skyline – Open, undeveloped rocky skyline with panoramic	 There are panoramic views of coastal cliffs and beaches which reinforce the coastal sense of place The landscape appears naturalistic and largely undisturbed and has habitats of international significance of outstanding value The wealth of archaeological and historical features recorded hereabouts is nationally significant and of outstanding value. This is an 	 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 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
views of the coastal cliffs and beaches from hill summits. Inter-visibility – Clear views across the lower land to the city of St David's and the adjacent Dowrog and Tretio Commons. Sensitive/rare landscape features – Wealth of nationally important ritual and religious archaeological sites from the prehistoric period onwards, as part of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. Heathland and maritime habitats of international importance. Nature of coastal edge – Rocky cliffs and small coves define the coastline in this LCA.	extremely important prehistoric landscape with extant features covering thousands of years of use and settlement which have not been strongly overlain by modern land use. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. • There is an important cultural reference to the patron saint of Wales because of St David's Head and there are clear views across the intervening lower ground towards the city of St David's and its cathedral. The cultural value is further supported by the large continuous tract of National Trust land along the northern coast of the area and including the hill summits	of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales). Its internationally important heathland and maritime habitats.	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	This LCA has outstanding values recorded across all Aspects.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Small area of upland landscape with rocky summits culminating in St David's head at the LCA's western extremity. Landcover / land use – Rough moorland grazing on the hills, fringed by an agricultural landscape of predominantly pastoral fields, with some rough grazing. Landscape pattern - Rocky, unenclosed hilltops; a mixture of irregular fields bounded by prominent hedgebanks on lower slopes. Sense of enclosure – A pervading sense of exposure characterises this LCA, with a lack of tall vegetation and expansive views. Sense of 'naturalness' – The 	 There is a pervading sense of exposure created by the bare rocky outcrops on the hill tops and lack of tall vegetation and a feeling of remoteness. The line of scattered farmsteads along a spring line on the lower slopes shows the human response to the exposure to north-westerly winds off the sea. The distinctive north Pembrokeshire vernacular architecture is strongly apparent, as in the adjacent Dowrog & Tretio Commons LCA There are panoramic views of coastal cliffs and beaches which reinforce the coastal sense of place The landscape appears naturalistic and largely undisturbed and has habitats of international significance of outstanding value 	The exposed and remote character, lack of tall vegetation, predominance of naturalistic and pastoral land uses, highly valued archaeological resource and important semi-natural habitats indicate that this landscape has a high sensitivity to any type of bioenergy planting. Landscape attributes that make it particularly sensitivity to bioenergy crops are: Its strong sense of tranquillity and remoteness, with little human development. Its naturalistic moorland and heathland habitats and pervading sense of exposure with absence of tall vegetation. Its predominantly unenclosed and pastoral land use.	This area is assessed as having a high sensitivity to any type of bioenergy crop, therefore no guidance has been included.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
moorland and heathland habitats on the hill summits and coastal fringe contrast with the agricultural landscape characterising the lower levels. Inter-visibility / important views – Clear views across the lower land to the city of St David's and the adjacent Dowrog and Tretio Commons. Sensitive/rare landscape features – Wealth of nationally important ritual and religious archaeological sites from the prehistoric period onwards, as part of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. Heathland and maritime habitats of international importance. Nature of coastal edge – Rocky cliffs and small coves define the coastline in this LCA.	 The wealth of archaeological and historical features recorded hereabouts is nationally significant and of outstanding value. This is an extremely important prehistoric landscape with extant features covering thousands of years of use and settlement which have not been strongly overlain by modern land use. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. There is an important cultural reference to the patron saint of Wales because of St David's Head and there are clear views across the intervening lower ground towards the city of St David's and its cathedral. The cultural value is further supported by the large 	 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. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Key Guidance (drawing on the LCA Management Guidelines)
	continuous tract of National Trust land along the northern coast of the area and including the hill summits	
	This LCA has outstanding values recorded across all Aspects.	

• **Skyline** – Open, undeveloped

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Rolling lowland and indented coastline with sea cliffs. Open character gives the impression of a large scale landscape. Landscape pattern – Irregular, fields of varying sizes. Unenclosed areas, particularly along the coast. Sense of enclosure – Open landscape with little woodland cover. Exposed coastline. Sense of tranquillity/ remoteness – Peaceful, rural landscape away from the A487. Few built intrusions, but well visited with many campsites. Sense of remoteness and wildness, particularly on the coast. Settlement / transport network – Sparse settlement pattern of scattered farmsteads and hamlets linked by rural lanes. A487 crosses the area. Skyline – Open, undeveloped 	 This is largely a rather peaceful open rural environment with attractive views to the coast and the cathedral at St David's There are three stretches of lowland heathland and wetlands with areas of standing water, a rare element within the National Park. There are internationally significant habitats here, especially lowland heath and grasslands There is a wealth of historical and archaeological features which are of national significance and result in a landscape of outstanding historical value. There are some fine examples of the distinctive vernacular Pembrokeshire houses with their 'outshuts' and massive round chimneys The abundance of early Christian sites is important. Whitesands Bay in particular has strong connections with St. David's, due in part to the pilgrims' chapel of St Patrick in the field behind the 	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. This LCA is judged to have a high sensitivity to large and medium-scale turbines, and moderate-high sensitivity to small turbines. 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	 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, preferably on brownfield sites and 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
skyline with extensive views to the coast. St David's Cathedral is a landmark feature on the skyline. Inter-visibility –Views along the coast to Ramsey Island and south across St Bride's Bay and the Marloes coastline. Strong visual association with the city of St David's and overlooked by Carn Llidi hills. Sensitive/rare landscape features – Outstanding historic and cultural value, including prehistoric features and an abundance of early Christian sites. Clegyr Boia is the only Pembrokeshire example of a Neolithic domestic settlement. Inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. Internationally important habitats including lowland heath, grasslands and wetlands. Nature of coastal edge – Dominated by sea cliffs with typically no or very limited areas	beach. This would have been a landing point for boats for those making the pilgrimage to St. David's by sea. The associations with the cathedral city of St. David's are highly significant in Welsh culture and underpin this area's outstanding cultural value. The cultural value is further supported by the large continuous tract of National Trust land along the Pen Dal-aderyn promontory and running eastwards to Porth Clais and beyond to Solva. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. Clegyr Boia is the only Pembrokeshire example of a	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.	 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. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
of rocky foreshore. Locally coves have sandy beaches and the mouths of several small rias are also present.	Neolithic domestic settlement, a fortified stronghold on a rocky hill outcrop to the west of St.David's.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Rolling lowland and indented coastline with sea cliffs. Open character gives the impression of a large scale landscape. Landcover / land use – Mixed agriculture with some areas of rough grazing particularly on coast and higher land. Landscape pattern - Irregular, medium-scale field pattern. Some areas of unenclosed land, particularly on the coast. Sense of enclosure – Open landscape with little woodland cover. Exposed coastline. Sense of 'naturalness' – Mostly improved farmland, with areas of rough grassland, heathland and wetland particularly along the coast. 	 This is largely a rather peaceful open rural environment with attractive views to the coast and the cathedral at St David's There are three stretches of lowland heathland and wetlands with areas of standing water, a rare element within the National Park. There are internationally significant habitats here, especially lowland heath and grasslands There is a wealth of historical and archaeological features which are of national significance and result in a landscape of outstanding historical value. There are some fine examples of the distinctive vernacular Pembrokeshire houses with their 'outshuts' and massive round chimneys The abundance of early Christian 	This landscape's improved agricultural character indicates that it may be able to accommodate some sensitively sited bioenergy crop planting. However its open character, naturalistic habitats, strong historic and cultural heritage, and relative sense of tranquillity increase sensitivity to crop planting and harvesting operations. This landscape is judged as having a high sensitivity to taller crops such as SRC and a moderate-high sensitivity to crops such as Miscanthus. Landscape attributes that are particularly sensitive to bioenergy crops are: Its open character particularly along the coast and on the headland. Its predominantly pastoral land	 It is unlikely that this LCA could accommodate SRC, due to the exposed character and absence of woodland. There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing the guidance below is observed. Plant at the field scale, in fields already in cropping rather than converting pastoral areas to cropping. Plant at least one field back away from the coastal edge to maintain coastal views along and from the landscape, including views to Ramsey Island, St Bride's Bay and the Marloes Coast.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
hedgebanks also contribute to the sense of naturalness. Inter-visibility / important views — Views along the coast to Ramsey Island and south across St Bride's Bay and the Marloes coastline. Strong visual association with the city of St David's and overlooked by Carn Llidi hills. Sensitive/rare landscape features — Outstanding historic and cultural value, including prehistoric features and an abundance of early Christian sites. Clegyr Boia is the only Pembrokeshire example of a Neolithic domestic settlement. Inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. Internationally important habitats including lowland heath, grasslands and wetlands. Nature of coastal edge — Dominated by sea cliffs with typically no or very limited areas of rocky foreshore. Locally	in particular has strong connections with St. David's, due in part to the pilgrims' chapel of St Patrick in the field behind the beach. This would have been a landing point for boats for those making the pilgrimage to St. David's by sea. • The associations with the cathedral city of St. David's are highly significant in Welsh culture and underpin this area's outstanding cultural value. The cultural value is further supported by the large continuous tract of National Trust land along the Pen Dal-aderyn promontory and running eastwards to Porth Clais and beyond to Solva. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and	use with lack of woodland or other tall vegetation. The presence of naturalistic habitats including heathland, wetlands and rough grassland. The extensive views along the open coastline, including to Ramsey Island. The strong visual connection with St David's – with the cathedral a prominent feature in views. Outstanding historic and cultural value, including prehistoric features such as the Clegyr Boia Neolithic settlement and early Christian sites.	 Ensure any crop planting is located away from the more exposed elevated areas of the LCA. Ensure planting and harvesting does not affect naturalistic habitats such as heathland, wetlands or rough grassland. Ensure crops and harvesting machinery do not affect the survival of hedgebanks or archaeological features. Plant at the field scale to maintain landscape pattern. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus. Ensure St David's Cathedral remains the dominant skyline feature in views from this LCA, ensuring no planting screens this landmark feature.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
coves have sandy beaches and the mouths of several small rias are also present.	settlement, Iron Age forts and field systems. Clegyr Boia is the only Pembrokeshire example of a Neolithic domestic settlement, a fortified stronghold on a rocky hill outcrop to the west of St.David's.	

LCA 19: RAMSEY ISLAND

 Landform and scale – A small island characterised by rocky coastal cliffs and rocky outcrops at the summit. Landscape pattern – Large areas of the island are unenclosed. Some large scale, irregular fields. Sense of enclosure – Pervading sense of exposure, with open grassland and the absence of woodland. Sense of tranquillity/ remoteness – Great sense of remoteness and strong coastal sense of of place. Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. Landscape pattern – Large international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore 	(from LCA		ea (from LCA	s relevant to and Managem				& Key	Guidance (drawin Management Guid	
island characterised by rocky coastal cliffs and rocky outcrops at the summit. Landscape pattern – Large areas of the island are unenclosed. Some large scale, irregular fields. Sense of enclosure – Pervading sense of exposure, with open grassland and the absence of woodland. Sense of tranquillity/ remoteness – Great sense of remoteness and strong coastal sense of place. Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of exposure, and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore Pervading sense of exposure, with the full range of these attributes There is a pervading sense of exposure and 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; there is and intern				WIN	ND TUI	RBINES				
areas of the island are unenclosed. Some large scale, irregular fields. Sense of enclosure – Pervading sense of exposure, with open grassland and the absence of woodland. Sense of tranquillity/ remoteness – Great sense of remoteness and strong coastal sense of place. Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of remoteness and strong coastal sense of place with the island effect of arousing curiosity and a tendency to want to cross the water and explore 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. Ramsey Island is therefore judged to have a high sensitivity to wind turbines of any size or scale. The key landscape attributes that make it unsuitable for wind turbines are: Its pervading sense of of wildness, bertiage, 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. Ramsey Island is therefore judged to have a high sensitivity to wind turbines of any size or scale. The key landscape attributes that make it unsuitable for wind turbines are: Its pervading sense of or instance and internationally significant archaeological evidence.	Pembrokeshir international i spectacular na	Pe int sp	Pembrokeshire international im spectacular nat	re coast are of mportance for thatural heritage,	heir g	exposed chai great potenti energy. Hov	racter would pr al to harness w vever, its perva	rovide rind ding sense	unsuitable for any siz turbine developmen	ze of scale of wind t; therefore no
 Sense of enclosure – Pervading sense of exposure, with open grassland and the absence of woodland. Sense of tranquillity/ remoteness – Great sense of remoteness and strong coastal sense of place. Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore features, along with its high value for nature conservation all pose severe constraints to the development of wind turbines. Ramsey Island is therefore judged to have a high sensitivity to wind turbines of any size or scale. The key landscape attributes that make it unsuitable for wind turbines are: Its pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed constraints to the development of wind turbines. Ramsey Island is turbines of any size or scale. The key landscape attributes that make it unsuitable for wind turbines are: Its pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed constraints to the development of wind turbines. 	 Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want 	• Ra	ole, f	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. Ramsey Island is therefore judged to have a high sensitivity to wind turbines of any size or scale. 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.						
 Sense of tranquillity/ remoteness – Great sense of remoteness and strong coastal sense of place. Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. Sense of tranquillity/ views of the surrounding coast The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore Ramsey Island is therefore judged to have a high sensitivity to wind turbines of any size or scale. The key landscape attributes that make it unsuitable for wind turbines are: Its pervading sense of wildness, 		• Th	ng 'at of							
• Settlement / transport network – This island is uninhabited, and as such there is no settlement or road network. are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore Its pervading sense of wildness,		vie • Th	ive St SS t							
		wi cu to	ing rant re		turbines wildness,					
 Skyline – Open skyline with expansive coastal views. Inter-visibility – Clear views to 		an the tid	all trong							

cri	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
•	Sensitive/rare landscape features – Internationally important historic and archaeological heritage, including a medieval chapel and prehistoric round barrows. Part of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. Rich diversity of habitats and species including heath and maritime habitats supporting important sea bird colonies. Nature of coastal edge – The relationship between land and sea underpins the character of	across all five evaluated landscape Aspects. Its historical importance has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales Ramsey Island LCA has a preponderance of outstanding values recorded across four Aspects.	 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. 	
	this island landscape.	BIOMASS: BIO	NERGY CROPS	
•	Landform and scale – A small island characterised by rocky coastal cliffs and rocky outcrops at the summit Landcover / land use – Former agricultural land no longer farmed, but grass kept short by rabbit grazing. Landscape pattern - Large areas of the island are	 The offshore islands of the Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes There is a pervading sense of 	The lack of human settlement, pervading sense of exposure and wildness, predominance of naturalistic heathland, grassland and maritime habitats, presence of internationally significant archaeological and historic features, and high value for nature conservation all pose severe constraints to bioenergy planting.	Ramsey Island is judged to be unsuitable for any type or scale of bioenergy planting. Therefore no guidance has been provided.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
unenclosed. Some large scale, irregular fields. Sense of enclosure – Pervading sense of exposure and wildness, with open grassland and the absence of woodland or other higher level vegetation. Sense of 'naturalness' – high with variety of lowland heathland, lowland dry acid grassland, purple moor-grass and rush pastures, maritime cliffs, rocky shores and exposed storm beaches. Inter-visibility / important views – Clear views to and from the mainland and the St David's Peninsular. Panoramic views give the island a strong coastal sense of place. Sensitive/rare landscape features – Internationally important historic and archaeological heritage, including a medieval chapel and prehistoric round barrows. Part of the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales.	exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore land which is beyond the mainland and surrounded by sea, made all the more challenging by the strong tidal races through the narrow channel Ramsey has outstanding values across all five evaluated landscape Aspects. Its historical importance has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales Ramsey Island LCA has a preponderance of outstanding values recorded across four Aspects.	 This landscape is therefore judged as having a high sensitivity to any type of bioenergy planting. Landscape attributes that indicate its unsuitability for bioenergy planting are: The pervading sense of exposure and wildness and absence of human settlement. The predominance of naturalistic habitats, and absence of any crops or woodland. Its open, exposed character. 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. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	y Guidance (drawing on the LCA Management Guidelines)
Rich diversity of habitats and species including heath and maritime habitats supporting important sea bird colonies.		
 Nature of coastal edge – The relationship between land and sea underpins the character of this island landscape. 		

LCA 20: TREFIN

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND TO	URBINES	
 Landform and scale – Undulating coastal landscape with rocky cliffs punctuated by sheltered coves and inlets. Open sea views. Landscape pattern – Mosaic of medium-scale irregular fields of varying shapes. Field pattern is strong. Sense of enclosure – Exposed, open landscape with some small woodland clumps and scrub e.g. areas of woodland in the shallow valleys at Trefin and Abercastle. Sense of tranquillity/ remoteness – This is a strongly rural, farmed landscape with few intrusions apart from evidence of past quarrying. It therefore has a strong relative sense of tranquillity and a sense of remoteness on the coastal edge. Settlement / transport network – Strong, long- established settled character 	 An exposed and diverse coastal landscape with extensive views along the coastline There is a strong, long-established settled character, arising from small scale settlements and scattered farmsteads within an undulating, predominantly pastoral farmland landscape. There is a very distinctive local vernacular architecture, stone-built with slate roofs The field pattern is well defined and imparts a rich texture to the open landscape, where small areas of woodland and scrub serve as punctuation points. The importance of the traditional field boundary hedgebanks and drystone walls cannot be overemphasised and the quality of their condition as a result of management practices is a defining element within the landscape There are nationally important 	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. This LCA is therefore judged as having a high sensitivity to large and medium scale wind turbines, and a moderate-high sensitivity to small-scale wind turbines. Landscape attributes that are particularly sensitive to wind turbines are: Its large scale, open aspect and undeveloped skylines.	 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 clifftop habitats
with occasional small villages,	habitats well represented here,	The extensive views along the	 Ensure turbines do not adversely

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
hamlets and scattered farmsteads linked by quiet, rural roads. Skyline — Open, undeveloped skyline due to the absence of woodland and development. Close relationship between the farmland and the adjacent coast. Inter-visibility — The open and relatively flat topography affords extensive views along the coast, including to St David's headland, and to / from inland areas (LCAs 15 and 16). Sensitive/rare landscape features — Highly valued natural habitats, particularly the coastal cliffs and lowland heathland. Many historic and archaeological features of national importance, particularly relating to the area's industrial past (e.g. the iconic 'blue lagoon' flooded slate quarry at Abereiddy). Conservation Area at Trefin, including the site of the bishop's palace, and at Porthgain in recognition of it large scale industrial heritage including lime kilns and its harbour.	notably lowland heathland habitats and the coastal cliffs. The cliffs along the greater part of the length of the coast in this LCA are assessed as being of outstanding value, which is supported by the designation of over 50% of the coastline as SSSI, Special Area of Conservation or Special Protection Area • The wealth of historical and archaeological features present, dating from prehistoric times to the recent industrial past, contribute to the outstanding historical value of much of this landscape, some of which is of national importance. At the northernmost extremity of this LCA, there is a small part of the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales. This large and distinctive headland forms a landscape strong in elements of historic continuity and survival, quite possibly from the late prehistoric period onwards. • The industrial remains are at a	 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. 	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. • 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Nature of coastal edge — Open, undeveloped coastline with rocky cliffs, coves and inlets. The relationship of this landscape with the coast is a key to its character.	landscape scale and include the iconic 'blue lagoon' at Abereiddy and the hoppers at Porthgain. The stretch of coast between Abereiddy and Porthgain is a walkthrough of industrial history, with stone quarries, workers' cottages, the manager's house, tramways and jetties, all of which contribute to the story of this landscape There are Conservation Areas at Trefin (designated August 1997), including the historically important site of the bishop's palace, and at Porthgain (designated November 1997) in recognition of the large scale industrial heritage - especially its harbour, lime kilns and associated structures - of this small commercial port and fishing village.		

Landscape attributes based on
criteria for each technology type
(from LCA)

Special Qualities relevant to this area (from LCA and Management Plan)

Sensitivity Judgement & Key Landscape Sensitivities

Guidance (drawing on the LCA Management Guidelines)

BIOMASS: BIONERGY CROPS

- Landform and scale –
 Undulating coastal landscape
 with rocky cliffs punctuated by
 sheltered coves and inlets.
 Open sea views give it a large scale feel.
- Landcover / land use –
 Predominantly pastoral land use with some fields of arable cultivation and swathes of heathland / rough grazing. Small linear woodlands line coastal inlets at Trefin and Abercastle and some small woodland clumps and scrub).
- Landscape pattern Mosaic of medium-scale irregular fields of varying shapes. Field pattern is strong and a defining feature of the landscape.
- Sense of enclosure Exposed, open landscape with a few areas of woodland apart from in the shallow valleys at Trefin and Abercastle.
- Sense of 'naturalness' The areas of lowland heath, small linear woodlands and coastal

- An exposed and diverse coastal landscape with extensive views along the coastline
- There is a strong, long-established settled character, arising from small scale settlements and scattered farmsteads within an undulating, predominantly pastoral farmland landscape. There is a very distinctive local vernacular architecture, stone-built with slate roofs
- The field pattern is well defined and imparts a rich texture to the open landscape, where small areas of woodland and scrub serve as punctuation points. The importance of the traditional field boundary hedgebanks and drystone walls cannot be overemphasised and the quality of their condition as a result of management practices is a defining element within the landscape
- There are nationally important habitats well represented here, notably lowland heathland habitats and the coastal cliffs. The cliffs

Although the presence of arable cultivation and small woodlands indicate that the landscape could accommodate some sensitively sited bioenergy planting, its open landscape character, areas of naturalistic landcover, strong irregular field pattern, extensive coastal views, highly valued coastal and heathland habitats, and nationally important archaeological and historic sites all pose constraints to bioenergy crops and associated harvesting operations.

This landscape is judged as having a high sensitivity to taller crops such as SRC and a moderate-high sensitivity to crops such as Miscanthus.

Landscape attributes that are particularly sensitive to bioenergy crops are:

- Its open and exposed character with few woodlands, particularly along the coast.
- The naturalistic habitats, particularly along the coast and

- It is unlikely that this LCA could accommodate SRC, due to the exposed character and general absence of woodland.
- There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing the guidance below is observed.
- Plant at the field scale, in fields already in cropping rather than converting pastoral areas to cropping.
- Plant at least one field back from the coastal edge to maintain the area's open and expansive views and naturalistic coastline.
- Ensure any crop planting is away from pastoral and heathland areas and the more exposed elevated areas of the LCA.
- Ensure crops and harvesting machinery does not affect the survival of the area's valued

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
heath introduce natural land cover within this farmed landscape. Inter-visibility / important views — The open and relatively flat topography affords extensive views along the coast, and to / from inland areas. Sensitive/rare landscape features — Highly valued natural habitats, particularly the coastal cliffs and lowland heathland. Many historic and archaeological features of national importance, particularly relating to the area's industrial past, as well as a raft of prehistoric and early Christian sites and monuments. Conservation Area at Trefin, including the site of the bishop's palace, and at Porthgain in recognition of it large scale industrial heritage including lime kilns and its harbour. Nature of coastal edge — Open, undeveloped coastline with rocky cliffs, coves and inlets. The relationship of this landscape with the coast is a key to its character.	along the greater part of the length of the coast in this LCA are assessed as being of outstanding value, which is supported by the designation of over 50% of the coastline as SSSI, Special Area of Conservation or Special Protection Area • The wealth of historical and archaeological features present, dating from prehistoric times to the recent industrial past, contribute to the outstanding historical value of much of this landscape, some of which is of national importance. At the northernmost extremity of this LCA, there is a small part of the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales. This large and distinctive headland forms a landscape strong in elements of historic continuity and survival, quite possibly from the late prehistoric period onwards. • The industrial remains are at a landscape scale and include the iconic 'blue lagoon' at Abereiddy	 jagged rocky outcrops . The strong, irregular field pattern and hedgebank field boundaries. The nationally important archaeological sites, including prehistoric and early Christian monuments, and remains relating to its industrial past, such as lime kilns. The character and appearance of the Conservation Areas at Porthgain and Trefin. Its highly valued habitats, particularly along the coastal cliffs and the areas of lowland heathland. 	 hedgebanks. Ensure that planting and machinery operations do not damage, or affect the setting of the area's prehistoric and early Christian sites, or features relating to its industrial heritage (e.g. lime kilns). Plant at the field scale to maintain landscape pattern and aim for irregular patterns of planting rather than geometric blocks. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
	and the hoppers at Porthgain. The stretch of coast between Abereiddy and Porthgain is a walkthrough of industrial history, with stone quarries, workers' cottages, the manager's house, tramways and jetties, all of which contribute to the story of this landscape	
	There are Conservation Areas at Trefin (designated August 1997), including the historically important site of the bishop's palace, and at Porthgain (designated November 1997) in recognition of the large scale industrial heritage - especially its harbour, lime kilns and associated structures - of this small commercial port and fishing village.	

LCA 21: PEN CAER/STRUMBLE HEAD

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
<u>'</u>	WIND TO	URBINES	
 Landform and scale – Large, distinctive headland comprising jagged coastal cliffs backed by an area of upland with rocky hill summits. Landscape pattern – Open hill summits and coastal edge surrounded by a well-defined mosaic of irregular, mediumsized fields. Sense of enclosure – Strong sense of exposure with sparse vegetation cover and little built development. Sense of tranquillity/remoteness – Pervading feeling of remoteness, particularly on the hill summits. Lightly settled character enhances the levels of tranquillity. Settlement / transport network – Sparse settlement pattern with scattered farmsteads, hamlets and small villages linked by a network of rural lanes. 	 This LCA has outstanding values recorded in four of the five evaluated landscape Aspects. An extensive area of wild, open moorland and farmland with attractive views to rocky coastal cliffs and the Preseli Hills There is a strong sense of exposure and remoteness here, resulting from the high elevation, sparse vegetation cover, proximity to the sea and the sparse settlement pattern There are many notable historical and archaeological sites which result in this LCA being of national importance with outstanding values in both historical and cultural landscape Aspects. This is a landscape with exceptional prehistoric remains, especially on the marginal farmland. The Iron Age fort at Garn Fawr is probably the most prominent feature, both physically and 	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. This LCA is therefore judged as having a high sensitivity to large and medium scale wind turbines, and a moderate-high sensitivity to small-scale wind turbines. 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.	 Large and medium scale turbines would not be appropriate in this landscape. There may be limited opportunity for 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 on brownfield sites or 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 important land mark

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
 Skyline – Open skyline with panoramic views from the hill summits to the coast and out to sea. The Iron Age hillfort at Garn Fawr is the most prominent skyline feature. Strumble Head lighthouse is also a landmark feature in coastal views in the north-west of this LCA. Inter-visibility – Hill tops provide panoramic views of the Preseli Hills to the east, and along the coast, which add to the local distinctiveness. Sensitive/rare landscape features – Rich nationally important archaeological heritage dating back to the prehistoric period, including evidence of the early church. Prominent Iron Age forts at Garn Fawr and Garn Fechen. Maritime and heathland habitats are valued, supporting breeding sea birds. Nature of coastal edge – Open coastal edge. The relationship between land and sea is a defining aspect of 	perceptually, and lies adjacent to another Iron Age fort at Garn Fechan. The historical importance of this landscape has been formally recognised by its inclusion in the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales. This large and distinctive headland forms a landscape strong in elements of historic continuity and survival, quite possibly from the late prehistoric period onwards. It exhibits distinctive Welsh settlement forms and contains actual and suggested evidence or the archaeology of the early church in Wales, preserved in both upstanding monuments and in crop-mark sites The area is of cultural importance nationally, being the location of the last invasion of the British mainland in the 17th Century.	 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. 	features, namely the hillforts on Garn Fawr and Garn Fechen, and the lighthouse on Stumble Head. • Ensure turbines and related infrastructure do not affect the area's valued heathland and clifftop habitats or the area's valued historic and archaeological features, particularly its prehistoric and early Christian sites and monuments. • 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
landscape character.			
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Large, distinctive headland comprising jagged coastal cliffs backed by an area of upland with rocky hill summits. Landcover / land use – Moorland and rough grazing on the hill summits, surrounded by predominantly pastoral farmland with some fields of arable cropping. Landscape pattern – Open hill summits and coastal edge surrounded by a well-defined mosaic of irregular, mediumsized fields. (This LCA has outstanding values recorded in four of the five evaluated landscape Aspects. An extensive area of wild, open moorland and farmland with attractive views to rocky coastal cliffs and the Preseli Hills There is a strong sense of exposure and remoteness here, resulting from the high elevation, sparse vegetation cover, proximity to the sea and the sparse settlement pattern There are many notable historical and archaeological sites which result in this LCA being of national 	Although this landscape contains some areas of arable cultivation its strong sense of exposure and remoteness, the extensive area of wild, open moorland, and presence of nationally important archaeological and historic sites all increase sensitivity to crop planting and harvesting operations. This landscape is judged as having a high sensitivity to taller crops such as SRC and a moderate-high sensitivity to crops such as Miscanthus. Landscape attributes that are particularly sensitive to bioenergy crops are:	 It is unlikely that this LCA could accommodate SRC, due to the exposed character and absence of woodland. There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing the guidance below is observed. Plant at the field scale, in fields already in cropping rather than converting pastoral areas to cropping. Ensure any crop planting is
 Sense of enclosure – Strong sense of exposure with sparse vegetation cover and little built development. Sense of 'naturalness' – Naturalistic heathland habitats 	 importance with outstanding values in both historical and cultural landscape Aspects. This is a landscape with exceptional prehistoric remains, especially on the marginal 	 The undeveloped and characterful skylines of jagged coastal cliffs and rocky hill summits. The open character of the 	located well away from the naturalistic coastal edge, away from pastoral areas such as the marginal farmland, and away from more exposed areas.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
on the hill summits and coastal edge, along with rough grassland. This forms a mosaic with the surrounding farmland. Inter-visibility / important views – Hill tops provide panoramic views of the Preseli Hills to the east, and along the coast, which add to the local distinctiveness. The Iron Age hillfort at Garn Fawr is the most prominent skyline feature. Sensitive/rare landscape features – Rich nationally important archaeological heritage dating back to the prehistoric period, including evidence of the early church. Prominent Iron Age forts at Garn Fawr and Garn Fechen. Maritime and heathland habitats are valued, supporting breeding sea birds. Nature of coastal edge – Open coastal edge. The relationship between land and sea is a defining aspect of landscape character.	 farmland. The Iron Age fort at Garn Fawr is probably the most prominent feature, both physically and perceptually, and lies adjacent to another Iron Age fort at Garn Fechan. The historical importance of this landscape has been formally recognised by its inclusion in the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales. This large and distinctive headland forms a landscape strong in elements of historic continuity and survival, quite possibly from the late prehistoric period onwards. It exhibits distinctive Welsh settlement forms and contains actual and suggested evidence or the archaeology of the early church in Wales, preserved in both upstanding monuments and in crop-mark sites The area is of cultural importance nationally, being the location of the last invasion of the British mainland in the 17th Century. 	landscape and extensive views along the coast. The intervisibility with the Preseli Hills. The prominent feature of Garn Fawr Iron Age hillfort. The presence of significant areas of naturalistic habitats, both inland and along the coastal edge. The strong, irregular field pattern. The presence of nationally important archaeological sites, including prehistoric sites and early Christian monuments. Its valued habitats, particularly along the coastal cliffs and the areas of lowland heathland.	 Ensure crops and harvesting machinery do not affect the survival of the area's hedgebanks or naturalistic habitats. Ensure that planting and machinery operations do not damage or affect the features of the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales, including the hillforts at Garn Fawr and Garn Fechen. Plant at the field scale to maintain landscape pattern and aim for irregular patterns of planting rather than geometric blocks. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Consider views to and from the Preseli Hills when considering planting. Plant well back from the coastal

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	& Key	Guidance (drawing on the LCA Management Guidelines)
			edge to maintain the area's open and expansive views, including views of Strumble Head lighthouse as a landmark feature.

LCA 22: MYNYDD CARNINGLI

cri	ndscape attributes based on teria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
		WIND T	URBINES	
•	Landform and scale – Distinctive rocky summit of Mynydd Carningli surrounded by rock-strewn slopes falling rapidly to the coast. Its elevation gives the impression of a large-scale landscape. Landscape pattern – Extensive area of open, unenclosed moorland falling to a pattern of small, irregular fields,	This LCA forms an integral part of the wider upland area stretching inland from the coast and separated from the nearby Preseli Hills only by the narrow wooded valley of the Afon Gwaun. There is a strong visual relationship with the nearby Mynydd Preseli There is a pervading sense of remoteness and wildness, resulting from the strong sense of exposure	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. Landscape attributes that are particularly sensitive to the development of wind turbines are:	This area is assessed as having a high sensitivity to any size and scale of wind turbine development, therefore no guidance has been included.
•	some of prehistoric origin. Sense of enclosure – Strong sense of exposure on the open moorland. Enclosed land on the slopes, with some woodland cover, gives some shelter in these locations.	on the open moorland and heathland, together with the close proximity of the sea. The relative inaccessibility imparts a sense of tranquillity. There is a distinctive rock formation at the summit which	 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 	
•	Sense of tranquillity/ remoteness – The relative inaccessibility imparts a sense of tranquillity. The open moorland has a pervading sense of remoteness and wildness. Settlement / transport network – Settlement mainly	adds to the sense of place, and this point is a conspicuous and distinctive reference point when viewed from the north, especially from the village of Newport, to which Carningli forms the impressive visual backdrop • There are internationally	 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. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
consists of isolated farmsteads and hamlets, linked by narrow lanes. The summit is remote and unsettled. • Skyline – The distinctive rock formation on the summit, along with its Iron Age hillfort, are dominant features when viewed from the surrounding landscape. The open skylines afford panoramic views to the coast, the village of Newport, and the surrounding landscapes, including Mynydd Preseli. • Inter-visibility – There is a strong visible relationship with the nearby Mynydd Preseli. The summit of Carningli forms an imposing backdrop to the coastal settlement of Newport. • Sensitive/rare landscape features – Highly valued range of historical and archaeological features of national significance, with abundant evidence for prehistoric human activity from the Neolithic to the Iron Age. Extensive areas of dry heathland, along with wet heath and marshy grassland, are internationally	important habitats present which are assessed as being of outstanding value within a single Aspect Area: wet heathland with cross-leaved heath and dry heath; almost half of the area of the LCA is classified as SSSI There are strong historical links with the upland of the Mynydd Carningli and Mynydd Preseli range of hills and the quality and extent of historical and archaeological features here is of recognised national significance within Wales and of outstanding value, as evidenced by the demarcation of the Newport and Carningli Registered Landscape of Special Historical Interest in Wales. This discrete block of upland centred on Mynydd Carningli at the north western end of the Preseli Hills contains a wealth of relict archaeological and other remains, some persisting as working elements in the landscape today, and the whole representing diverse land use and organisation from the prehistoric, mediaeval and later periods	 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. 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
important semi-natural habitats. • Nature of coastal edge – N/A.	 The single dominant archaeological feature is that of the spectacular Iron Age fort at the summit of Mynydd Carningli. From this radiate outwards prehistoric field systems, settlement evidence and ritual sites (such as standing stones); the abundant evidence for prehistoric human activity from the Neolithic to the Iron Age can be traced across the high ground This is a very strong historical and cultural landscape, with almost every 'natural' outcrop having been reworked at some time in its past and altered or enhanced by human activity. The open ground is dotted with cairns dating from prehistoric to recent times, tangible evidence of human 	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Distinctive rocky summit of Mynydd Carningli surrounded by rock-strewn slopes falling rapidly to the coast. Its elevation gives the impression of a large-scale landscape. Landcover / land use – open, unenclosed moorland and fields of pasture – pasture and rough grazing predominates. Landscape pattern – Open, unenclosed moorland falling to a pattern of small, irregular fields, some of prehistoric origin. Sense of enclosure – Strong sense of exposure on the open moorland. Enclosed land on the slopes, with some woodland cover, gives some shelter in these locations. Sense of 'naturalness' – High – wild and natural character with extensive areas of dry heathland, along with wet heath and marshy grassland, are internationally important semi-natural habitats. No cropped land. 	 This LCA forms an integral part of the wider upland area stretching inland from the coast and separated from the nearby Preseli Hills only by the narrow wooded valley of the Afon Gwaun. There is a strong visual relationship with the nearby Mynydd Preseli There is a pervading sense of remoteness and wildness, resulting from the strong sense of exposure on the open moorland and heathland, together with the close proximity of the sea. The relative inaccessibility imparts a sense of tranquillity. There is a distinctive rock formation at the summit which adds to the sense of place, and this point is a conspicuous and distinctive reference point when viewed from the north, especially from the village of Newport, to which Carningli forms the impressive visual backdrop There are internationally important habitats present which are assessed as being of 	The distinctive open rocky skylines, strong feeling of remoteness with little human disturbance, rough grazed character and the wealth of outstanding archaeology and internationally important habitats all pose constraints to bioenergy planting. This LCA is therefore judged as having a high sensitivity to bioenergy crops. Landscape attributes that make it unsuitable for bioenergy crop growth are: The distinctive open rocky skylines, strong feeling of remoteness with little human disturbance. The wild and natural character with extensive areas of dry heathland, along with wet heath and marshy grassland, are internationally important seminatural habitats. Its open character with sparse vegetation cover and dominance	This area is assessed as having a high sensitivity to bioenergy planting; therefore no guidance has been included.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Inter-visibility / important views – There is a strong visible relationship with the nearby Mynydd Preseli. The summit of Carningli forms an imposing backdrop to the coastal settlement of Newport. Sensitive/rare landscape features – Highly valued range of historical and archaeological features of national significance, with abundant evidence for prehistoric human activity from the Neolithic to the Iron Age. Extensive areas of dry heathland, along with wet heath and marshy grassland, are internationally important semi-natural habitats. Nature of coastal edge – N/A 	outstanding value within a single Aspect Area: wet heathland with cross-leaved heath and dry heath; almost half of the area of the LCA is classified as SSSI There are strong historical links with the upland of the Mynydd Carningli and Mynydd Preseli range of hills and the quality and extent of historical and archaeological features here is of recognised national significance within Wales and of outstanding value, as evidenced by the demarcation of the Newport and Carningli Registered Landscape of Special Historical Interest in Wales. This discrete block of upland centred on Mynydd Carningli at the north western end of the Preseli Hills contains a wealth of relict archaeological and other remains, some persisting as working elements in the landscape today, and the whole representing diverse land use and organisation from the prehistoric, mediaeval and later periods The single dominant archaeological feature is that of the spectacular	of grazing as a land use. The presence of nationally important archaeological features forming part of the Newport and Carningli Registered Landscape of Special Historical Interest in Wales. The spectacular Iron Age fort at the summit of Mynydd Carningli.	

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
	Iron Age fort at the summit of Mynydd Carningli. From this radiate outwards prehistoric field systems, settlement evidence and ritual sites (such as standing stones); the abundant evidence for prehistoric human activity from the Neolithic to the Iron Age can be traced across the high ground	
	This is a very strong historical and cultural landscape, with almost every 'natural' outcrop having been reworked at some time in its past and altered or enhanced by human activity. The open ground is dotted with cairns dating from prehistoric to recent times, tangible evidence of human influence on even open moorland with a wild and natural character	

LCA 24: DINAS HEAD

crit	ndscape attributes based on ceria for each technology type om LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
		WIND T	URBINES	
•	Landform and scale – Large, linear coastal landscape with a gently sloping platform cut by small, steeply incised stream valleys. Prominent headland of Dinas Head. Landscape pattern – Irregular field pattern, with distinctive small scale fields west of Dinas Cross. Large scale fields on Dinas Head. Sense of enclosure – Hedgebanks and pockets of woodland in the steep valleys provide shelter and a sense of enclosure from the prevailing coastal winds. Open coastline with areas of unenclosed heathland. Sense of tranquillity/remoteness – Relative peace and tranquillity away from the main A487 which runs along the LCA's main axis.	 Although this is a settled landscape, it is relatively peaceful — except for the effects of the busy main A487 road running along its main axis — and dominated by pastoral agriculture, with fields bounded mostly by traditional hedgebanks, and small pockets of woodland and scrub There is a distinctive sense of place derived from the extensive coastal views, across Newport Bay and Fishguard Bay, with the high prominent headland of Dinas Head providing a strong focal point and visual reference, especially when viewed from the A487 main coast road. The high ground of Mynydd Carningli, Carn Enoch and Mynydd Melyn also defines the southern boundary of this LCA and reinforces the sense of place Hedgebanks as traditional field boundaries are very important local landscape elements and their 	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. This LCA is therefore assessed as having a high sensitivity to large and medium-sized turbines, and a moderate-high sensitivity to small-scale turbines. 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.	 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, preferably on brownfield sites or 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
•	Settlement / transport network – Scattered farmsteads	quality - as a direct consequence of their management - has a major	The distinctive views to, and	Preseli Mountains and Mynydd Carningli when siting any

Landscape attributes based on criteria for each technology type from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
and settlements – the largest is the linear village of Dinas Cross. Prominent camping/caravan site on the coast. Skyline – Open skyline with higher areas of land providing extensive views of the rugged coastal cliffs and Dinas Head. Inter-visibility – Views to the south east and south are dominated by the distinctive form of Mynydd Carningli and the western summits of the Preseli Hills, which form the southern backdrop up to the skyline and contribute to the sense of place. Sensitive/rare landscape features – Important prehistoric remains, notably the Neolithic chambered tomb at Cerrig y Gof. The eastern part of the LCA falls within the Newport and Carningli Registered Landscape of Special Historic Interest. The area's hedgebanks are valued landscape elements of this locality. Nature of coastal edge – Rocky coastline punctuated by	influence on the perception of this landscape, including its scale and texture. They also relate directly to the long-established need to provide year-round shelter for livestock from the prevailing winds off the sea and are a locally distinctive feature of the West Wales coastal landscape There are important prehistoric remains in this area, notably the Neolithic tomb at Cerrig y Gof, and the extent of the Newport and Carningli Registered Landscape of Special Historic Interest recognises the probable links between the coastal plateau and the adjacent very important prehistoric landscape of the Preselis and Mynydd Carningli.	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.	 Ensure turbines and related infrastructure do not affect the area's prehistoric remains within the Newport and Carningli Registered Landscape of Special Historic Interest, particularly Cerrig y Gof Neolithic tomb. 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
sandy bays. Views to the coast are an important element of landscape character.			
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Large, linear coastal landscape with a gently sloping platform cut by small stream valleys. Prominent headland of Dinas Head. Landcover / land use – Agricultural land (mostly grazed, some arable) plus semi-natural habitats, especially along the coast. Landscape pattern – Irregular field pattern, with distinctive small scale fields west of Dinas Cross. Large scale fields on Dinas Head. Sense of enclosure – Hedgebanks and pockets of woodland provide shelter and a sense of enclosure from the prevailing coastal winds. Open coastline with areas of unenclosed heathland. 	 Although this is a settled landscape, it is relatively peaceful — except for the effects of the busy main A487 road running along its main axis — and dominated by pastoral agriculture, with fields bounded mostly by traditional hedgebanks, and small pockets of woodland and scrub There is a distinctive sense of place derived from the extensive coastal views, across Newport Bay and Fishguard Bay, with the high prominent headland of Dinas Head providing a strong focal point and visual reference, especially when viewed from the A487 main coast road. The high ground of Mynydd Carningli, Carn Enoch and Mynydd Melyn also defines the southern boundary of this LCA and reinforces the sense of place 	Although there are some cropped areas within this landscape, the open coastal character, rocky skylines, sense of tranquillity, rough grazed character and the wealth of outstanding archaeology and internationally important habitats all pose constraints to bioenergy planting. Hedgebanks and pockets of woodland provide a sense of enclosure away from the coastal edge. This LCA is judged as having moderate - high sensitivity to bioenergy crops. Landscape attributes that are particularly sensitive to growth and harvesting of bioenergy crops are: Open coastal character, including rocky coastlines and unenclosed heathland.	 There may be opportunity to link some SRC with existing woodland, providing it does not alter the organic shape and form of woodland within the landscape, or the sense of openness along the coast. There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing it is sited well away from the coastal edge and in areas already affected by cropping (plant at least one field back). Ensure such crops/ harvesting do not affect valued semi-natural habitats, including rocky shores, sandy beaches, maritime cliff vegetation/ heathland, scrub, fen, marshy grassland, or lowland

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
 Sense of 'naturalness' – Although this is an agricultural landscape (predominantly grazed), the coastal edge has a more naturalistic character with rocky shores, sandy beaches, and maritime cliff vegetation. Also scrub, heath, fen, marshy grassland, and lowland mixed deciduous woodland. Inter-visibility / important views – Views to the south east and south are dominated by the distinctive form of Mynydd Carningli and the western summits of the Preseli Hills, which form the southern backdrop up to the skyline and contribute to the sense of place. Sensitive/rare landscape features – Important prehistoric remains, notably the Neolithic chambered tomb at Cerrig y Gof. The eastern part of the LCA falls within the Newport and Carningli Registered Landscape of Special Historic Interest. The area's hedgebanks are valued landscape elements of this locality. 	 Hedgebanks as traditional field boundaries are very important local landscape elements and their quality - as a direct consequence of their management - has a major influence on the perception of this landscape, including its scale and texture. They also relate directly to the long-established need to provide year-round shelter for livestock from the prevailing winds off the sea and are a locally distinctive feature of the West Wales coastal landscape There are important prehistoric remains in this area, notably the Neolithic tomb at Cerrig y Gof, and the extent of the Newport and Carningli Registered Landscape of Special Historic Interest recognises the probable links between the coastal plateau and the adjacent very important prehistoric landscape of the Preselis and Mynydd Carningli. 	 The predominantly pastoral character of the landscape. The hedgebanks that are important in creating landscape pattern. The naturalistic character of the coast including rocky shores, sandy beaches, and maritime cliff vegetation. Areas of scrub, fen, marshy grassland, and lowland mixed deciduous woodland. Views to and from Mynydd Carningli and the western summits of the Preseli Hills. The wealth of outstanding archaeology including important prehistoric remains, forming part of the Newport and Carningli Registered Landscape of Special Historic Interest. 	 mixed deciduous woodland. Ensure crops and harvesting machinery do not affect the survival of hedgebanks or archaeological features, particularly Cerrig y Gof Neolithic tomb and those associated with the Newport and Carningli Registered Landscape of Special Historic Interest. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Ensure that any planting/harvesting does not interfere with views to and from Mynydd Carningli and the western summits of the Preseli Hills.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Nature of coastal edge – Rocky coastline punctuated by sandy bays. Views to the coast are an important element of landscape character.			

LCA 25: CEMAES HEAD

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
	WIND TO	URBINES	
 Landform and scale – Open, large scale landscape with high coastal cliffs backed by rolling farmland. Landscape pattern – Well defined irregular field pattern with prominent hedgebanks. Sense of enclosure – Open, windswept landscape with shelter provided by headgebanks and small areas of woodland. Unenclosed coastal edge enhancing the feeling of exposure. Sense of tranquillity/ remoteness – Strong sense of tranquillity and remoteness due to sparse settlement pattern and exposure to the coast. The main settlement at Moylgrove is hidden within a steep wooded valley, reinforcing the sense of tranquillity. Settlement / transport network – Minor roads link scattered farmsteads and 	 A predominantly open, windswept farmland landscape, with traditional hedgebanks as the dominant boundary feature, imparting a strong texture to the landscape, and providing evidence of long associations with pastoral agriculture and the sheltering of livestock from the prevailing winds off the sea There are frequent views down to the sea and unspoilt coastal cliffs from exposed sections of minor roads along high ground, where bordering hedgebanks allow views from the road There are impressive views across a large tract of land towards Mynydd Preseli and Mynydd Carningli, which form the southern skyline and contribute to the strong sense of place. Long framed views along roads formed by steep hedgebanks to either side are also a local characteristic here. 	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. This LCA is therefore assessed as having a high sensitivity to large and medium-sized turbines, and a moderate-high sensitivity to small-scale turbines. 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	 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
hamlets. Moylgrove village is the main settlement. Skyline – Open, undeveloped ridgetops and cliffs. The adjacent Mynydd Preseli and Mynydd Carningli frame the skyline to the south. Burial mounds and tumuli on the high outcrop of Crugiau Cemmaes are a feature. Inter-visibility – Open ridgetops and roads on higher ground afford long views to the coastal cliffs and sea. Views south to and from the Preseli Mountains. Sensitive/rare landscape features – Wealth of nationally important archaeological and historic sites, particularly prehistoric remains. The burial mounds and tumuli on the high outcrop of Crugiau Cemmaes are particularly prominent. Nature of coastal edge – Some of the highest coastal cliffs in the National Park, with contrasting sandy bay at Poppit Sands in the north-east, and Newport Sands in the south-	 There are strong feelings of remoteness, with a sparse settlement pattern largely of scattered farmsteads and isolated hamlets, and a notable absence of settlements, Moylgrove being substantially hidden from view. There are sand dunes, sandy beaches and mudflats to the western side of the mouth the Teifi estuary at Poppit Sands. The wealth of archaeological and historical sites are of national importance in Wales. These include a small part of the Lower Teifi Valley Registered Landscape of Special Historic Interest between Cemaes Head and the Park boundary near Poppit, stretching inland to the high point of Crugiau Maen Saeson to the west of St.Dogmaels, which has Bronze Age ritual and funerary monuments. 	 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. 	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. 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.

Landscape attributes based on criteria for each technology type (from LCA) west. The constant relationship between land and sea is a defining feature of the landscape.	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Open, large scale landscape with high coastal cliffs backed by rolling farmland. Landcover / land use – Land use dominated by pastoral farmland, with some arable fields, wooded stream valleys and quarries forming a mosaic. Landscape pattern – Well defined irregular field pattern with prominent hedgebanks. Sense of enclosure – Open, windswept landscape with shelter provided by headgebanks and small areas of woodland. Unenclosed coastal edge enhancing the feeling of exposure. Sense of 'naturalness' – The area's stream-side woodlands, coastal heath, maritime 	 A predominantly open, windswept farmland landscape, with traditional hedgebanks as dominant boundary feature, imparting a strong texture to the landscape, and providing evidence of long associations with pastoral agriculture and the sheltering of livestock from the prevailing winds off the sea There are frequent views down to the sea and unspoilt coastal cliffs from exposed sections of minor roads along high ground, where bordering hedgebanks allow views from the road There are impressive views across a large tract of land towards Mynydd Preseli and Mynydd Carningli, which form the southern skyline and contribute to the strong sense of place. 	Although there are some cropped areas within this landscape, the predominantly pastoral land use, irregular field pattern, open naturalistic coastline, and presence of important prehistoric remains all present sensitivities to the planting of bioenergy crops. This LCA is therefore judged as having a moderate-high sensitivity to both SRC and Miscanthus crops. Landscape attributes that are particularly sensitive to bioenergy crop planting are: The open and exposed character, particularly along the coast and on higher pockets of land. The predominantly pastoral character of the agricultural	 There may be opportunity to link some SRC with existing woodland, providing it does not alter the organic shape and form of woodland within the landscape, or the sense of openness along the coast. There may be opportunity to accommodate a very limited amount of bioenergy crop, such as Miscanthus, providing it is sited well away from the coastal edge and in areas already affected by cropping. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of Miscanthus or SRC. Aim for irregular patterns of

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
grasslands and estuarine habitats fringing the Teifi estuary introduce naturalistic land cover – particularly along the coast. Inland, bracken and scrub covered hedgebanks contribute to the sense of naturalness. Inter-visibility / important views – Open ridgetops and roads on higher ground afford long views to the coast. The adjacent Mynydd Preseli and Mynydd Carningli are prominent in views to the south. Sensitive/rare landscape features – Wealth of nationally important archaeological and historic sites, particularly prehistoric remains. The burial mounds and tumuli on the high outcrop of Crugiau Cemmaes are particularly prominent. Nature of coastal edge – Some of the highest coastal cliffs in the National Park, with contrasting sandy bay at Poppit Sands in the north-east, and Newport Sands in the southwest. The constant relationship between land and sea is a	 Long framed views along roads formed by steep hedgebanks to either side are also a local characteristic here. There are strong feelings of remoteness, with a sparse settlement pattern largely of scattered farmsteads and isolated hamlets, and a notable absence of settlements, Moylgrove being substantially hidden from view. There are sand dunes, sandy beaches and mudflats to the western side of the mouth the Teifi estuary at Poppit Sands. The wealth of archaeological and historical sites are of national importance in Wales. These include a small part of the Lower Teifi Valley Registered Landscape of Special Historic Interest between Cemaes Head and the Park boundary near Poppit, stretching inland to the high point of Crugiau Maen Saeson to the west of St.Dogmaels, which has Bronze Age ritual and funerary monuments. 	 Ind. The presence of naturalistic clifftop and estuarine habitats. The irregular field pattern with valued traditional hedgebanks. The extensive views to the coast and sea from open ridgetops. The inter-visibility with Mynydd Carningli and the Preseli Hills. The presence of nationally valued prehistoric remains including the burial mounds and tumuli on Crugiau Cemmaes. 	planting rather than geometric blocks. Ensure any crop planting is located well away from the naturalistic coastal edge (at least one field back), and away from more exposed areas, particularly on the higher ground. Ensure crops and harvesting machinery do not affect the survival of the area's hedgebanks or naturalistic habitats. Ensure planting does not disrupt important views to the coast from higher ground, and southwards to the Preseli Hills. Ensure that planting and harvesting operations do not affect the area's prehistoric remains, including the burial mounds and tumuli on Crugiau Cemmaes.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Guidance (drawing on the LCA Management Guidelines)
defining feature of the landscape.		

LCA 26: CWM GWAUN / AFON NYFER

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Lowland, narrow valley system of an intimate scale, dividing the two upland areas of Mynydd Preseli and Mynydd Preseli. Landscape pattern – Patchwork of small, irregular fields punctuated by woodland blocks. Sense of enclosure – Dense mature hedgerow network, combined with significant blocks of woodland, give a high sense of enclosure. Particular contrast with the surrounding open moorland landscapes. Sense of tranquillity/ remoteness – Intimate valley landscape with a lack of recent development and a strong traditional sense of place. Settlement / transport network – Scattered, sparse settlement pattern linked by minor roads running along the valley floors. 	 There is a pervading sense of shelter resulting in these valleys from a combination of landform, woodland and the dense mature hedgerow network bounding most of the fields There is a strong sense of enclosure and intimacy imparted by the above characteristics, resulting in a patchwork of small fields punctuated by woodland blocks, giving the landscape a rich texture. This contrasts strongly with the open moorland of the nearby Preseli Hills, with attractive broad views The scattered sparse settlement pattern is dominated by traditional building types, in intimate association with the ubiquitous landscape elements of mature hedgerows enclosing small fields. These factors contribute positively to the feeling of the valleys as being a landscape which is substantially unspoilt by recent 	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. This LCA is therefore assessed as having a high sensitivity to large and medium-scale turbines, and a moderate-high sensitivity to small scale wind turbines. 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	 Large or medium scale turbines would not be appropriate in this landscape. There may be limited opportunity for 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 on brownfield sites or 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)		Guidance (drawing on the LCA Management Guidelines)
 Skyline – Undeveloped skylines dominated by woodland. Inter-visibility – Frequent views out to the surrounding Preseli hills. Sensitive/rare landscape features – Oak and alder woodlands are of nature conservation interest, as well as meadows along the floodplains. The Cwm Gwaun valley contains internationally and nationally designated wildlife sties. Iron Age forts and enclosures overlooking the valleys, medieval buildings and structures, and Neoloithic tombs around Nevern are particularly valued. Nature of coastal edge – N/A 	 built development or changes in agricultural management Between 30% and 40% of the Cwm Gwaun valley has national or internationally designated sites for nature conservation interest, covering purple moor-grass meadows, western acidic oak woodland and alder woodland on floodplains Part of the Afon Nyfer has internationally important habitats of dry heaths and wet heathland with cross-leaved heath, in addition to purple moor-grass meadows and western acidic oak woodland Oak and alder woodland habitats are of local priority importance for nature conservation, and the connectivity between woodland blocks through the hedgerow network is an important supporting factor Registered Landscapes of both Outstanding and Special Historic Interest in Wales are present in small parts of this LCA. There is a 	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.	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. • 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.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	string of Iron Age forts and enclosures which perch on almost every available outcrop along these valleys.		
	A traditional Welsh-speaking community survives here and the Gwaun Valley, at present, is not experiencing the same degree of cultural change that has occurred in nearby coastal areas.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Lowland, narrow valley system of an intimate scale, dividing the two upland areas of Mynydd Preseli and Mynydd Preseli. Landcover / land use – Rough grazing on the upper valley slopes with a predominantly pastoral land use elsewhere. Landscape pattern – Patchwork of small, irregular fields punctuated by woodland blocks. Sense of enclosure – Dense mature hedgerow network, combined with significant blocks 	 There is a pervading sense of shelter resulting in these valleys from a combination of landform, woodland and the dense mature hedgerow network bounding most of the fields There is a strong sense of enclosure and intimacy imparted by the above characteristics, resulting in a patchwork of small fields punctuated by woodland blocks, giving the landscape a rich texture. This contrasts strongly with the open moorland of the nearby Preseli Hills, with attractive broad views 	Although enclosure is provided by the presence of woodlands and overgrown hedges, the predominantly pastoral land use, small scale, irregular field pattern, high proportion of valued naturalistic habitats, distinctive views of the surrounding uplands, and the presence of important archaeological features all present sensitivities to the planting of bioenergy crops. This LCA is therefore judged as having a moderate-high sensitivity to bioenergy crops. The landscape attributes that would be most sensitive to growth and	 There may be opportunity to link some SRC with existing woodland, providing it does not alter the organic shape and form of woodland within the landscape, and is not visible in key viewpoints. There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing it is sited in fields already affected by cropping rather than pastoral areas. Ensure crops and harvesting machinery do not affect the
of woodland, give a high sense of	The scattered sparse settlement		

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Key	Guidance (drawing on the LCA Management Guidelines)
	connectivity between woodland blocks through the hedgerow network is an important supporting factor		
	Registered Landscapes of both Outstanding and Special Historic Interest in Wales are present in small parts of this LCA. There is a string of Iron Age forts and enclosures which perch on almost every available outcrop along these valleys.		
	A traditional Welsh-speaking community survives here and the Gwaun Valley, at present, is not experiencing the same degree of cultural change that has occurred in nearby coastal areas.		

I CA 27. MYNYDD PRESELL

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	WIND TO	URBINES	
 Landform and scale – Large scale, upland mass with rocky summits and scree slopes. Landscape pattern – Open moorland with blocks of coniferous plantation on the lower flanks. Large, rectilinear fields of more recent enclosure on the southern flank of the mountain block. Sense of enclosure – Extensive unenclosed moorland landscape with a strong sense of openness. Sense of tranquillity/ remoteness – Pervading sense of remoteness and wildness with little or no built development. Settlement / transport network – Area crossed by minor lanes. An absence of settlement is a defining feature of this upland area. Skyline – Undeveloped, open skyline, broken only by the presence of conifer plantations 	 The Mynydd Preseli and Mynydd Carningli range of hills is unique within the Pembrokeshire Coast National Park because of its extensive broad upland mass which stretches inland, contrasting strongly with the narrow ribbon of coastal land which characterises the great majority of the National Park. It is visible from large parts of the National Park and from extensive parts of the surrounding county of Pembrokeshire, providing a familiar and readily discernible reference point in conditions of moderate to clear visibility There is a pervading sense of remoteness and wildness, especially on the summits and the upper slopes of these hills, and a strong sense of exposure, resulting from the proximity of the sea and the lack of cover and shelter on the open high ground Distinctive rock formations at the 	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. This LCA is therefore assessed as having a high sensitivity to all sizes and scales of wind turbines. 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	 This landscape would be highly sensitive to the development of all sizes and scales of turbine. There may be limited potential for 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)		
in some locations. A conspicuous and famous upland ridge. Inter-visibility – Mynydd Preseli is visible from a great distance across northern Pembrokeshire. Views to the coast further contribute to sense of place. Sensitive/rare landscape features – This landscape is recognised as of national historical and cultural significance – much falling within the Preseli Registered Landscape of Outstanding Historic Interest in Wales. The area contains remarkable and extensive evidence for prehistoric land use and ritual activity. Valued habitats include acidic grassland and heathland which grades into much wetter vegetation including boggy flushes, marshy grassland and wet heath. Nature of coastal edge – N/A	summits provide visual punctuation points as the eye is drawn up the slopes and along the smooth ridges forming the horizon; this is a landscape of outstanding geological value This is a landscape of recognised national historical and cultural significance within Wales. There are close historical and archaeological links with the adjacent Mynydd Carningli and many common attributes, especially the prehistoric ritual landscape. The blue stones for the earliest stone phase of Stonehenge originated from Carn Menyn. Abandoned settlements are testimony to the repeated phases of human use of this landscape. The east-west ridge trail is popularly regarded as being prehistoric This archaeological and historical interest has been recognised by the inclusion of large part of this LCA in the Preseli Registered Landscape of Outstanding Historic Interest in Wales, representing the best surviving and most complete,	surrounding landscapes. Its nationally valued archaeological resource, particularly the breadth and range of prehistoric remains.	infrastructure does not affect the area's prehistoric remains within the Preseli Registered Landscape of Outstanding Historic Interest in Wales. • 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.		

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	typical historic cross-section across the Preseli Hills. The area contains remarkable and extensive evidence for prehistoric land use and ritual, superimposed in part by recent enclosure.		
	BIOMASS: BIO	NERGY CROPS	
 Landform and scale – Large scale, upland mass with rocky summits and scree slopes. Landcover / land use – Open common land grazing is the predominant land use, with moorland and acid grassland habitats dominated. Enclosed land around the fringes of the hills is predominantly improved pasture. Blocks of coniferous plantation are also present in the landscape. Landscape pattern – Open moorland with blocks of coniferous plantation on the lower flanks. Large, rectilinear fields of more recent enclosure on the southern flank of the mountain block. Sense of enclosure – 	 The Mynydd Preseli and Mynydd Carningli range of hills is unique within the Pembrokeshire Coast National Park because of its extensive broad upland mass which stretches inland, contrasting strongly with the narrow ribbon of coastal land which characterises the great majority of the National Park. It is visible from large parts of the National Park and from extensive parts of the surrounding county of Pembrokeshire, providing a familiar and readily discernible reference point in conditions of moderate to clear visibility There is a pervading sense of remoteness and wildness, especially on the summits and the upper slopes of these hills, and a 	The dominance of the open moorland, the predominantly pastoral character of the surrounding enclosed land, high proportion of semi-natural habitats, lack of woodland cover and high visual prominence of the landscape, along with its valued prehistoric archaeological resource all present constraints to bioenergy planting. This LCA is therefore judged as having a high sensitivity to both SRC and Miscanthus crops. The landscape attributes that would be most sensitive to bioenergy crop planting are: The open, exposed character of the moorland, with a strong sense of remoteness.	 Plant at the field scale, in fields already in cropping rather than converting pastoral areas or unimproved land to cropping. Any small scale SRC should be linked and integrated with existing plantations without extending their overall size and visual impact. No crops should be planted on the open moor. Ensure crops and harvesting machinery do not affect the survival of the area's upstanding archaeological features. Ensure planting does not disrupt important views to the coast and across the surrounding landscapes.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)		
Extensive unenclosed moorland landscape with a strong sense of openness. Sense of 'naturalness' – High - the rough moorland habitats and areas of wet heath and flushes dominate this landscape. Inter-visibility / important views – Mynydd Preseli is visible from a great distance across northern Pembrokeshire. Views to the coast further contribute to sense of place. Sensitive/rare landscape features – This landscape is recognised as of national historical and cultural significance – much falling within the Preseli Registered Landscape of Outstanding Historic Interest in Wales. The area contains remarkable and extensive evidence for prehistoric land use and ritual activity. Valued habitats include acidic grassland and heathland which grades into much wetter vegetation including boggy flushes, marshy grassland and wet heath.	from the proximity of the sea and the lack of cover and shelter on the open high ground Distinctive rock formations at the summits provide visual punctuation points as the eye is drawn up the slopes and along the smooth ridges forming the horizon; this is a landscape of outstanding geological value This is a landscape of recognised national historical and cultural significance within Wales. There are close historical and archaeological links with the adjacent Mynydd Carningli and many common attributes, especially the prehistoric ritual landscape. The blue stones for the earliest stone phase of Stonehenge originated from Carn Menyn. Abandoned settlements are testimony to the repeated phases of human use of this landscape. The east-west ridge trail is popularly regarded as being prehistoric This archaeological and historical interest has been recognised by	 for common grazing. The pastoral character of the fringing agricultural land. The presence of naturalistic heathland and wetland habitats. The extensive views to the coast and the surrounding landscapes. The high visual prominence of the LCA – present in views from across northern Pembrokeshire. The presence of nationally valued prehistoric remains. 	Ensure that planting and harvesting operations do not affect the area's prehistoric remains.		

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
Nature of coastal edge – N/A	the inclusion of large part of this LCA in the Preseli Registered Landscape of Outstanding Historic Interest in Wales, representing the best surviving and most complete, typical historic cross-section across the Preseli Hills. The area contains remarkable and extensive evidence for prehistoric land use and ritual, superimposed in part by recent enclosure.		

LCA 28: DAUGLEDDAU

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
	WIND T	URBINES	
 Landform and scale – Ria landscape of broad river meanders fringed by rolling lowland. Landscape pattern – The river estuary is backed by a landscape of irregular small-medium fields, mixed woodland and parkland forming a rich mosaic. Sense of enclosure – Strong sense of enclosure provided by the dense stands of woodland and tree belts, along with the shape of the landform sloping up from the estuary. Sense of tranquillity/remoteness – Great sense of tranquillity produced by the enclosed water body and strong rural character of the surrounding land. Settlement / transport network – Farms and small settlements are dotted along the shores of the Daugleddau linked 	 This large LCA is unique in the National Park in that it is physically detached from the remaining areas of the Park by some distance. There is no sense of being close to the sea, except for the movement of the tides, and the smell of salt on the air and occasional lumps of seaweed on the strand line. There is a great sense of tranquillity here, produced by the enclosed large water body, whether at high or low tide, and the feeling of being on a quiet backwater. A strong sense of enclosure and shelter is provided by the surrounding landform, dense stands of woodland and belts of trees. There are framed views at intervals along shoreline roads and paths. The water body has a major unifying influence on the scene, whether at high or low tide There is a prevailing sense of a sheltered, well cared-for wooded 	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. This LCA is assessed as having a high sensitivity to large and medium-sized turbines, and a moderate-high sensitivity to small-scale turbines. 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	 Large and medium scale turbines would not be appropriate in this landscape. There may be limited opportunity for 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 on brownfield sites or 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

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)		
 Skyline – Undeveloped skylines, with woodland cover occupying many ridgelines. Inter-visibility – The enclosed nature of the landscape minimises views to and from the surrounding areas. Views across the width and length of the river, often framed by woodland, are a characterful feature of this LCA. Sensitive/rare landscape features – The remains of the area's small scale mining industry and limestone quarrying are recognised as part of the Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales – the working tidemill and castle at Carew being of particular value. Other historic features include Bronze Age barrows, Iron Age hillforts and parkland. Estuarine habitats and the area's oak woodlands are valued seminatural habitats. Nature of coastal edge – N/A. 	farmland and parkland landscape of long-established private estates and secluded houses, contrasting with the more open shoreline villages and hamlets with views along the branches of the estuary This is a landscape of outstanding historical significance within Wales. This area includes traces of the county's small-scale coal mining industry as well as historic agricultural landscapes, including landed houses, farms and cottages set in distinctive field patterns. The working tide-mill at Carew is unique in Britain and contributes to the outstanding cultural value of this LCA. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses virtually all of this LCA. This river valley and estuary landscape has an unsurpassed concentration of remains, reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to	skylines. The presence of historic features including Bronze Age barrows, Iron Age hillforts and parkland. The presence of valued seminatural habitats.	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. • 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.		

crit	ndscape attributes based on ceria for each technology type om LCA)	ar	pecial Qualities relevant to this ea (from LCA and Management an) modern periods.	Sensitivity Judgement & Key Landscape Sensitivities		idance (drawing on the LCA nagement Guidelines)
				NERGY CROPS		
•	Landform and scale – Ria landscape of broad river meanders fringed by rolling lowland. Landcover / land use – Landscape is dominated by the broad expanse of the estuarine river. Agricultural land on the shorelines is predominantly pastoral, with some arable fields. Woodland is a significant land use in this LCA. Landscape pattern – The river estuary is backed by a landscape of irregular smallmedium fields, mixed woodland and parkland forming a rich mosaic.	•	This large LCA is unique in the National Park in that it is physically detached from the remaining areas of the Park by some distance. There is no sense of being close to the sea, except for the movement of the tides, and the smell of salt on the air and occasional lumps of seaweed on the strand line. There is a great sense of tranquillity here, produced by the enclosed large water body, whether at high or low tide, and the feeling of being on a quiet backwater. A strong sense of enclosure and shelter is provided by the surrounding landform, dense stands of woodland and belts of trees. There are framed	The presence of significant areas of woodland cover, along with cropped fields, could indicate that the landscape would be able to incorporate the planting of bioenergy crops. However, the predominantly pastoral land use, irregular field pattern, strong historic sense of place, and the presence of naturalistic habitats increase sensitivity to the planting of bioenergy crops. This LCA is therefore judged as having a moderate sensitivity to SRC and a moderate – high sensitivity to Miscanthus planting. Landscape attributes that are most sensitive to bioenergy crop planting are:	•	There may be opportunity to link some SRC with existing woodland, providing it does not alter the organic shape and form of woodland within the landscape, and is not visible in key viewpoints. There may be opportunity to accommodate a limited amount of bioenergy crop, such as Miscanthus, providing it is sited in fields already affected by cropping rather than pastoral areas. Maintain a diversity of crop types/land uses in adjoining fields to maintain the patchwork landscape pattern - avoid vast swathes of
•	Sense of enclosure – Strong sense of enclosure provided by the dense stands of woodland and tree belts, along with the		views at intervals along shoreline roads and paths. The water body has a major unifying influence on	Its predominantly pastoral character, with irregularly shaped fields set within an	•	Miscanthus or SRC. Aim for irregular patterns of planting rather than geometric

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
shape of the landform sloping up from the estuary. Sense of 'naturalness' – The river and related estuarine habitats, along with the area's woodlands, introduce a significant sense of naturalness into the farmed landscape. Inter-visibility / important views – The enclosed nature of the landscape minimises views to and from the surrounding areas. Views across the width and length of the river, often framed by woodland, are a characterful feature of this LCA. Sensitive/rare landscape features – The remains of the area's small scale mining industry and limestone quarrying are recognised as part of the Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales – the working tidemill and castle at Carew being of particular value. Other historic features include Bronze Age barrows, Iron Age hillforts and parkland. Estuarine habitats and the area's oak	 the scene, whether at high or low tide There is a prevailing sense of a sheltered, well cared-for wooded farmland and parkland landscape of long-established private estates and secluded houses, contrasting with the more open shoreline villages and hamlets with views along the branches of the estuary This is a landscape of outstanding historical significance within Wales. This area includes traces of the county's small-scale coal mining industry as well as historic agricultural landscapes, including landed houses, farms and cottages set in distinctive field patterns. The working tide-mill at Carew is unique in Britain and contributes to the outstanding cultural value of this LCA. The Milford Haven Waterway Registered Landscape of Outstanding Historical Interest in Wales encompasses virtually all of this LCA. This river valley and estuary landscape has an unsurpassed concentration of 	 historic agricultural landscape. Important views across and along the river from shoreline settlements. The landscape's valued seminatural oak woodlands and estuarine habitats. The presence of historic features including Bronze Age barrows, Iron Age hillforts and parkland. 	 blocks. Ensure crops and harvesting operations do not affect the survival of the area's hedgebanks or naturalistic habitats such as semi-natural oak woodlands and estuarine habitats. Ensure that planting and harvesting operations do not affect the area's archaeological features, including Bronze Age barrows and Iron Age hillforts. Consider views across and along the river from shoreline settlements when planning any planting.

Landscape attributes based on criteria for each technology type (from LCA)	Special Qualities relevant to this area (from LCA and Management Plan)	Sensitivity Judgement & Key Landscape Sensitivities	Guidance (drawing on the LCA Management Guidelines)
woodlands are valued semi- natural habitats.	remains, reflecting maritime conquest, settlement, commerce,		
Nature of coastal edge – N/A.	fishing, defence and industry spanning the prehistoric to modern periods.		