Technical Paper E4 (b)
Annex 1: Landscape Sensitivity and Strategy Matrices for each Landscape Character Area
Cornwall Council
January 2012

N.B. This is a live document that will be updated

Prepared for Cornwall Council
by
Land Use Consultants

April 2011

Annex 1: Landscape Sensitivity and Strategy Matrices for each Landscape Character Area

INTRODUCTION

A1.1 In order to help understand how best to accommodate wind and solar electricity generation installations in the Cornish landscape Cornwall Council commissioned Land Use Consultants (LUC) to undertake an assessment of the landscape sensitivity to onshore wind and large scale solar photovoltaic (PV) development.

A1.2 The report ('An Assessment of the Landscape Sensitivity to Onshore Wind and Large Scale Photovoltaic Development in Cornwall', Land Use Consultants April 2011) sets out the methodology for the study and presents a summary of the results. It also includes a glossary in **Appendix 1**, and a User Guide in **Appendix 2**.

A1.3 The main report is supplemented by four Annexes. This Annex (**Annex 1**) contains detailed landscape sensitivity and strategy matrices for each Landscape Character Area these matrices set out a detailed assessment of the sensitivity of the Cornish landscape to wind farms and solar PV developments, including landscape recommendations on the appropriate siting and scale of future development (wind and solar PV) within each of the county's 40 Landscape Character Areas. It also presents a 'landscape strategy' for deployment of each technology in each LCA. The following key applies to maps contained in this Annex:

Key for maps

- Landscape Character Area
- Surrounding Landscape Character Areas
- Cornwall Area of Outstanding Natural Beauty
- Tamar Valley Area of Outstanding Natural Beauty
- Areas of Great Landscape Value (from Cornwall Council)

A1.4 **Annex 2** provides generic guidance on the siting and design of **wind energy development** in Cornwall, from a landscape and visual perspective, **Annex 3** provides guidance on the siting and design of large scale PV development in Cornwall, and **Annex 4** provides guidance on the cumulative assessment of wind energy and large scale solar PV developments.

LIST OF LANDSCAPE CHARACTER AREAS:

1 West Penwith South (Land's End to Newlyn)
2 West Penwith (North and West Coastal Strip)
3 Penwith Central Hills
4 Mount's Bay
5 St Ives Bay
6 Mount's Bay East
7 South Lizard Peninsula
8 North East Lizard Peninsula
9 Helford Ria
10 Carnmenellis
11 Redruth, Camborne and Gwennap
12 St Agnes
13 Fal Ria, Truro and Falmouth
14 Newlyn Downs
15 Newquay and Perranporth Coast
16 Mid Fal Plateau
17 St Austell or Hensbarrow China Clay Area
18 St Breock Downs
19 Trevose Head and Coastal Plateau
20 Mid Cornwall Moors
21 Fowey Valley
22 South East Cornwall Plateau
23 Looe Valley Rivers
24 Seaton River Valley
25 Lynher and Tiddy River Valleys
26 East Cornwall and Tamar Moorland Fringe
27 Lower Tamar and Tavy Rivers
28 North Coast Reskeage Downs
29 Middle Tamar Valleys
30 Kit Hill
31 Upper Tamar and Ottery Valleys
32 Bodmin Moor
33 Camel and Allen Valleys

34 Camel Estuary

35 Kellan Head to Millook Haven Coast

36 Delabole Plateau

37 Western Culm Plateau

38 Bude Basin

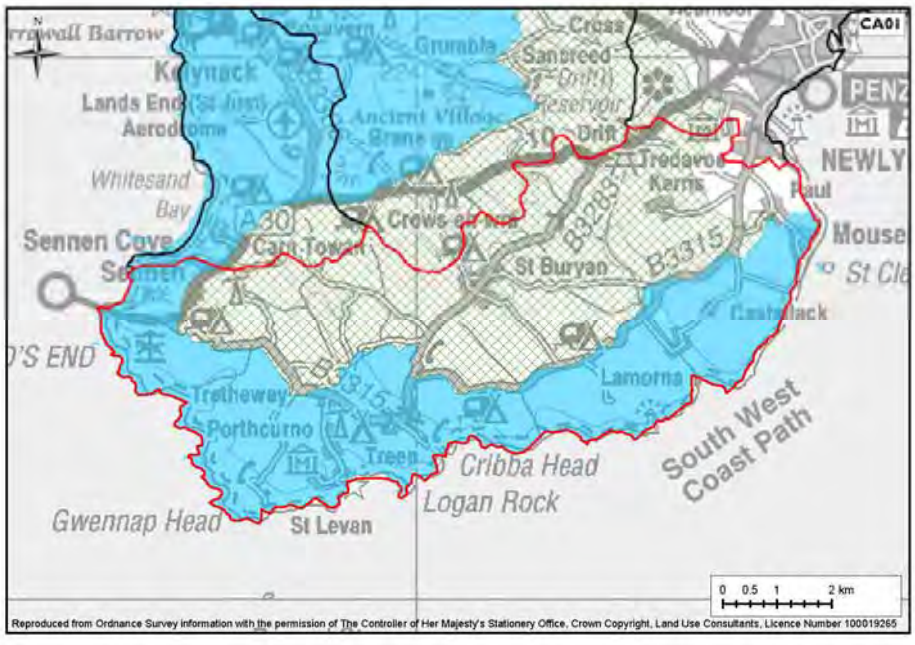
39 St Austell Bay and Luxulyan Valley

40 Gerrans, Veryan and Mevagissey Bays

CA01: West Penwith South (Land's End to Newlyn)

Key Landscape Characteristics[1]

- *Exposed open maritime landscape character, windswept and highly influenced by wind and weather.*
- *Undulating inland plateau of mainly pastoral fields on shallow unimproved soils, with deep valleys near the coast.*
- *Dramatic and heavily indented granite coastline with fishing villages in small coves.*
- *Ancient field pattern of small fields with curving sinuous Cornish hedges, extending virtually to the coast.*
- *Small linear woods with scrub and Wet Woodland on the floor of sheltered valleys with wetlands including small areas of Fens and Purple Moor Grass and Rush Pastures.*
- *Significant areas of Lowland Heathland on the coast.*
- *Mixed farmland, pastoral in the west and more arable in the east.*
- *Isolated farms, clustered hamlets and villages within inland farming pattern, with distinctive church towers.*
- *Many ancient monuments such as cliff castles and standing stones.*
- *Open, with extensive views in good weather, outstanding across Mounts Bay on eastern side and extending to Lizard peninsula and to the west it is possible to see the Isles of Scilly.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A gently undulating plateau surrounded by a dramatic, indented coastline with high cliffs, incised clefts ('zawns'), intimate coves and rocky headlands (including Land's End). Inland, the plateau is cut by numerous small valleys running mainly towards the south and south east. The land rises from the LCA's southern coastline towards a line of low hills in the north.
Land cover pattern and presence of human scale features	The landscape has a strong varied field pattern of irregular, very small fields of prehistoric / medieval origin with intermittent areas of larger, more modern fields mainly on higher ground. Land cover pattern is varied, made up of mainly mixed farmland (including tiny terraced bulb plots) and pockets of woodland. Human scale features include farm buildings, Cornish hedges and occasional wind-sculpted trees.
Tracks/transport pattern	This is a landscape with predominantly narrow winding minor roads and lanes, linking the landscape's dispersed hamlets and small farmstead groups and tightly enclosed by stone-faced Cornish hedges, offering few passing places. Some lanes are deep, including where they cut through the bedrock.
Skylines	Although the LCA does not refer to a skyline in the description, the description refers to the undulating plateau which rises towards a line of low hills to the north and the abrupt coastline with sheer high cliffs and rocky headlands. The LCA description also highlights the historic features marking the skyline such as Treryn Dinas and Maen Castle cliff castles (Scheduled Monuments) and the towers of the medieval churches at St Buryan, Paul and Sennen.
Perceptual qualities	The landscape is strongly influenced by the sea and weather, with a wild, windswept and wave-beaten coast contrasting with sheltered coves and fishing villages. Inland it is more domesticated. Tourism-related development (including at Land's End) is eroding the generally high levels of tranquillity and relative remoteness associated with the majority of the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the landscape's 'Prehistoric' fields as of high vulnerability to development, along with the areas of 'Upland Rough Ground' on the higher hills summits and 'Coastal Rough Ground' along the coastal strip. Areas of 'Post-Medieval' field patterns are assessed by the study as of 'moderate' vulnerability, whilst more modern enclosures are deemed as of 'low-moderate' (Amalgamation of AEL) and 'low' (Intakes) vulnerability.
Distinctive landscape features	The LCA description notes the dramatic coastline with its coves and coastal villages; the relic flower-growing fields hugging the cliff edge; Land's End; The Minack Theatre; Lamorna Cove, Merry Maidens and Boscawen Un stone circles; Treryn Dinas and Maen Castle cliff castles; St Buryan Church Tower; the Logan Rock; and capstan at Penberth as distinctive features of the landscape. Some of these could be affected by wind energy development, particularly the dramatic coastline and the prominence of Treryn Dinas and Maen Castle cliff castles; St Buryan Church Tower; and the Logan Rock.
Scenic quality	The coastal parts of the LCA fall within the 'West Penwith' section of the Cornwall AONB (48% of the LCA is AONB). Qualities of this area that may particularly be affected by wind energy development are the scale of the cliffs, the exposed

Criteria	Lower sensitivity	⟷	Higher sensitivity
	moorland of the Penwith Downs and the skyline of granite outcrops, picturesque coves, the prominence and skylines of mining structures, and absence of buildings and structures on the uplands. Much of the remainder of the LCA lies within the St Buryan AGLV. Scenic qualities of the St Buryan AGLV, which might be sensitive to wind turbine development, include St Buryan church tower as a dominant feature of the area. Much of the LCA is also recognised as Heritage Coast – the area recognised as heritage coast falls within the AONB and AGLV.		
Overall sensitivity assessment			
	Although the large-scale landform could indicate a lower sensitivity to wind energy development, other characteristics such as the dramatic landform of the coastline, the presence of human scale features, the small scale prehistoric fields, narrow hedged lanes, landmark features, and relative remoteness increase levels of sensitivity so that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development outside AONB and **high** within the AONB.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The presence of particularly small scale landscape patterns and frequent human scale features in this LCA mean that this landscape is particularly sensitive to 'medium' or 'large' scale turbines. The rugged and wild coastal edge would be sensitive to any wind energy development.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The presence of very small scale landscape patterns across much of the landscape mean that it is likely to be particularly sensitive to any clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single very small or small turbines** in association with existing buildings, with **no turbines** along the rugged and wild undeveloped coastal edge or its immediate hinterland. There may be more than one turbine in the LCA, but they should be clearly separated so that, although turbine influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB **a landscape without wind energy development** (except for development limited to occasional very small scale single turbines linked to existing buildings (eg farm buildings).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate turbines away from the rugged and wild coastal edge – small turbines should be located in farmed areas in association with existing farm buildings or businesses. • Ensure tracks associated with development do not damage historic field

	patterns, minimising disturbance to traditional Cornish hedges and replacing any lengths affected by development. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such as cliff castles (Carn Les Boel, Treryn Dinas and Maen Castle) stone circles (Boscawen Un and Merry Maidens) and medieval church towers (St Buryan, Paul and Sennen). • Areas of Prehistoric Farmland and ancient fields are more sensitive to larger wind turbines than areas of modern or post-medieval fields. • Avoid siting turbines within the HLC types of 'Rough Ground' and 'Prehistoric' fields - assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – ensure turbines do not detract from the remote experience when travelling along this route. • Ensure wind energy development does not adversely affect the dramatic coastline, or the prominence of Treryn Dinas and Maen Castle cliff castles, St Buryan Church Tower, and the Logan Rock. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the scale of the cliffs, the exposed moorland of the Penwith Downs and the skyline of granite outcrops, picturesque coves, the prominence and skylines of mining structures, and absence of buildings and structures on the uplands) – ensure choice of site and scale of development does not detract from these. • Protect the sense of openness and being 'at one' with the sea, the stone faced hedgebanks, small to medium scale fields and St Buryan church tower that all contribute to the scenic quality of the St Buryan AGLV.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	A gently undulating plateau with some steep slopes and sloping towards a dramatic, indented coastline with high cliffs, incised clefts ('zawns'), intimate coves and rocky headlands (including Land's End).		
Sense of openness / enclosure	The coast and plateau is open and exposed to the elements, with only occasional wind-sculpted trees. Limited shelter is provided by the small wooded valleys that cut through the landform. Granite-faced Cornish hedges with little vegetation cover enclose the landscape's fields.		
Field pattern and scale	The landscape has a strong pattern of irregular, very small fields of prehistoric / medieval origin with intermittent areas of larger, more modern fields mainly on higher ground. The coast is defined by open, unenclosed rough grazing land. The tiny, prehistoric fields and bulb plots are particularly sensitive.		
Landcover	Mixed farmland (mainly pasture to the west) with woods, patches of open rough ground and coastal Lowland Heathland along the cliff edge with small horticultural plots in the more sheltered parts.		
Perceptual qualities	The landscape is strongly influenced by the sea and weather, with a wild, windswept and wave-beaten coast contrasting with sheltered coves and fishing villages. Inland it is more domesticated. Tourism-related development (including at Land's End) is eroding the generally high levels of tranquillity and relative remoteness associated with the majority of the landscape.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping solar PV installations assesses the landscape's 'Prehistoric' fields as of high vulnerability to development, along with the areas of 'Upland Rough Ground' on the higher hills summits and 'Coastal Rough Ground' along the coastal strip. Areas of 'Post-Medieval' and 'Modern (Intakes') are assessed by the study as of 'moderate' vulnerability, whilst more 'Modern' enclosures are deemed as of 'low-moderate' vulnerability (Amalgamation of AEL)		
Distinctive landscape features	The LCA description notes the dramatic coastline with its coves and coastal villages; the relic flower-growing fields hugging the cliff edge; Land's End; The Minack Theatre; Lamorna Cove, Merry Maidens and Boscawen Un stone circles; Treryn Dinas and Maen Castle cliff castles; St Buryan Church Tower; the Logan Rock; and capstan at Penberth as distinctive features of the landscape. Some of these could be affected by solar PV development, particularly the dramatic coastline and the relic flower-growing fields hugging the cliff edge.		
Scenic quality	The coastal parts of the LCA fall within the 'West Penwith' section of the Cornwall AONB (48% of the LCA is AONB). Qualities that may particularly be affected by solar PV development are the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands. Much of the remainder of the LCA lies within the St Buryan AGLV. Scenic qualities of the St Buryan AGLV, which might be sensitive to solar PV development, include the sense of openness and the stone faced hedgebanks.		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Much of the LCA is also recognised as Heritage Coast.		
Overall sensitivity assessment	 Although the presence of gentle undulations and some areas of greater enclosure in the valleys might lower sensitivity to solar PV development in parts, the sense of openness, the dominant prehistoric field patterns, pastoral character (particularly to the west), rugged coast and high scenic quality (particularly along the coast) increase sensitivity so that overall this LCA is considered to have **moderate-high** sensitivity to solar PV development outside the AONB and **high** within the AONB.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The presence of very small scale, prehistoric field patterns means that the landscape is likely to be particularly sensitive to 'small', 'medium' and 'large' scales of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

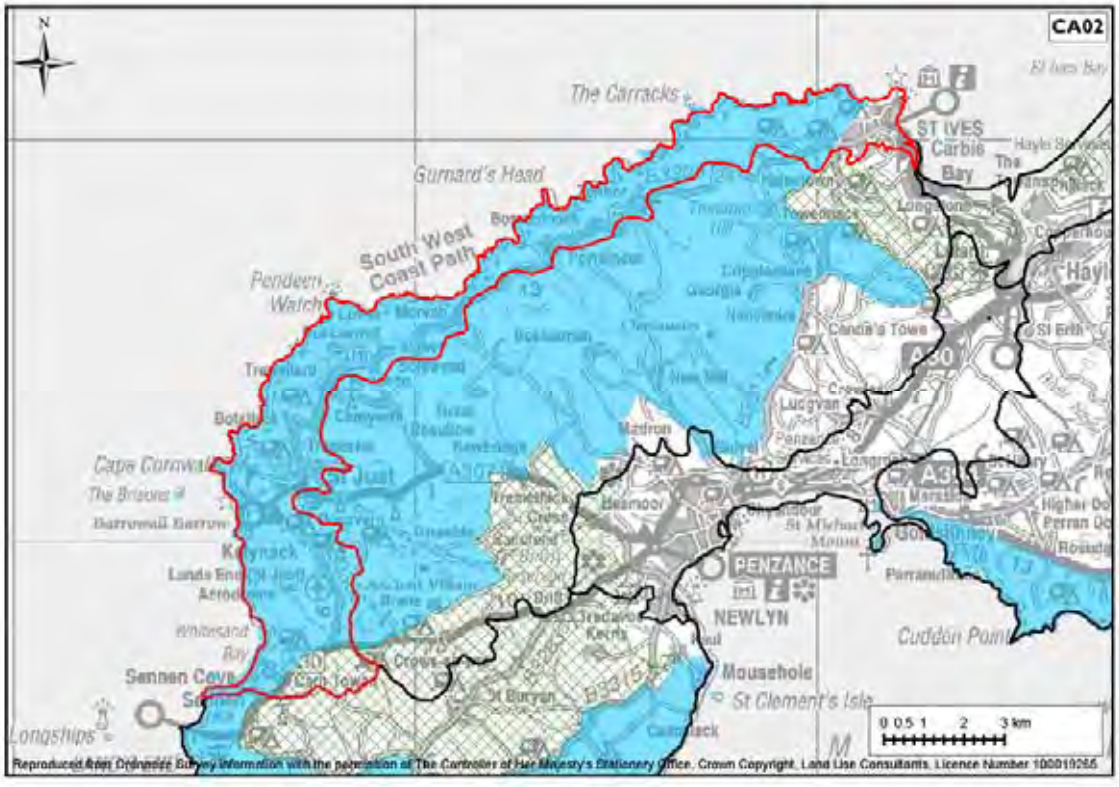
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (very small scale) outside the AONB**,** a **landscape without solar PV development** (except for very occasional very small scale well sited developments) within the AONB, and **no solar PV development** along the undeveloped rugged and wild coastal edge or its immediate hinterland. There may be more than one well sited very small scale development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. .
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development in sheltered folds in the landscape where it will be least visible and have least influence on landscape character – avoid prominent slopes or the rugged and wild coastal edge. • Avoid siting arrays within areas of very small, prehistoric fields and terraced bulb plots. • Preserve the strong field patterns, particularly relating to ancient fields by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Use existing landscape features, such as granite-faced Cornish hedges to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV developments within the HLC types of 'Rough Ground' and 'Prehistoric' fields – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the dramatic coastline and the relic flower-growing fields hugging the cliff edge as distinctive features of

	this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands) – ensure choice of site and scale of development does not detract from these. • Protect the sense of openness and being 'at one' with the sea, the stone faced hedgebanks and the small to medium scale fields that contribute to the scenic quality of the St Buryan AGLV.

CA02: West Penwith – (North and West Coastal Strip)

Key Landscape Characteristics[1]

- *Exposed coastal shelf.*
- *Sheer cliffs of jointed granite with significant headlands and small rocky coves.*
- *Predominantly pasture and some arable with large extent of coastal Lowland Heathland.*
- *Much scrub and bracken along coast and along small stream valleys with wetland including some wet woodland, fens and purple moor grass and rush pastures.*
- *Anciently enclosed land and prehistoric field pattern remains intact with distinctive treeless stone wall and Cornish hedge boundaries and extensive prehistoric remains.*
- *Extensive mining relics to west around St Just and Pendeen.*
- *Isolated villages with distinctive church towers.*
- *Main settlements: St Ives and St Just.*
- *Wide sandy beach backed by Coastal Sand Dunes in west at Sennen.*
- *Little modern clutter although there is tourism around St Ives and Sennen Cove*



[1] Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	An exposed, large-scale north- and west-facing coastal strip, gradually falling away from the more elevated inland areas (including the Penwith Central Hills) towards the sea. The land is interrupted by short narrow valleys, providing a contrasting smaller scale to the landscape. The rugged coastline is indented with numerous small rocky coves, boulder beaches, high, sheer cliffs and prominent headlands (from Cape Cornwall to Pendeen Watch and Bosigran; and eastwards towards the Island at St Ives).		
Land cover pattern and presence of human scale features	This is a landscape with mainly small, irregularly shaped fields (of prehistoric origin) enclosed by a network of distinctive granite hedges and stone walls constructed of massive boulders. There are some larger, more regular post-medieval fields on higher ground. There is a strong variety in landcover including pastoral farmland, scrub, bracken and rough pasture (in valleys cutting through the farmland to the coast) and coastal areas defined by stretches of open heathland hugging the indented coastline. Although this area is generally sparsely settled, numerous human scale features include farm buildings, Cornish hedges, and the remains of an extensive tin mining industry - (forming part of the Cornwall Mining World Heritage Site) including buildings, engine houses, pitheads, chimneys, shafts and rows of terraced miners' cottages.		
Tracks/transport pattern	This is a landscape containing few roads, and those that exist are predominantly narrow lanes bounded by Cornish hedges.		
Skylines	Although the LCA description does not refer specifically to skylines it notes the coastal cliff castles (Kenidjack Castle, Bosigran Castle Gurnard's Head) Pendeen Watch lighthouse, the distinctive chimney stack on Cape Cornwall, The Crowns engine houses on the cliffs at Botallack and the square church towers at Zennor, Morvah and St Just as distinctive features of the landscape. Along the extreme west and north coast the almost sheer cliffs form natural dramatic features in views.		
Perceptual qualities	This landscape is strongly influenced by the sea and has a wild, windswept character. Areas surrounding St Ives in the north and St Just and Whitesand Bay in the south are the most developed, while the linking coastal stretch is more remote, with much smaller settlements mainly concentrated along the B3306.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the large stretches of 'Rough Ground' along the coast and on the higher inland hills as of high vulnerability to wind turbine development. 'Prehistoric Farmland', which covers a large proportion of the LCA, is also assessed as of high vulnerability to wind turbines. Patches of 'Post-Medieval' farmland, particularly in the west of the LCA, are assessed as of 'moderate' vulnerability, whilst small areas of 'Modern' enclosures ('Amalgamation of AEL' and 'Intakes') are classed as of 'low-moderate' and 'low' vulnerability respectively. Small areas of 'Industrial-Relict' land are classed as of 'moderate' vulnerability, whilst areas of modern development / settlement within this landscape are deemed as of 'low-moderate' vulnerability to wind turbines.		
Distinctive landscape features	The LCA notes the large number of prehistoric monuments; the various distinctive		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	prehistoric field patterns and hedges; granite farmsteads; large boulders used in structures and lying in fields; the mining structures and features; the exposed coast and heath; the landmark churches at Zennor, Morvah and St Just, Pendeen Watch Lighthouse, the monumental chimney stack on Cape Cornwall and The Crowns engine houses on the cliffs at Botallack; and Sennen Cove with its sand dunes as distinctive features of the landscape. Some of these could be affected by wind energy development.		
Scenic quality			
	The majority of the LCA falls within the West Penwith Cornwall AONB (90% of the LCA is AONB). A large portion of the LCA is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the scale of the cliffs, the exposed moorland of the Penwith Downs and the skyline of granite outcrops, picturesque coves, the prominence and skylines of mining structures, and absence of buildings and structures on the uplands. A small corner of the south east lies within the St Buryan AGLV. Special qualities include the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature or the area, the sense of openness, and being 'at one' with the sea.		
Overall sensitivity assessment			
	The landscape's prehistoric landscape pattern, presence of human scale features, extensive areas of coastal rough ground, distinctive skyline features (including internationally important historic landmark features), remote nature and extremely high scenic quality mean that this LCA is considered to have a **high** sensitivity to wind energy development. The rugged coastline and tracts of coastal heath would be of highest sensitivity.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	This majority of this LCA is highly sensitive to all sizes of turbines. The small scale historic field patterns and human-scale historic features mean that only the very smallest turbines may be accommodated adjacent to farm buildings. Areas of larger, more modern fields on the higher ground away from the coast, or associated with locations of existing modern development (e.g. around St Ives), might be less sensitive to 'small' turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The high sensitivity of the LCA and the small scale of the landscape patterns means that the majority of the LCA would be highly sensitive to any clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape without wind farms** with the exception of very occasional very small single turbines associated with existing buildings. There may however be distant views of wind energy development outside the LCA, which may be perceptible under conditions of good visibility.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments

	within this LCA: • Only the very smallest turbines may be accommodated adjacent to farm buildings – locate these away from the relatively remote rugged coastline and tracts of coastal heath. • Ensure siting of very small turbines does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such as cliff castles (Kenidjack Castle, Bosigran Castle Gurnard's Head), church towers, and internationally important mining remains (e.g. the chimney stack on Cape Cornwall and The Crowns engine houses). • Consider views from local viewpoints and popular routes (eg. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – ensure development does not detract from the sense of remoteness experienced along this path. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the scale of the cliffs, the exposed moorland of the Penwith Downs and the skyline of granite outcrops, picturesque coves, the prominence and skylines of mining structures, and absence of buildings and structures on the uplands) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Buryan AGLV (particularly the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	An exposed, large-scale north- and west-facing coastal strip, gradually falling away from the more elevated inland areas (the slopes of the Penwith Central Hills, over 140m AOD) towards the sea. The land is interrupted by short narrow valleys, providing a contrasting smaller scale to the landscape. The rugged coastline is indented with numerous small rocky coves, boulder beaches, high, sheer cliffs and prominent headlands (from Cape Cornwall to Pendeen Watch and Bosigran; and eastwards towards the Island at St Ives).
Sense of openness / enclosure	This is an open and exposed landscape strongly influence by the coast. As such there is very limited tree cover across the plateau and coastal strip, whilst the valleys contain patches of willow carr and scrub. Fields are enclosed by distinctive granite hedges and stone walls, often constructed from large granite boulders with no vegetation cover.
Field pattern and scale	Small, irregularly shaped fields of prehistoric origin are particularly associated with this landscape, dating back up to 3,500 years. This is supplemented by a well-preserved pattern of subsequent modification and adaptation, including some areas of more regular modern fields resulting from piecemeal enclosure in recent decades. 19th century smallholders' rectangular fields are a strong feature of the mining landscape between Pendeen and St Just (part of the Cornish Mining World Heritage Site). The coastal strip is characterised by open heathland providing a contrast in scale and texture.
Landcover	Landcover consists mainly of pastoral farmland with some small areas of arable land and areas of semi-natural landcover in valleys cutting through the farmland and along the coast.
Perceptual qualities	This landscape is strongly influenced by the sea and has a wild, windswept character. Areas surrounding St Ives in the north and St Just and Whitesand Bay in the south are the most developed, while the linking coastal stretch is more remote, with much smaller settlements mainly concentrated along the B3306.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the large stretches of 'Rough Ground' along the coast and on the higher inland hills strip as of high vulnerability to development. 'Prehistoric' farmland, which covers a large proportion of the LCA, is also assessed as of 'high' vulnerability to solar PV development. Patches of 'Post-Medieval' enclosures in the west of this LCA are classed as of 'moderate' vulnerability, whilst small areas of 'Modern' enclosure ('Intakes' and 'Amalgamation of AEL') are assessed as of 'low-moderate' and 'low' vulnerability respectively. Areas of 'Industrial-Relict' land are classed as of 'moderate' vulnerability.
Distinctive landscape features	The LCA notes the large number of prehistoric monuments; the various distinctive prehistoric field patterns and hedges; granite farmsteads; large boulders used in structures and lying in fields; the mining structures and features; the exposed coast and heath; the landmark churches at Zennor, Morvah and St Just, Pendeen Watch Lighthouse, the monumental chimney stack on Cape Cornwall and The Crowns engine houses on the cliffs at Botallack; and Sennen Cove with its sand dunes as distinctive features of the landscape. Some of these could be affected by solar PV

Criteria	Lower sensitivity	⟷	Higher sensitivity
	development.		
Scenic quality	The majority of the LCA falls within the West Penwith Cornwall AONB (90% of the LCA is AONB). A large portion of the LCA is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands. A small corner of the south east lies within the St Buryan AGLV. Special qualities include the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature or the area, the sense of openness, and being 'at one' with the sea.		
Overall sensitivity assessment	The landscape's rugged and prominent coastline, prehistoric field pattern, dominance of permanent pasture and coastal rough ground, relative sense of remoteness and high scenic quality mean this LCA is considered to have a high sensitivity to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	This LCA is highly sensitive to all scales of solar PV development, except for the smallest scale schemes linked to existing buildings and settlement.		

Landscape strategy and Guidance for Solar PV Development

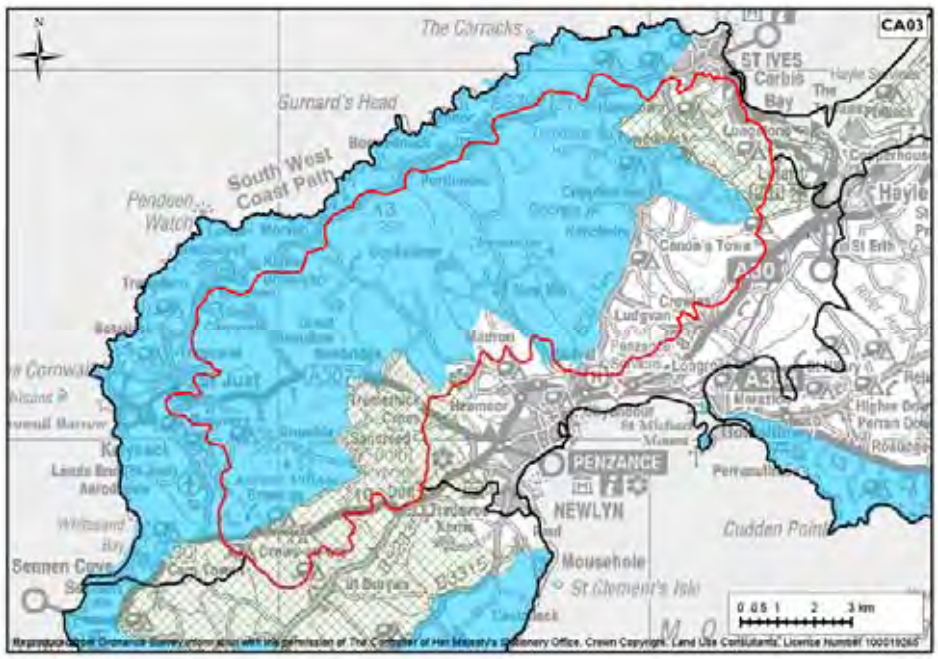
Landscape strategy	The landscape strategy is for **a landscape without solar PV developments** (except for very small very occasional developments associated with existing buildings and settlement).
Siting Guidance	See Annex 3of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Only very small scale developments, linked to existing buildings/settlement will be able to be accommodated in this area. • Locate development in sheltered folds in the landscape where it will be least visible and have least influence on landscape character – avoid locating development on valley and coastal slopes or other steep slopes (related to the Penwith Central Hills) where PV panels would be particularly visible. • Use existing landscape features, such as granite-faced Cornish hedges, to screen development wherever possible, ensuring that any screening provided is in character with the landscape. • Prevent damage to the landscape's small-scale road network during the installation phase (including through road widening and the removal / cutting back of Cornish hedges) • Ensure any new buildings constructed as part of a solar PV development match the local vernacular, in terms of colours used and scale. Utilise existing farm buildings to house inverters wherever possible.

	• Avoid siting solar PV developments within the HLC types of 'Prehistoric Farmland' and 'Rough Ground'– assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape, and avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the large number of prehistoric monuments; the distinctive prehistoric field patterns; granite hedges; the mining structures and features; the exposed coast and heath; the landmark churches at Zennor, Morvah and St Just, Pendeen Watch Lighthouse, the monumental chimney stack on Cape Cornwall and The Crowns engine houses on the cliffs at Botallack; and Sennen Cove with its sand dunes as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands) – ensure choice of site and scale of development does not detract from theseLandscape strategy • Protect the sense of openness and being 'at one' with the sea, the stone faced hedgebanks and the small to medium scale fields that contribute to the scenic quality of the St Buryan AGLV. •

CA03: Penwith Central Hills

Key Landscape Characteristics[1]

- *Core of an exposed, windswept granite peninsula rising to a chain of gently rounded hills with prominent rocky outcrops.*
- *Rugged boulder-strewn moorland of Lowland Heathland, bracken and scrub on the upland areas.*
- *Open landscape with few trees except linear broadleaved woodland in small river valleys, shallow depressions and around farmsteads.*
- *Prominent rocky outcrops.*
- *Internationally important concentration of archaeological remains from Neolithic, Bronze and Iron Ages through to the medieval and post-medieval periods, with extensive remains of post-medieval mining.*
- *Historically important, small scale, field pattern with sinuous boundaries, much of it of prehistoric origin. Hedges often drystone, without earth.*
- *Dispersed small granite farmsteads and small nucleated hamlets/villages.*
- *Pasture and rough ground dominate with some arable/horticulture to the south and east.*
- *Highly visible evidence of tin mining, china clay and quarrying.*
- *Extensive views to north and south coast from highest hills.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale			An arc of gently rounded hills with occasional prominent rocky outcrops, forming the core of the West Penwith peninsula. Valleys form parallel ridges running south-eastwards. This landscape varies in scale from the larger scale undulating hills, to the more enclosed, smaller scale river valleys. Medium to small scale valleys drain the uplands to the south east and shorter, smaller scale, valleys drain north to the sea.
Land cover pattern and presence of human scale features			The landscape has a strong varied field pattern of small scale fields (of prehistoric origin) in the valleys and lower ridges with some larger, rectilinear fields (of post medieval and modern origin) and unenclosed moorland on higher ground. The landscape has a fine and detailed grain of human detail that includes a rich, dense and finely detailed occurrence of visible historic and prehistoric remains and features of often millennia of continuous human occupation. Other human scale features include farmsteads, former mining buildings, caravan sites (near Carbis Bay), Cornish hedges and occasional trees associated with farmsteads.
Tracks/transport pattern			This landscape contains few lanes or vehicular tracks, with the A307 and A30 crossing only the south eastern end of the area. Minor tracks and lanes provide access across the ridges while some of the moorland areas remain undisturbed with no tracks (including around Carnyorth Common, Woon Gumpus Common, Chun Downs, Wathc Croft, Carn Galver, Treen Common Beagletodn Downs, Amalveor Downs, and Rosewall Hill).
Skylines			Although the LCA description does not refer specifically to skylines, it notes an arc of bare rounded hills with prominent rocky outcrops and also highlights various historic hilltop structures which form landmarks including Roger's Tower at Castle-an-Dinas, Greenburrow engine house near Ding Dong and Knill's Monument adjoining Steeple Woods near St Ives. A granite quarry breaks the skyline at Castle-an-Dinas.
Perceptual qualities			This landscape offers contrasting areas of wild, exposed, virtually unsettled moorlands with more managed agricultural areas of fields along the upper valley slopes. Aside from small areas associated with settlement around St Ives in the north, this LCA has a strong sense of remoteness and tranquillity.
Historic landscape character			Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the landscape's 'Prehistoric' fields as of high vulnerability to development, along with the areas of 'Upland Rough Ground' on the higher hills summits and small areas of 'Ornamental' land. Small areas of 'Medieval Farmland' on higher slopes are assessed as of 'moderate-high' vulnerability whilst areas of 'Post medieval Farmland' are assessed as of 'moderate' vulnerability. Small areas of '20th century Farmland (amalgamations of Anciently Enclosed Land)' in the south and a reservoir are assessed as of 'low-moderate' vulnerability, whilst some areas of '20th century Farmland (intakes)' scattered throughout the LCA, are deemed as of 'low' vulnerability.
Distinctive landscape features			The LCA describes the spectacular rocky carns (Carn Galver, Carn Kenidjack, Chapel Carn Brea, Watch Croft, etc), the rounded outlines of the upland moors, numerous prehistoric structures (including quoits, standing stones and forts such as Lanyon Quoit, Men-antol, and Chun Castle as well as settlements like Chysauster),

Criteria	Lower sensitivity	⟷	Higher sensitivity
	landmark hilltop structures; Knill's Monument adjoining Steeple Woods near St Ives, Roger's Tower at Castle-an-Dinas, and Greenburrow engine house near Ding Dong and Madron Carn as distinctive features of this landscape. These features are frequent throughout the LCA and could be affected by wind energy development.		
Scenic quality	Large parts of the LCA fall within the West Penwith Cornwall AONB (68% of the LCA is AONB). A large part is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the scale of the cliffs, the exposed moorland of the Penwith Downs, the skyline of granite outcrops, picturesque coves and the prominence and skylines of mining structures. The south eastern corner of the LCA lies within the St Buryan AGLV. Special qualities include the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea. A small area in the north east lies within the Halestown & St. Ives Bay AGLV. Special qualities include the wild nature of the dunes, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, and the coastal strip which forms part of the coastal panorama across St Ives Bay.		
Overall sensitivity assessment	Although this LCA has a large scale landform, the undeveloped and distinctive skyline formed by the arc of hills, the remote and wild perceptual character, the presence of historic skyline features, the presence of large area of unenclosed moorland, and the particularly high scenic quality mean that this LCA is considered to have a **high** sensitivity to wind energy development.		
Recommendations on turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The high sensitivity of this landscape means this landscape is likely to be particularly sensitive to any turbines greater than very small scale. The unenclosed moorland would be particularly sensitive to any turbines.		
Recommendations on cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The high sensitivity of the LCA and the small scale of the landscape patterns means that the LCA would be highly sensitive to any clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings)and **no turbines** in the unenclosed moorland.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Only the very smallest turbines may be accommodated adjacent to farm buildings in farmed areas (do not locate in unenclosed heath). • Ensure wind energy development does not dominate, or prevent the

	understanding and appreciation of, historic landmarks on the skyline, including Roger's Tower at Castle-an-Dinas, Greenburrow engine house near Ding Dong and Knill's Monument adjoining Steeple Woods near St Ives. • Ensure wind energy development does not adversely affect the spectacular rocky carns (Carn Galver, Carn Kenidjack, Chapel Carn Brea, Watch Croft, etc), the rounded outlines of the upland moors, numerous prehistoric structures (including quoits, standing stones and forts such as Lanyon Quoit, Men-antol, and Chun Castle as well as settlements like Chysauster), and landmark hilltop structures as distinctive features of this landscape. • Consider views from local viewpoints and popular routes when considering the siting and design of wind energy development in the landscape (eg the remote hilltops, and viewpoint at Carn Brea) – ensure development does not detract from the sense of remoteness experienced in these areas. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the scale of the cliffs, the exposed moorland of the Penwith Downs and the skyline of granite outcrops, picturesque coves, the prominence and skylines of mining structures) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Buryan AGLV (particularly the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea) - ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Halestown & St. Ives Bay AGLV (particularly the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, the coastal strip which forms part of the coastal panorama across St Ives Bay) - ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	An arc of gently rounded hills with occasional prominent rocky outcrops, forming the core of the West Penwith peninsula. Valleys form parallel ridges running south-eastwards. The landscape's prominent upper slopes and valley sides are the most sensitive landform types.
Sense of openness / enclosure	The landscape includes significant areas of open, unenclosed moorland on higher ground in the north. The wooded valleys provide a contrasting sense of enclosure to an otherwise open and treeless landscape.
Field pattern and scale	There is a distinctive patchwork pattern of small scale fields (of prehistoric origin) in the valleys and on lower ridges with larger, rectilinear fields of post medieval and modern origin on higher ground. Unenclosed upland commons are characteristic of the higher hill summits and slopes.
Landcover	Predominantly agricultural land (mainly pasture but including areas of arable and horticultural land) interspersed with areas of large scale, unenclosed moorland on higher ground in the north and broadleaved woodland in the valley bottoms.
Perceptual qualities	This landscape offers contrasting areas of wild, exposed, virtually unsettled moorlands with more managed agricultural areas of fields along the upper valley slopes. Aside from small areas associated with settlement around St Ives in the north this LCA has a strong sense of remoteness and tranquillity.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the landscape's 'Prehistoric' fields as of high vulnerability to development along with the areas of 'Upland Rough Ground' on the higher hills summits (which combine to make up a significant proportion of the LCA) and small areas of 'Ornamental' land. Small areas of 'Medieval Farmland' on higher slopes are assessed by the study as of 'moderate-high' vulnerability whilst areas of 20th century Farmland (intakes)' and areas of 'Post medieval Farmland' are assessed as of 'moderate' vulnerability. Small areas of '20th century Farmland (amalgamations of Anciently Enclosed Land)' in the south and a reservoir (south-east) are assessed by the study as of 'low-moderate' vulnerability.
Distinctive landscape features	The LCA describes the spectacular rocky carns (Carn Galver, Carn Kenidjack, Chapel Carn Brea, Watch Croft, etc), the rounded outlines of the upland moors, numerous prehistoric structures (including quoits, standing stones and forts such as Lanyon Quoit, Men-antol, and Chun Castle as well as settlements like Chysauster), landmark hilltop structures; Knill's Monument adjoining Steeple Woods near St Ives, Roger's Tower at Castle-an-Dinas, and Greenburrow engine house near Ding Dong and Madron Carn as distinctive features of this landscape. Some of these could be affected by solar PV development.
Scenic quality	Large parts of the LCA fall within the West Penwith Cornwall AONB (68% of the LCA is AONB). A large part is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands.

Criteria	Lower sensitivity	⟷	Higher sensitivity
	The south eastern corner of the LCA lies within the St Buryan AGLV Special qualities include the small to medium scale of the fields, the stone faced hedgebanks, St Buryan church tower as a dominant feature or the area, the sense of openness, and being 'at one' with the sea. A small area in the north east lies within the Halestown & St. Ives Bay AGLV. Special qualities include the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, the coastal strip which forms part of the coastal panorama across St Ives Bay.		
Overall sensitivity assessment			Although this LCA includes some more sheltered areas and most of this LCA is farmed (which could indicate lower sensitivity to solar PV development), the overriding sense of openness of the central hills, the prominent skylines and slopes, wild character, sense of remoteness, important prehistoric field patterns, areas of open moorland (and pastoral character around the moorland) and particularly high scenic quality increase levels of sensitivity so that overall the LCA is judged to have a **high** sensitivity to solar PV developments.
Recommendations on sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***			The high sensitivity and presence of very small scale prehistoric fields means that this landscape is likely to be particularly sensitive to most scales of solar PV development.

Landscape strategy and Guidance for Solar PV Development

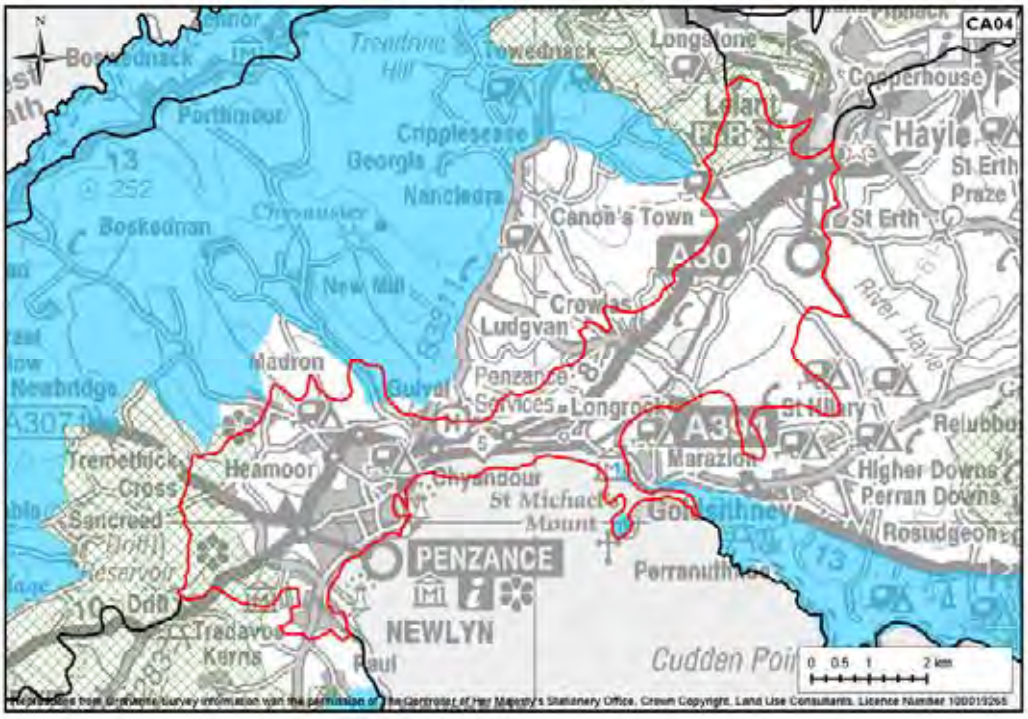
Landscape strategy	The landscape strategy is for **a landscape without solar PV developments** (except for very small very occasional developments associated with existing buildings and settlement in the settled farmed areas in the south and east (LDU 282).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development in sheltered folds in the landscape where it will be least visible and have least influence on landscape character – avoid prominent slopes or the rugged and wild coastal edge. • Avoid siting arrays within areas of very small, prehistoric fields and terraced bulb plots. • Preserve the strong field patterns, particularly relating to ancient fields by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Use existing landscape features, such as granite-faced Cornish hedges to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV developments within the HLC types of 'Rough Ground' and 'Prehistoric' fields – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape, and avoid locating solar PV development where it would be directly overlooked at close quarters.

	• Ensure solar PV development does not adversely affect the spectacular rocky carns, the rounded outlines of the upland moors, numerous prehistoric structures, or landmark hilltop structures as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the network of tiny irregular pasture fields, the seasonal patterns and colours resulting from arable, pastoral and horticultural use including potato and daffodil production, the extensive coastal heathland and moorland, and the absence of buildings and structures on the uplands) – ensure choice of site and scale of development does not detract from these. • Protect the sense of openness and being 'at one' with the sea, the stone faced hedgebanks and the small to medium scale fields that contribute to the scenic quality of the St Buryan AGLV..

CA04: Mount's Bay

Key Landscape Characteristics[1]

- *Large-scale extensive curving south-west facing bay and hinterland towards the western end of county.*
- *Large settlements, Penzance and Newlyn, concentrated at the western end of the bay.*
- *Mixed land cover of farmland in medium-scale pattern with wooded river valley.*
- *High quality arable and horticulture and some pasture.*
- *Exposed narrow natural open flat foreshore with St Michael's Mount the major landmark.*
- *St Michael's Mount occupies a high, small, rocky island linked to the mainland by a causeway to Marazion.*
- *Large area of Reedbeds and open water with Saline Lagoon at Marazion Marsh*
- *Well wooded, with many small farm woodlands, Wet Woodland in valleys, many hedgerow trees and characteristically tall Cornish hedges, particularly along the lanes.*
- *Intimate and contained natural river floodplain, internally unenclosed with ribbon development along edges.*
- *Main rail and road communications corridor.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	This is a large-scale extensive curving south-west facing bay and hinterland. It is a gently rolling landscape consisting of a low lying coastal area surrounding the expansive curving Mount's Bay and extending northwards to Hayle, following the course of the Hayle River in the form of a relatively shallow valley. St Michael's Mount forms a small but distinctive landform feature off the coast at the eastern edge of the area.		
Land cover pattern and presence of human scale features	Inland, the small to medium scale field pattern and mixture of pasture and arable farmland provides a relatively simple landcover. There are a few areas of larger, more regular post medieval fields west and south-west of the Hayle estuary, at the south-eastern tip of the LCA and to the north and west of Penzance. Variety is provided by narrow linear bands of woodland following water courses and associated with parkland estates and small conifer plantations (in the south-east). Human scale features include scattered small farmsteads, Cornish hedges (particularly along the lanes) and many hedgerow trees.		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A30. There are relatively few restrictions in terms of narrow hedged lanes, although some less frequently used lanes are often winding and well hedged.		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the presence of historic landmark features including St Michael's Mount rising out of the sea at the eastern end of Mount's Bay, and Lescudjack Iron Age hillfort in Penzance. Additional distinctive features include the church towers of Ludgvan, Gulval and Madron and St Mary's in Penzance. Although St Michael's Mount is a particularly important skyline feature, it is located on the edge of the LCA.		
Perceptual qualities	The south-west end of this LCA is dominated by development of Penzance and Newlyn, and there are some settlements alongside the route of the A30 such as Crowlas, Canonstown and Longrock. Some less densely settled, more tranquil areas are to be found in the north east of the area (just north of Truthwall). The heliport at Penzance forms a distinctive feature along the seafront, eroding perceptions of tranquillity in this location.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses large areas of 'Prehistoric' fields, areas of 'Ornamental' land, 'older Settlement core (pre-1907)' and small areas of 'Coastal Rough Ground' as of high vulnerability to wind turbine development. Large areas of 'Medieval Farmland', predominantly in the north-east of the LCA, and areas of 'Natural Water' are assessed by the study as of 'moderate-high' vulnerability. Smaller patches of 'Post-Medieval Farmland' are assessed as of 'moderate' vulnerability, and scattered locations of '20th Century Farmland', 'Plantation and Scrub', and 'Communications' are classed as of low vulnerability to wind turbine development.		
Distinctive landscape features	The LCA describes the seasonal use of plastic sheeting for crop protection, random granite boulder sea defences along coast and sea defences; St Michael's Mount and its causeway (which is visible at low tide); The tower of St Mary's Church in Penzance; Ludgvan, Gulval and Madron church towers; the heliport; the harbours at Newlyn and Penzance as distinctive features of the landscape. Some of these features could		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	be affected by wind energy development.		
Scenic quality	St Michael's Mount falls within the 'South Coast – Western' (Lizard to Marazion & Helford River) part of the Cornwall AONB (this forms under 2% of the LCA). Qualities that may particularly be affected by wind energy development are the distinctive silhouette of St Michael's Mount visible across all of Mounts Bay, and the prominence and skyline of historic engines houses on the cliffs. A small part of the western end of the LCA falls within the St Buryan AGLV – special qualities include its small to medium scale of the fields, stone faced hedgebanks, St Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea. The northern tip of the LCA falls within the Halsetown and St Ives Bay AGLV [NB the paper map of St Buryan AGLV includes area around Penzance/Newlyn in the AGLV, whilst GIS does not] – special qualities include the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, the coastal strip which forms part of the coastal panorama across St Ives Bay.		
Overall sensitivity assessment	Although the large landform scale, largely simple landcover pattern, and existing human influence could indicate lower sensitivity to wind energy development, the presence of prehistoric fields and the presence of St Michael's Mount and Lescudjack Iron Age hillfort as skyline features increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development. The coastline around St Michael's Mount and its immediate hinterland (and St. Michael's Mount itself) and the areas of prehistoric fields would be particularly sensitive. St Michael's Mount itself (designated as part of the AONB) would have a **high** sensitivity.		
Recommendations on turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the landform is of relatively large scale, the presence of varied small to medium scale land cover patterns and frequent human scale features mean that this landscape is likely to be particularly sensitive to 'large' turbines. The coastline around St Michael's Mount (and St. Michael's Mount itself) would be particularly sensitive to any turbines and the areas of prehistoric fields would be particularly sensitive to any except the smallest turbines.		
Recommendations on cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The scale of the landform and landcover patterns means that the LCA is likely to be particularly sensitive to 'medium', 'large' and 'very large' scale clusters of wind turbines. The coastline around St Michael's Mount (and St. Michael's Mount itself) would be particularly sensitive to any turbines and the areas of prehistoric fields would be particularly sensitive to anything except single turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines, or possibly small clusters**, comprising turbines up to and including medium scale (or single very small turbines in areas of prehistoric fields) and **no turbines** along the undeveloped coast around St Michael's Mount (and St. Michael's Mount itself). There may be more than one cluster of turbines in the LCA, but they should be clearly

	separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid siting turbines on the coastal edge around St Michael's Mount, or on St. Michael's Mount itself. • Consider locating wind energy development on brownfield sites, or relating to businesses and industrial areas around Penzance. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such St Michael's Mount, Lescudjack hillfort and the church towers at St Mary's Church in Penzance, Ludgvan, Gulval and Madron. • Avoid siting turbines within the HLC Types of 'Ornamental' land, 'older Settlement core (pre-1907)' and 'Coastal Rough Ground' - assessed by Cornwall Council as being highly vulnerable to wind farm development. • In areas of the smallest prehistoric fields only single very small turbines will be suitable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Protect the factors which contribute to the scenic quality of the Cornwall AONB around St Michael's Mount (particularly the distinctive silhouette of St Michael's Mount visible across all of Mounts Bay, and the prominence and skyline of historic engines houses on the cliffs) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Buryan AGLV (particularly its small to medium scale of the fields, stone faced hedgebanks, St Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Halsetown and St Ives Bay AGLV (particularly the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, the coastal strip which forms part of the coastal panorama across St Ives Bay) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	This is a gently undulating lowland landscape with some visible slopes (particularly on steeper valley sides and along the coast).
Sense of openness / enclosure	The coastal strip is the most open and exposed in this area. The remainder of the landscape (with the exception of urban areas) is relatively well wooded including wet woodland in the valleys, small farm woodlands and many hedgerow trees. Cornish hedges with tall plant growth enclose the landscape's fields.
Field pattern and scale	The landscape has a strong pattern of irregular, small fields of prehistoric origin (particularly in the centre and the west where it links with West Penwith) and medium sized field of medieval origin (particularly in the east) with a few areas of modern, larger, regular fields (just south-west of the Hayle estuary, the south east tip of the LCA, and to the north and west of Penzance).
Landcover	Predominantly agricultural land – a mixture of pasture and arable (including vegetable and horticultural use), with some semi-natural landcover along the river corridor and along the coastal strip. Includes the seasonal use of plastic sheeting for crop protection.
Perceptual qualities	The south-west end of this LCA is dominated by development of Penzance and Newlyn, and there are some settlements alongside the route of the A30 such as Crowlas, Canonstown and Longrock. Some less densely settled, more tranquil areas are to be found in the north east of the area (just north of Truthwall). The heliport at Penznace forms a distinctive feature along the seafront, eroding perceptions of tranquillity in this location. Areas of intensive farming also convey a human influence to the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses large areas of 'Prehistoric' fields, 'Ornamental' land and small areas of 'Coastal Rough Ground' as of high vulnerability to solar PV development. Large areas of 'Medieval Farmland', particularly in the north-east, are assessed by the study as of 'moderate-high' vulnerability, whilst smaller areas of 'Post-Medieval Farmland' are assessed as of 'moderate' vulnerability. Small scattered areas of '20th Century Farmland' are classed as of low vulnerability to solar PV development.
Distinctive landscape features	The LCA describes the seasonal use of plastic sheeting for crop protection, random granite boulder sea defences along coast and sea defences; St Michael's Mount and its causeway (which is visible at low tide); the tower of St Mary's Church in Penzance; Ludgvan, Gulval and Madron church towers; the heliport; the harbours at Newlyn and Penzance as distinctive features of the landscape. Few of these features would be affected by solar PV development.
Scenic quality	St Michael's Mount falls within the 'South Coast – Western' (Lizard to Marazion & Helford River) part of the Cornwall AONB (this forms under 2% of the LCA). Qualities that may particularly be affected by solar PV development are the extensive waterside reedbeds, the elemental qualities of the coastline as seen across Mount's Bay, the permanent greens of improved pasture, and the field patterns. A small part of the western end of the LCA falls within the St Buryan AGLV – special qualities include its small to medium scale of the fields, stone faced hedgebanks, St

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Buryan church tower as a dominant feature of the area, the sense of openness, and being 'at one' with the sea. The northern tip of the LCA falls within the Halsetown and St Ives Bay AGLV – special qualities include the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, the coastal strip which forms part of the coastal panorama across St Ives Bay.		
Overall sensitivity assessment			
	Although the generally lowland landform, sense of enclosure away from the coast, presence of existing human influence, predominance of agricultural land (including arable land and use of plastic sheeting) could indicate a lower sensitivity to solar PV development, the presence of rare 'Prehistoric' fields, the presence of some visible slopes (particularly on steeper valley sides and along the coast), and the open and naturalistic character of the coastline increase levels of sensitivity to solar PV development. Overall, the LCA is judged to be of **moderate** sensitivity to solar PV development. The undeveloped and naturalistic coastal strip and its immediate hinterland would be particularly sensitive. St Michael's Mount itself (designated as part of the AONB) would have a **high** sensitivity		
Recommendations on sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The presence of a strong pattern of irregular, small fields of prehistoric and medieval origin means that the landscape is likely to be particularly sensitive to 'large' size categories.		

Landscape strategy and Guidance for Solar PV Development

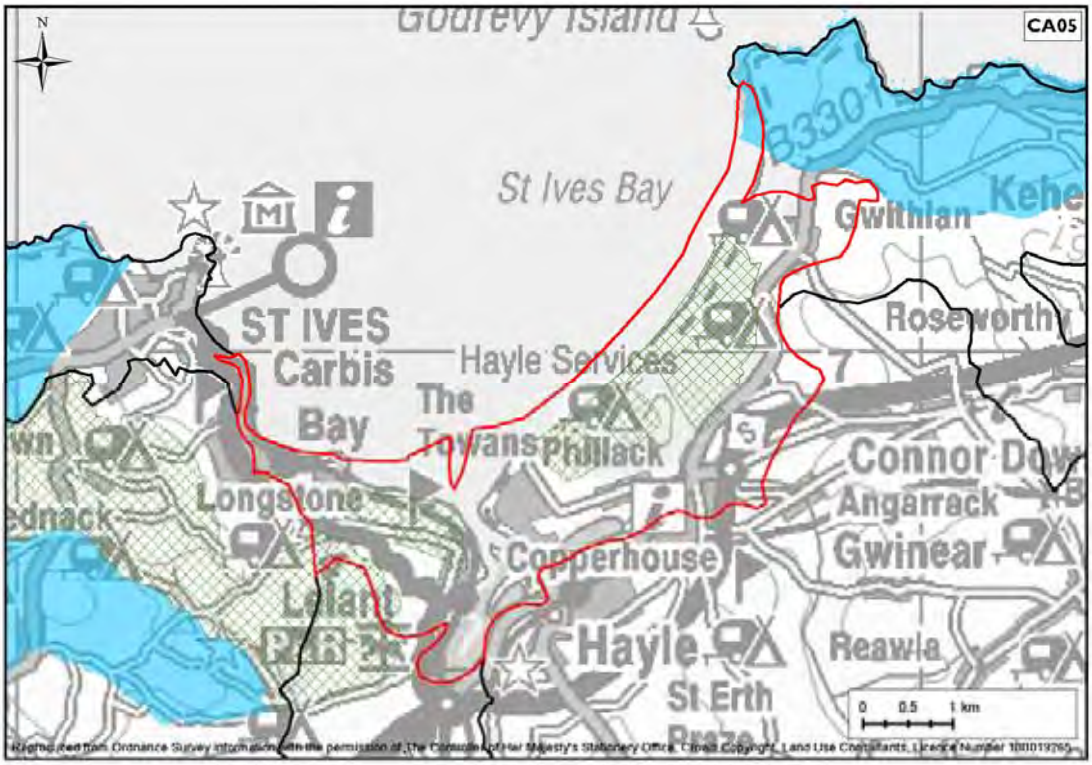
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** up to and including medium size (size should relate to field scale which is smaller in the west) and **no solar PV development** along the undeveloped coastal edge and its immediate hinterland or on St. Michael's Mount (in the AONB). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on steeper valley pr coastal slopes, or along the naturalistic coastal edge (and particularly around St Michael's Mount). • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Use existing landscape features, such as woodlands, tree belts and high Cornish hedges to screen development and ensure that any additional screening provided is in character with the landscape. • Avoid siting solar PV within the HLC Types of 'Prehistoric' fields, areas of 'Ornamental' parkland and small areas of 'Coastal Rough Ground' - assessed by Cornwall Council as being highly vulnerable to solar PV development.

	• Ensure development is in scale with the landscape – areas of smaller medieval fields might require smaller developments. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Ensure solar PV development does not adversely affect the random granite boulder sea defences along coast or St Michael's Mount and its causeway (which is visible at low tide) as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB around St Michael's Mount (particularly the extensive waterside reedbeds, the elemental qualities of the coastline as seen across Mount's Bay, the permanent greens of improved pasture, and the field pattern) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Buryan AGLV (particularly its small to medium scale of the fields, stone faced hedgebanks, the sense of openness, and being 'at one' with the sea) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Halsetown and St Ives Bay AGLV (particularly the wild nature of the dunes, the semi-natural habitats between St Ives and Halsetown, the small green fields surrounded by stone hedges, wooded area around Trevethoe House, and the coastal strip which forms part of the coastal panorama across St Ives Bay) – ensure choice of site and scale of development does not detract from these.

CA05: St Ives Bay

Key Landscape Characteristics[1]

- *Wide curving bay with long sandy beaches.*
- *Wide alluvial estuary at Hayle with Intertidal Mudflats, Saline Lagoons at Copperhouse Pool and Carnsew Pool, Coastal Saltmarsh and Reedbeds.*
- *Extensive Coastal Sand Dunes rising to 72m AOD.*
- *Caravan and chalet development on dunes.*
- *Small settlements of Lelant, Phillack and Gwithian.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A wide, curving bay with long sandy beaches backed by extensive sand dunes (Towans) which are distinctive features reaching over 70 metres in height. The LCA includes the Hayle estuary, comprising expansive mudflats which contribute to the large scale of the landscape. Behind the bay, land rises gently up towards the higher land of the Connor Downs (CA06) and the ridge behind Carbis Bay in the west (CA03). The bay is enclosed by prominent rocky headlands, including Porthminster Point in the west and Godrevy Point in the east (CA28).		
Land cover pattern and presence of human scale features	A large part of the area comprises extensive sand dunes backing the sandy bay, fringed by development and agricultural land. The majority of the agricultural land is characterised by large regular fields of post-medieval origin (the largest area lies between Lelant and Carbis Bay) with areas of medieval fields around the church towns of Lelant and Gwithian. Human scale features include holiday chalets, fishing boats, quays, bridges, hedges and individual Monterey pine / cypress trees.		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A30 and A3074 and the B3301. There are relatively few restrictions in terms of narrow hedged lanes.		
Skylines	The LCA description's only reference to skyline is in relation to the pylons that '*dominate the skyline around the Hayle sub-station and former power station*'. The LCA description also highlights the 19th century Godrevy Lighthouse which forms a landmark in the bay and the 19th and early 20th earthwork remains of the National Explosive Works at Upton Towans.		
Perceptual qualities	The natural beauty of the coast (particularly the sand dunes) has been significantly affected by 20th century urban and tourism-related development, although relatively remote areas do remain. Extensive post-war holiday and chalet developments are features within the dunes on the east side of the Hayle estuary and along the coast near Gwithian. The West Cornwall Golf Course is also situated on the western banks of the Hayle. This is a landscape with a strong human influence.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses areas of 'Rough Ground' associated with relict industry at Upton Towans as of high vulnerability to wind turbine development, as are the strips of 'Coastal Rough Ground' fringing the bay. Areas of medieval fields remaining in inland locations are assessed as of moderate-high vulnerability, whilst patches of 'Post-Medieval (Intakes)' and 'Modern' land are classed as of moderate and low vulnerability respectively. Areas of land under recreational uses, such as the golf course on the western edge of the Hayle Estuary, are assessed as of moderate vulnerability, whilst locations of modern development/settlement are classed as of low-moderate vulnerability to wind turbine development.		
Distinctive landscape features	The LCA description notes the sandy beaches, extensive dunes, tidal estuary, the historic port at Hayle, the mix of enclosed field patterns and the explosive works at Upton Towans as distinctive features of the landscape. Some of these could be sensitive to wind energy development.		
Scenic quality			

Criteria	Lower sensitivity	⟷	Higher sensitivity
	A significant proportion of the LCA falls within the Halsetown & St Ives Bay AGLV. The wild nature of the dunes and the coastal panorama across St Ives Bay, which are noted as important features of this AGLV, could be affected by wind energy development. Under 1% is in the Cornwall AONB.		
Overall sensitivity assessment	Although the large scale landform, presence of large regular fields, presence of tracks, and existing human influence could indicate lower sensitivity to wind energy development, the distinctive landform of the dunes, presence of human scale features, significant tracts of semi-natural habitat (particularly sand dunes), frequent human-scale features (including holiday chalets, fishing boats, quays, bridges, hedges and distinctive Monterey pine / cypress trees), occasional relatively remote areas within the dunes, and the value of the landscape in the coastal panorama across St Ives Bay increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development (**moderate-high** within the AONB). The landscape's remaining areas of undeveloped, wild sand dunes would be particularly sensitive to the development of wind turbines.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large, the scale of the landcover pattern and presence of frequent human-scale features means that this landscape would be particularly sensitive to 'large' turbines. The landscape's remaining areas of undeveloped, wild sand dunes would be sensitive to the development of any wind turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the landform is relatively large, the scale of the landcover pattern and presence of frequent human-scale features means that this landscape would be particularly sensitive to 'medium', 'large' and 'very large' turbine clusters. The landscape's remaining areas of undeveloped, wild sand dunes would be sensitive to the development of any wind turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines**, comprising turbines up to and including 'medium' size, with **no turbines** in the remaining areas of undeveloped, wild sand dunes. There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the more remote parts of the bay, particularly the remaining areas of undeveloped, wild sand dunes. • Associate wind turbines with existing buildings (e.g. farm buildings, golf clubhouses and holiday park sites) creating a functional link between the turbines and their users. • Ensure tracks associated with development do not damage historic field patterns

	(particularly around Lelant and Gwithian) and ensure minimum disturbance of traditional Cornish hedges, replacing any hedgebanks affected by development. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of landmarks on the skyline, including the landmarks of Godrevy Lighthouse and remains of National Explosive Works at Upton Towans. • Avoid siting turbines on areas of 'Rough Ground' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the sandy beaches, extensive dunes, tidal estuary, the historic port at Hayle, the mix of enclosed field patterns and the explosive works at Upton Towans as distinctive features of the landscape. • Protect the scenic qualities of the Halsetown & St Ives Bay AGLV, particularly the wild quality of the sand dunes and coastal panoramas across St Ives Bay.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	Generally this is a gently undulating lowland landscape with some visible slopes and distinct landform features formed by the extensive sand dunes (Towans) reaching over 70 metres in height.
Sense of openness / enclosure	The coastal sand dunes, beaches, mudflats and saltmarshes are open and unenclosed, whilst agricultural land fringing the bay is bounded by low-cut Cornish hedges and hedgerows. Small areas of woodland provide enclosure around Lelant.
Field pattern and scale	Medieval fields are found around the church towns of Lelant and Gwithian, but elsewhere is characterised by large regular fields of post-medieval origin (the largest area lies between Lelant and Carbis Bay).
Landcover	The majority of the area is made up of extensive sand dunes backing the sandy bay, fringed by development and agricultural land. Agricultural land is mostly arable with improved and unimproved grassland in places. Low-lying areas just above the estuary are marshy in places as at Loggans Moor and Marsh Lane.
Perceptual qualities	The inherently wild characteristics of the coastal landscape (particularly the sand dunes) have been significantly affected by 20th century urban and tourism-related development. Extensive post-war holiday and chalet developments are features within the dunes on the east side of the Hayle estuary and along the coast near Gwithian. The West Cornwall Golf Course is also situated on the western banks of the Hayle. This is a landscape with a strong human influence.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the areas of 'Rough Ground' associated with relict industry at Upton Towans as of high vulnerability to solar PV development, as per the strips of 'Coastal Rough Ground' fringing the bay. Areas of medieval fields remaining in inland locations are assessed as of moderate-high vulnerability, whilst patches of 'Post-Medieval (Intakes)' and 'Modern' land are classed as of moderate vulnerability. Areas of land under recreational uses, such as the golf course on the western edge of the Hayle Estuary, are assessed as of moderate vulnerability.
Distinctive landscape features	The LCA description notes the sandy beaches, extensive dunes, tidal estuary, the historic port at Hayle, the mix of enclosed field patterns and the explosive works at Upton Towans as distinctive features of the landscape. Some of these could be sensitive to solar PV development.
Scenic quality	A significant proportion of the LCA falls within the Halsetown & St Ives Bay AGLV. The wild nature of the dunes and the coastal panorama across St Ives Bay, which are noted as important features of this AGLV, could be affected by solar PV development. Under 1% is in the Cornwall AONB.
Overall sensitivity assessment	Although the gently undulating landform, presence of mixed farmland (including arable land), and existing human influence could indicate lower sensitivity to solar PV development, the presence of visible slopes, sense of openness, presence of distinctive features (particularly the extensive dunes and field patterns), and the value of the landscape in the coastal panorama across St Ives Bay increase sensitivity to

Criteria	Lower sensitivity	⟷	Higher sensitivity
	solar PV development. Overall this LCA is considered to have a **moderate** sensitivity to solar PV development (**moderate-high** within the AONB). The landscape's remaining areas of undeveloped, wild sand dunes would be particularly sensitive to the development of wind turbines.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Due to the relatively limited extent of agricultural land in this LCA, this area would be particularly sensitive to 'medium' and 'large' sizes of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** located on lower slopes in more enclosed areas away from the coast and **no PV development** in the landscape's remaining areas of undeveloped, wild sand dunes. There may be more than one solar PV development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development within remaining areas of undeveloped, wild sand dunes and other coastal habitats where freedom from human activity and sense of naturalness are higher. • Avoid locating PV development on slopes close to the coastal edge, where PV panels would be particularly visible in panoramic views across the bay. • Aim to locate solar PV developments in folds and on lower slopes in more enclosed areas. • Preserve the strong field patterns, particularly relating to medieval fields around Lelant and Gwithian, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Use existing landscape features, such as Cornish hedges, hedgerows, Monterey pine / cypress trees, woodland and buildings to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting turbines on areas of 'Rough Ground' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the sandy beaches, extensive dunes, tidal estuary, the historic port at Hayle, the mix of enclosed field patterns and the explosive works at Upton Towans as distinctive features of the landscape. • Protect the scenic qualities of the Halsetown & St Ives Bay AGLV, particularly

	the wild quality of the sand dunes and coastal panoramas across St Ives Bay.

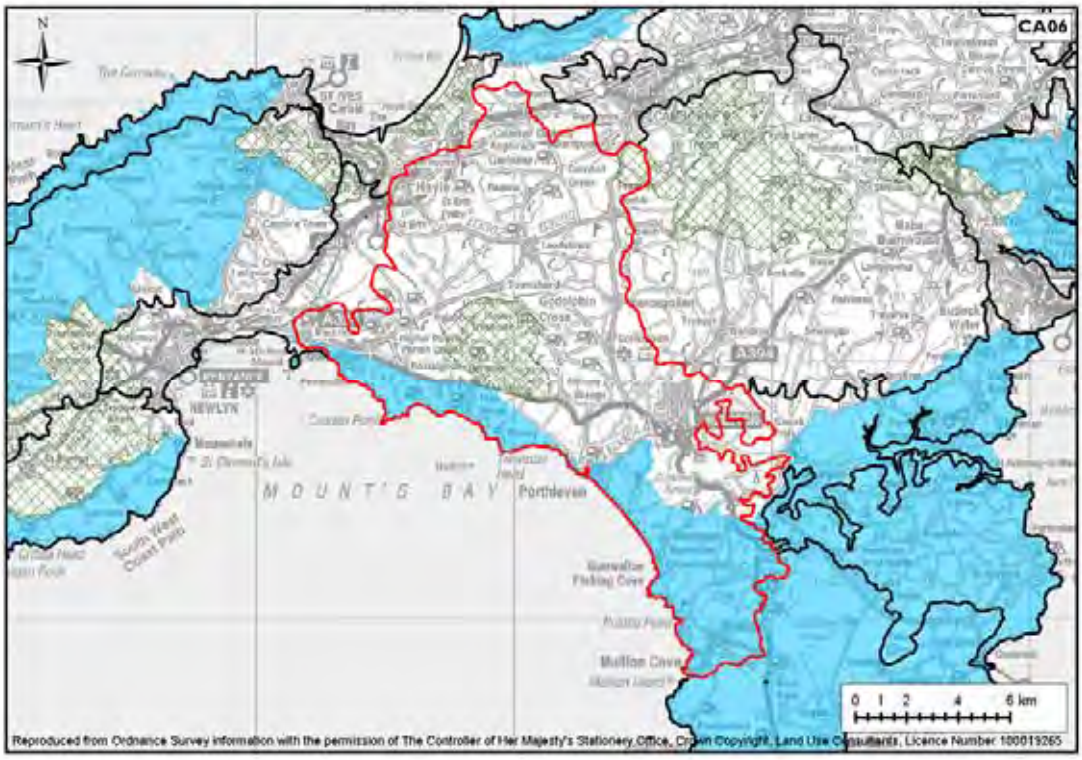
CA06: Mount's Bay East

Key Landscape Characteristics[1]

- *Very strong topography of high cliffs on coast, backed by gently undulating plateau intersected by distinctive flat-bottomed valleys.*
- *Distinctive natural hills at Godolphin and Tregonning Hills, with important relict prehistoric and later landscapes.*
- *Semi-natural vegetation on coastal strip, backed by anciently enclosed pastoral farmland and some woodland in valleys, with substantial areas of more recent enclosure.*
- *Long narrow sandy beaches, with juxtaposition of rock and sand on beach edge.*
- *Coastal strip interrupted by sand bar between sea and lake (Loe Pool), with unusual juxtaposition of fresh and seawater features.*
- *River valleys enclosed by woodland and wetland habitats, but dominated by agricultural use.*
- *Generally pastoral farming on small farms with improved pasture and well wooded, including estate plantations.*
- *Mix of improved and semi-improved grassland and occasional arable on plateau, with neutral grassland in valleys.*
- *Well vegetated hedges with some trees on boundaries. Some hedges very high and dominant with wealth of wildflowers.*
- *Extensive areas of mining remains over much of the central and northern portion of the LCA, part of the Tregonning and Gwinear WHS mining district. Spectacular cliff edge engine houses near Rinsey and Trewavas Head.*
- *Mix of and contrast between Anciently Enclosed Land medieval landscapes of dispersed farm hamlets and traditional churchtowns and widespread post-medieval settlement and enclosure.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]


CA06
N
MOUNT'S BAY
Porthleven
Gwavas Fishing Cove
Mullion Cove
NEWLYN
South West Coast Path
A394
0 1 2 4 6 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. Land Use Consultants. Licence Number 100019265

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A rolling medium-large scale landform, dissected by smaller scale shallow valleys and rising in the centre to the twin peaks of Godolphin Hill (162m AOD) and the elongated Tregonning Hill (194 m AOD). The hills stretch to the coast in the south, ending in steep cliffs, rocky headlands and beaches, notably the Loe Bar and long, straight beach at Porthleven Sands. Along the coast, short streams flow in steep narrow valleys down to the sea, creating a contrasting small scale and sense of enclosure.		
Land cover pattern and presence of human scale features	Mostly a farmed landscape of generally small-medium scale irregular fields (of medieval origin) with some larger, rectilinear fields on the fringes of the mining areas and higher hill slopes. The farmland is supplemented by a variable pattern of woodland and trees, including estate plantations on slopes and more significant woodland along valley sides. Areas of rough ground (heath and scrub) are found along the coast, along with small fragmented areas inland – including those associated with former mining activity. Loe Pool is Cornwall's largest natural lake and a substantial area of natural open water within the landscape. There are many human scale features including Cornish hedges, many hedgerow trees (particularly in valleys) and scattered buildings and settlements including church towers.		
Tracks/transport pattern	This LCA contains existing roads including the A30 and A394 and elsewhere it is a landscape with predominantly narrow and winding lanes bounded by Cornish hedges and in some areas sunken lanes bordered by stonefaced Cornish hedges.		
Skylines	Although the LCA description does not specifically refer to skylines, it notes the two peaks at Godolphin Hill (162m AOD) and Tregonning Hill (194 m AOD) as distinctive features of the landscape. The LCA description also highlights prominent cliff top Bronze Age barrows as features of the cliff tops and spectacular remains of disused engine houses on coastal cliffs at Rinsey and Trewavas Head. There are a few telecommunications masts, and a prominent pylon line crosses through the west of the landscape.		
Perceptual qualities	Tranquillity varies across this LCA – although large stretches of the coast and LCA are remote from human influence, the area includes Culdrose Airfield, the main A30 and A394 road corridors and the larger settlements of Hayle and Helston. Some of the upper river valleys convey a sense of 'secrecy'.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses patches of 'Upland Rough Ground' on the higher hills summits and 'Coastal Rough Ground' along the coastal strip as of high vulnerability to wind turbine development. Areas of the 'Ornamental' HLC Type, associated with historic estates within the landscape, are also assessed as of 'high' vulnerability. 'Medieval Farmland', which covers a large proportion of the LCA, is assessed as of moderate-high vulnerability to wind turbines. Significant areas of 'Post-Medieval (Intakes)', found in large blocks across the landscape are assessed as of 'moderate' vulnerability, whilst the 'Military' land associated with Culdrose Airfield and areas of 20th century settlement are assessed as of low vulnerability to wind turbines.		
Distinctive			

Criteria	Lower sensitivity	⟷	Higher sensitivity
landscape features	The LCA description notes the spectacular coastal scenery; Loe Pool and Loe Bar; rock outcrops set in sand on beach edge; dominant sand bar between sea and lake and variety of beach stones within sandy shingle; groups of isolated mine buildings on the cliffs; lake on edge of Helston with silted-up and vegetated upper river valley and board walks for recreation; Godolphin and Tregonning Hills; RAF Culdrose; Godolphin House and Trevarno; and mining and other industrial remains as distinctive features of the landscape. Some of these could be affected by wind energy development, particularly the spectacular coastal scenery, isolated mine buildings on the cliffs and the apparent prominence of the hills.		
Scenic quality	The entire coastline and significant areas backing the coast fall within the South Coast Western part of the Cornwall AONB (23% of LCA is designated as AONB), and the southern part of the LCA is also defined as Heritage Coast. Qualities of the AONB that may particularly be affected by wind energy development are the distinctive silhouette of St Michael's Mount visible across all of Mounts Bay, and the prominence and skyline of historic engines houses on the cliffs. The Godolphin and Tregonning Hills are recognised as an AGLV. The qualities of the AGLV which may be affected by wind turbine development, include the prominence of the hills when looking south from Townshend.		
Overall sensitivity assessment	Although the medium-large scale landform and presence of human influence (in the form of agriculture, roads and Culdrose Airfield) could indicate a lower sensitivity to wind energy development, the rugged and prominent coastal headlands, presence of human scale features, narrow lanes, skyline features of Bronze Age barrows and engine houses along the coast, remote coastline and high scenic quality increase levels of sensitivity to wind turbines. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development and a **moderate-high** sensitivity within the AONB. The undeveloped coast and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large, the presence of small-scale field patterns and frequent human scale features means that much of this landscape would be particularly sensitive to 'large' turbines. Some larger scale areas may be able to accommodate turbines at the smaller end of the 'large' scale where landform and field pattern are larger (particularly in the east). The undeveloped coastal edge would be particularly sensitive to any turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The scale of the rolling inland hills and small-medium size of fields mean that this landscape would be particularly sensitive to 'medium', 'large' and 'very large' clusters of wind turbines. The undeveloped coastal edge would be sensitive to any scale of turbine development.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines, or possibly small clusters** of up to and including medium size (or large turbines at the lower end of the scale in the east - turbine size should relate to landscape scale which varies within the LCA), and **no turbines** along the undeveloped coastal edge and its immediate hinterland. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings). There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the undeveloped rugged and 'wild' coastline - maintain undeveloped views along the coastline. • Consider locating development within industrial areas or on brownfield land. • Ensure minimum disturbance of the landscape's roadside Cornish hedges, replacing any hedgebanks affected by development. • Areas of Medieval Farmland are more sensitive to wind turbines (particularly large scale turbines) than areas of modern or post-medieval fields. • Avoid siting turbines within the HLC types of 'Rough Ground' and 'Ornamental' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Maintain the distinctive and undeveloped skylines of Godolphin and Tregonning Hills. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of historic landmarks on the skyline, including the Bronze Age barrows along the coast and the engine houses on Rinsey and Trewavas Head. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the spectacular coastal scenery, isolated mine buildings on the cliffs or the apparent prominence of Godolphin and Tregonning hills as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB, particularly the distinctive silhouette of St Michael's Mount visible across all of Mounts Bay, and the prominence and skyline of historic engines houses on the cliffs – ensure choice of site and scale of development does not detract from these. • Protect the scenic qualities of the Godolphin and Tregonning Hills AGLV, including the views of the hills from Townshend.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A rolling landscape, dissected by shallow (flat-bottomed) valleys and rising in the centre to the twin peaks of Godolphin Hill (162m AOD) and the elongated Tregonning Hill (194 m AOD). The hills stretch to the coast in the south, ending in steep cliffs, rocky headlands and beaches, notably the Loe Bar and long, straight beach at Porthleven Sands. Along the coast, short streams flow in steep narrow valleys down to the sea.
Sense of openness / enclosure	This is a landscape with contrasting levels of enclosure. The coastline is open with little tree cover, whilst the inland valleys are enclosed by woodland, contrasting with open slopes and hill summits. Well-vegetated and sometimes very high hedges are found across the area and there are larger scale fields in the east.
Field pattern and scale	Fields are generally small-medium scale and irregular (of medieval origin) with some larger, rectilinear fields with straight boundaries on the fringes of the mining areas and higher hill slopes (mainly of post-medieval origin). The majority of the coastal strip is open rough ground, as are the higher inland hill summits.
Landcover	The farmed areas are mostly pastoral with a large proportion of arable land, making up the majority of land cover. There is generally a variable pattern of woodland and trees, with woodland mostly in the valleys. There are areas of rough ground along the coast, and small fragmented areas inland, especially around areas of former mining activity. Loe Pool is Cornwall's largest natural lake and a substantial area of natural open water.
Perceptual qualities	This is a largely tranquil landscape, the LCA includes Culdrose Airfield, the main A30 and A394 road corridors and the larger settlements of Hayle and Helston. Large stretches of the coast are remote from human influence, whilst some of the upper river valleys convey a sense of 'secrecy'.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses patches of 'Rough Ground' on the higher hills summits and along the coastal strip as of high vulnerability to development. Areas of the 'Ornamental' HLC Type, associated with historic estates within the landscape, are also assessed as of 'high' vulnerability. 'Medieval Farmland', which covers a large proportion of the LCA, is assessed as of moderate-high vulnerability to solar PV development. Areas of 'Post-Medieval (Intakes)', found in large blocks across the landscape are assessed as of 'moderate' vulnerability, as is the 'Military' land associated with Culdrose Airfield.
Distinctive landscape features	The LCA description notes the spectacular coastal scenery; Loe Pool and Loe Bar; rock outcrops set in sand on beach edge; dominant sand bar between sea and lake and variety of beach stones within sandy shingle; groups of isolated mine buildings on the cliffs; lake on edge of Helston with silted-up and vegetated upper river valley and board walks for recreation; Godolphin and Tregonning Hills; RAF Culdrose; Godolphin House and Trevarno; and mining and other industrial remains as distinctive features of the landscape. Some of these could be affected by solar PV development, particularly the spectacular coastal scenery.
Scenic quality	The entire coastline and significant areas backing the coast fall within the South Coast Western part of the Cornwall AONB (23% of LCA is designated as AONB), and the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	southern part of the LCA is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the extensive waterside reedbeds, the elemental qualities of the coastline as seen across Mount's Bay, the permanent greens of improved pasture, and the field pattern. The Godolphin and Tregonning Hills are designated as an AGLV. Scenic qualities, which may be affected by solar PV development, include the views of the hills when looking south from Townshend.		
Overall sensitivity assessment			
	Although the undulating nature of the landform, the sense of enclosure in lower lying areas away from the coast, and the presence of human influence could indicate a lower sensitivity to solar PV development, the landscape's dramatic and open coastline, spectacular coastal scenery and high scenic quality increase levels of sensitivity to this form of renewable energy development (particularly along the coast). Overall, this landscape is assessed as having a **moderate** sensitivity to solar PV development and a **moderate-high** sensitivity within the AONB. The landscape's open and naturalistic coastline and its immediate hinterland, and prominent hill slopes (Godolphin and Tregonning Hills) would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Field pattern varies across the LCA, but areas of small-medium scale fields (of medieval origin) would be particularly sensitive to 'large' solar PV developments. The landscape's open and naturalistic coastline and prominent hill slopes (Godolphin and Tregonning Hills) would be sensitive to all scales of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** up to and including large scale located in sheltered folds in the landscape (size of development should relate to landscape scale which varies within the LCA), with no **solar PV development** along the landscape's open and naturalistic coastline and its immediate hinterland or on prominent hill slopes (particularly Godolphin and Tregonning Hills). Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development along the landscape's open and naturalistic coastline and prominent hill slopes (Godolphin and Tregonning Hills). • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Avoid locating development on slopes close to the coastal edge, where PV panels would be particularly visible in panoramic views across the Mount's Bay.

	• Use existing landscape features, such as high Cornish hedges, woodland and estate plantations to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Prevent damage to the landscape's small-scale road network during the installation phase (including through road widening and the removal / cutting back of the landscape's distinctive stone-faced Cornish hedges) • Avoid siting PV developments within the HLC types of 'Rough Ground' and 'Ornamental' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the spectacular coastal scenery as a distinctive feature of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB, particularly the extensive waterside reedbeds, the elemental qualities of the coastline as seen across Mount's Bay, the permanent greens of improved pasture, and the field pattern – ensure choice of site and scale of development does not detract from these. • Protect the scenic qualities of the Godolphin and Tregonning Hills AGLV, including the views of the hills from Townshend.

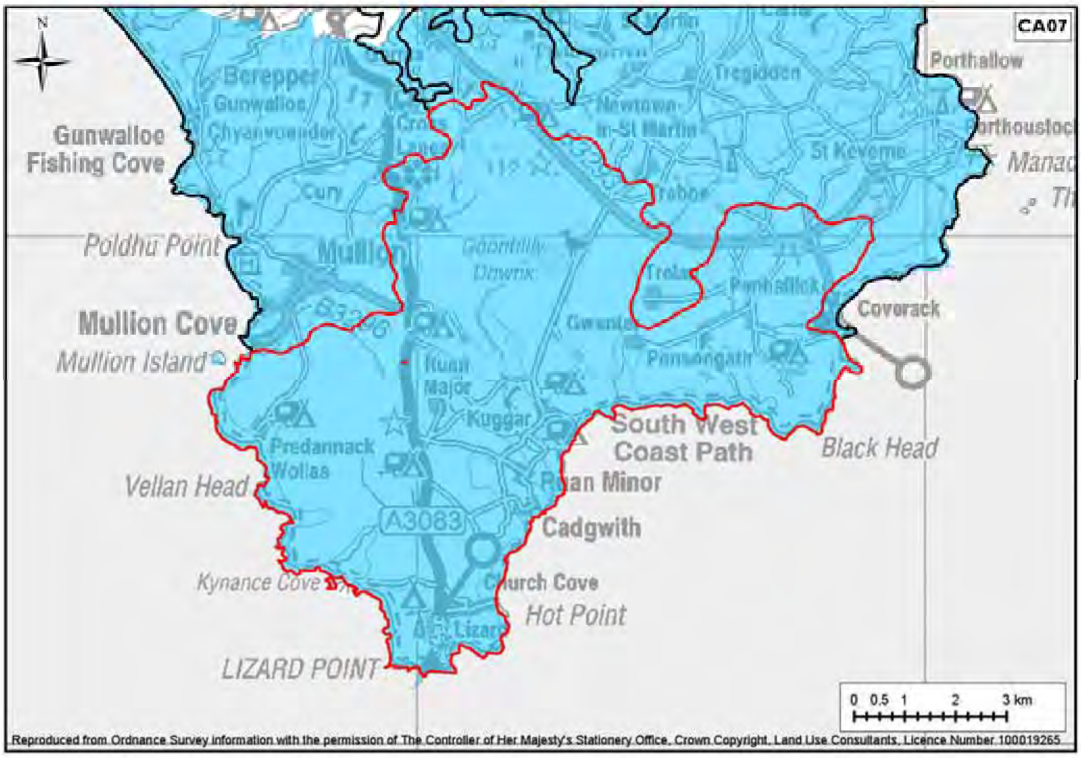
CA07: South Lizard Peninsula

Key Landscape Characteristics[1]

- *Gently undulating open upland plateau with low central ridge, falling away to east and west, more steeply near the coast.*
- *Open and treeless landscape, with extensive areas of Lowland Heathland and rough ground within pastoral farmland.*
- *Contrasting field patterns of small, irregular, anciently enclosed land of medieval origin and more regular, medium scale, recently enclosed land, fringing the unenclosed rough ground.*
- *Mainly pastoral improved fields with few arable bounded by Cornish hedges with wind pruned hedgerow trees and scrubby margins.*
- *Narrow and occasionally steeply incised wooded stream valleys with tumbling streams lined with woodland and little tree cover on the plateau.*
- *Numerous traces of past human activity on the downs, from Bronze Age barrows to remains of postmedieval peat cutting.*
- *Military and communications land use and heritage.*
- *A few coastal villages with isolated cottages and small farms inland.*
- *High indented cliffs with boulders on shoreline, rocky outcrops on headlands and wildflower-filled coves.*
- *Sparse transport pattern with many ancient trackways.*
- *Significant areas of unenclosed rough ground.*
- *Dramatic coastal scenery and far reaching views.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]


CA07
N
Porthallow
Gunwalloe Fishing Cove
Berepper
Gunwalloe
Chyanvounder
Cury
Tregidden
Newtown-in-St Martin
St Keverne
TrabOe
Poldhu Point
Mullion
Goonhilly Downs
Mullion Cove
Mullion Island
B3296
Gweniter
Trelan
Penhallick
Coverack
Pensongath
Ruan Major
Kuggar
South West Coast Path
Black Head
Predannack Wollas
Vellan Head
Cadgwith
A3083
Kynance Cove
Church Cove
Hot Point
Lizard
LIZARD POINT
0 0.5 1 2 3 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright, Land Use Consultants, Licence Number 100019265

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	An extensive gently undulating elevated plateau, falling away to east and west and with a coastline of high, steep cliffs indented by tight narrow coves. On the more sheltered eastern side the land is more folded with narrow valleys carrying water off the plateau to the sea.
Land cover pattern and presence of human scale features	Varies between extensive unenclosed heathland with simple landcover pattern (heathland, conifer blocks, and large, regular recently enclosed land) and more complex pattern of enclosed farmland with small-scale, irregular medieval fields and valleys containing woodland and scrub. Human scale features are located in the farmland around the open heathland and include Cornish hedges, trees, farm buildings, and cottages.
Tracks/transport pattern	The A3083, B3293 and the minor road that runs straight across the Downs from Goonhilly to Kuggar and Ruan Minor provide access to the LCA. Apart from this the roads are narrow and winding.
Skylines	Although the LCA description does not refer specifically to skylines, it notes the Lizard Lighthouse, the large satellite dishes and conifer plantations on Goonhilly Downs, the windmill tower on the east side of Predannack Downs and the wind turbines near Bonython as landmarks. The LCA description also refers to two spectacular Iron Age cliff castles at Chynalls and Lankidden.
Perceptual qualities	This is an open and exposed landscape with dramatic rough and rugged scenery and long panoramic views, the latter especially along the coast. The AONB description notes the strong sense of isolation in this part of the AONB.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Upland Rough Ground' and 'Coastal Rough Ground', which make up a significant proportion of the LCA, to be highly vulnerable to wind turbines. Large areas of 'Medieval' land, surrounding the areas of Upland Rough Ground, are also assessed as of moderate-high vulnerability, whilst areas of lower sensitivity are associated with the smaller areas of 'Post-Medieval (Intakes)' – assessed as of moderate-low vulnerability – and 'Modern Enclosures' – assessed of low vulnerability.
Distinctive landscape features	The LCA description notes the satellite dishes and wind turbines at Goonhilly; the rocky cliff tops, especially on west-facing coast, some with small, often inaccessible (by car) sandy beaches (Kynance Cove) and distinctive geological features (Serpentine works); the Lizard lighthouse; the thatched cottages at Cadgwith; and Predannack airfield as distinctive features of this landscape. Some of these could be affected by wind energy development.
Scenic quality	The whole of this LCA falls within the 'South Coast Western' section (The Lizard Peninsula) of the Cornwall AONB, and the western half of the landscape is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the majestic scale of the cliffs, the strong sense of isolation, the prominence and skyline of the Lizard lighthouse, and the winding narrow roads.
Overall sensitivity	

Criteria	Lower sensitivity	⟷	Higher sensitivity
assessment	Although the large scale landform and simple land cover patterns of the plateau, and the presence of existing human influence could indicate a lower sensitivity to wind turbine development, the landscape's high scenic quality (recognised by AONB designation), narrow valleys, areas of uninterrupted rough ground with few tracks, and rugged coastline heighten levels of sensitivity to wind energy development. Overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's 'wild' and dramatic coastline and its immediate hinterland, and areas of rough ground would be particularly sensitive to the development of wind turbines. The least sensitive parts of the LCA are the larger scale landscapes of recently enclosed land to the north of the LCA, away from the coast and outside the areas of unenclosed heath.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The landscape's 'wild' and dramatic coastline, and areas of rough ground would be sensitive to any wind turbines. Areas of smaller scale medieval farmland will be particularly sensitive to any large or medium turbines, although the areas of large scale fields of recently enclosed land to the north are less sensitive.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The landscape's 'wild' and dramatic coastline, and areas of rough ground would be sensitive to any wind turbines. Other areas would be particularly sensitive to 'very large', 'large' or 'medium' clusters of wind turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	Since this LCA falls entirely within the Cornwall AONB the landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings), with **no turbines** along the undulating and undeveloped coastline and its immediate hinterland, or within unspoilt areas of open heathland. However, the sensitivity assessment indicates that areas of recently enclosed land in the northern part of the LCA may have a greater flexibility to accommodate turbines larger than domestic scale. Collectively turbines within the LCA should not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the coastline, particularly its prominent headlands and cliff tops. • Areas of Medieval Farmland and long narrow ancient fields are more sensitive to wind turbines (particularly large scale turbines) than areas of modern or post-medieval fields. • Ensure size of turbine and development cluster responds to landscape scale

	(which varies across the LCA). • Utilise areas of woodland, including plantations, to screen ground-level features of wind turbine developments wherever possible. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the lighthouse at Lizard Point, Iron Age cliff castles at Chynalls and Lankidden, the remains of Predannack windmill. • Any new development will need to consider cumulative impact with existing developments. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground' and 'Coastal Rough Ground' – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not dominate or adversely affect the rocky cliff tops with their distinctive geological features, the Lizard lighthouse, or the thatched cottages at Cadgwith as distinctive features of this landscape • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the majestic scale of the cliffs, the strong sense of isolation, the prominence and skyline of the Lizard lighthouse, and the winding narrow roads) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	A gently undulating plateau landscape with hidden areas as well as some visible slopes - on the more sheltered eastern side the land is more folded with narrow valleys carrying water off the plateau to the sea.		
Sense of openness / enclosure	The plateau and cliffs are open and exposed, with little tree cover apart from occasional conifer blocks (e.g. on Goonhilly Downs). Fields surrounding the downs are bounded by Cornish hedges, with frequent hedgerow trees in the more sheltered locations and the valleys draining the plateau (particularly in the south-east and east) have a contrasting sense of enclosure.		
Field pattern and scale	The open and unenclosed inland and coastal heaths are surrounded by a mixture of mainly small-scale, irregular medieval fields interspersed with larger, rectilinear post-medieval fields and recently enclosed land.		
Landcover	Open pastoral farmland (with some arable and recreation) and extensive heath especially on the western side of the area linked with the coastal heath.		
Perceptual qualities	This is an open and exposed landscape with dramatic rough and rugged scenery and long panoramic views, the latter especially along the coast. The AONB description notes the strong sense of isolation in this part of the AONB.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Rough Ground', which make up a significant proportion of the LCA's plateau and coast, to be highly vulnerable to solar PV development. Large areas of 'Medieval' land, surrounding the areas of unenclosed rough ground, are assessed as moderate-high vulnerability, whilst areas of lower vulnerability are associated with the smaller areas of 'Post-Medieval (Intakes)' – assessed as of moderate vulnerability – and 'Modern Enclosures' – assessed of moderate-low vulnerability.		
Distinctive landscape features	The LCA description notes the satellite dishes and wind turbines at Goonhilly; the rocky cliff tops, especially on west-facing coast, some with small, often inaccessible (by car) sandy beaches (Kynance Cove) and distinctive geological features (Serpentine works); the Lizard lighthouse; the thatched cottages at Cadgwith; and Predannack airfield as distinctive features of this landscape. These are unlikely to be affected by solar PV development.		
Scenic quality	The whole of this LCA falls within the 'South Coast Western' section of the Cornwall AONB, and the western half of the landscape is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the unenclosed downland plateau with strong sense of isolation and exposure and the intricate field pattern.		
Overall sensitivity			

Criteria	Lower sensitivity	⟷	Higher sensitivity
assessment	Although the gently undulating plateau landform, presence of some sheltered areas, presence of human influences, and apparent lack of distinctive features that could be affected by solar PV development could indicate a lower levels of sensitivity, the high scenic quality as recognised through AONB designation, strong sense of openness on the plateau, large areas of rough ground and rugged and prominent coastline heighten levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV development. The large, open tracts of heathland on the plateau and undeveloped coast and its immediate hinterland would be particularly sensitive to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The large, open tracts of heathland on the plateau and undeveloped coast would be sensitive to any solar PV development. The enclosed parts of the landscape would be particularly sensitive to the 'large' and 'medium' scale developments due to the size of the fields.		

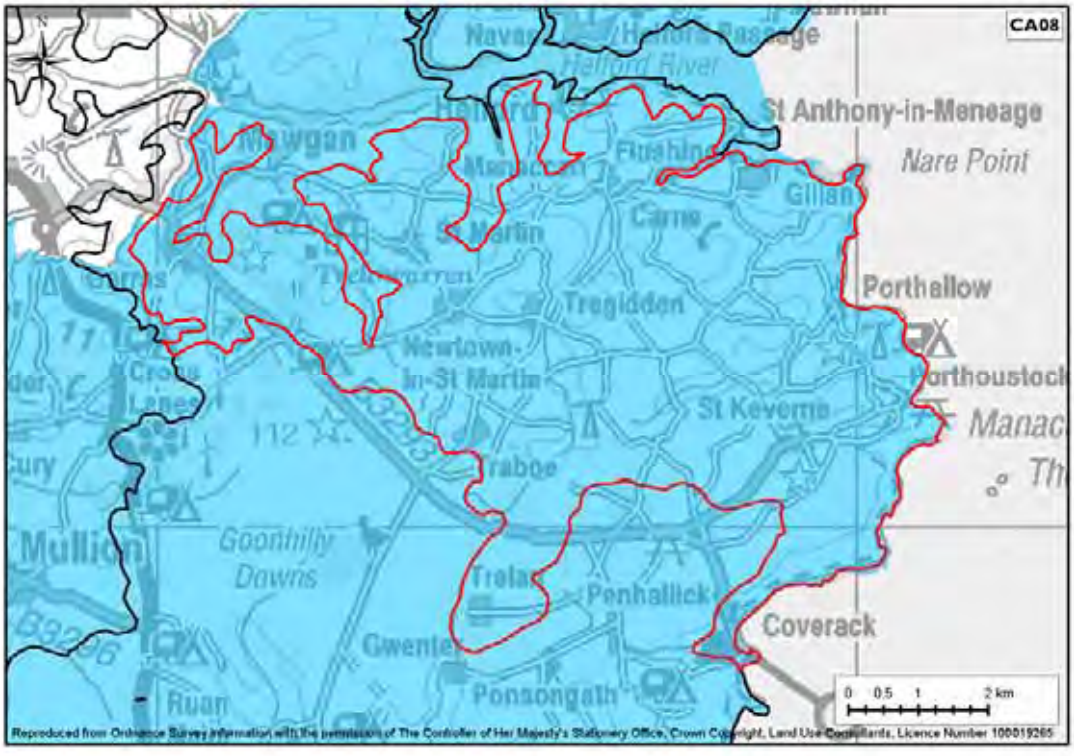
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape without solar PV development** (except for very occasional very small scale well sited developments associated with existing buildings in more enclosed areas) and no solar PV developments along the undeveloped and open coastline and its immediate hinterland, or within unspoilt areas of open heathland.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development within dips and sheltered folds in the undulating landform of the hills or in flat areas where ground level vegetation may provide a screen to development. • Avoid locating any development in the large, open tracts of heathland on the plateau or along the undeveloped coast. • In areas of medieval fields, preserve the strong field patterns by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Avoid siting solar PV development within the HLC Types of 'Upland Rough Ground' and 'Coastal Rough Ground' – assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not dominate or adversely affect the rocky cliff tops with their distinctive geological features, the Lizard lighthouse, the thatched cottages at Cadgwith or Predannack airfield as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the unenclosed downland plateau with strong sense of isolation and exposure and the intricate field pattern) – ensure choice of site and scale of development does not detract from these qualities.

CA08: North-East Lizard Peninsula

Key Landscape Characteristics[1]

- *Contrasting landscape of open farmed plateau and small hidden valleys.*
- *Small steep-sided valleys which are very heavily wooded.*
- *Medium to large, irregular field pattern on the plateau with a smaller, more irregular field pattern in the valleys.*
- *Plateau and valleys more sheltered and with more tree cover than south Lizard.*
- *Groups of trees around farms and areas of estate and ornamental woodland planting.*
- *Mixed farming with Cornish hedges with mature trees on the plateau; mainly pasture, with significant areas of arable and some rough grazing.*
- *Very narrow winding lanes bounded by high Cornish hedges and hedge trees.*
- *Few nucleated villages and isolated farmsteads with fishing villages at the coast.*
- *Low indented cliffs and reef rocks with some sandy beaches and remnant coastal heath/ coastal rough ground on the coastal strip.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A gently undulating plateau with incised by several small valleys – resulting in an undulating coastline. The indented east coast includes cliffs of variable height, sloping to a rocky shoreline where reefs of rock run out to sea. These include headlands at Manacle Point, Nare Point, Low Point and Dowland Point.
Land cover pattern and presence of human scale features	The LCA is dominated by a strong medium sized field pattern of medieval Anciently Enclosed Land (which in parts of St Keverne parish follows an earlier, prehistoric, pattern). There are some areas of enlarged, modern fields in parts (the largest area being around Lanarth). Valley woodlands horticulture, orchards and coastal rough ground add to the variety of landcover. Frequent human scale features include Cornish hedges, trees, woodland, boats, farm buildings and cottages.
Tracks/transport pattern	The area is served by old, narrow, winding lanes that are deep and enclosed by high stone-faced hedges, many containing mature hawthorns and twisted oaks.
Skylines	Although the LCA description does not refer specifically to skylines, it notes the prominent Bronze Age barrow of Roskruge Beacon, the Iron Age sites at Halliggye fogou, Gear hillfort and Caer Vallack. Skylines are relatively undeveloped.
Perceptual qualities	The landscape includes a few nucleated villages and isolated farmsteads with fishing villages along the coast. It is a tranquil and strongly rural landscape with the wooded valleys conveying a sense of 'secrecy' and a wild coastline. The sense of tranquillity is affected locally by quarrying along the coast. The rocky coastline is a popular tourism destination in the summer months, reducing the landscape's perceptions of tranquillity during these periods.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Rough Ground' (along the coast and some patches inland) and 'Ornamental' (associated with parkland estates) as of 'high' vulnerability to development. Large areas of 'Medieval Farmland', which make up the majority of the LCA, are assessed as of 'moderate-high' vulnerability to wind turbines. Areas of lower sensitivity are associated with the smaller areas of the HLC type 'Modern Enclosures (Amalgamation of AEL)' – assessed as 'low-moderate' vulnerability – and 'Modern Enclosures (Intakes)' – assessed as of 'low' vulnerability.
Distinctive landscape features	The LCA description notes the large roadstone quarries on the cliffs from Lowland Point to Porthallow and the plantations of the Trelowarren Estate as distinctive features of the landscape. These are unlikely to be affected by wind energy development.
Scenic quality	All of the LCA falls within the 'South Coast Western' part of the Cornwall AONB. Qualities of this part of the AONB that may particularly be affected by wind energy development are the majestic scale of the cliffs, the strong sense of isolation, the prominence and skyline of the Lizard lighthouse (not part of this LCA), and the winding narrow roads.
Overall sensitivity assessment	Although the gently undulating landform, presence of some modern fields and apparent lack of distinctive features (as listed in the LCA description) could indicate a lower sensitivity to wind energy development, the undulating and wild coastline,

Criteria	Lower sensitivity	⟷	Higher sensitivity
	generally undeveloped skylines, winding lanes, frequent human scale features, sense of tranquillity and high scenic quality increase levels of sensitivity to wind turbines to the extent that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's undulating and undeveloped coastline and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Due to the relatively low height of these hills, the presence of human scale features and size of the fields, this landscape would be particularly sensitive to 'large' turbines as well as turbines at the higher end of the 'medium' size. The open, naturalistic coastline would be sensitive to the development of any turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The scale of the rolling hills and medium sized field pattern means that this landscape would be particularly sensitive to 'medium', 'large' and 'very large' clusters of wind turbines. The open, naturalistic coastline would be sensitive to the development of any turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	Since this LCA falls entirely within AONB the landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings), with **no turbines** along the undulating and undeveloped coastline and its immediate hinterland. Collectively the turbines should not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines along the undulating and undeveloped coastline and the 'secretive' valleys and peaceful creeks/coves fringing the Helford River. • Minimise the length of new tracks introduced into the landscape, using existing routes wherever possible. Avoid damage and alterations to the network of winding rural roads, frequently enclosed by high stone-faced hedges and mature trees. • Avoid damage and alterations to the network of old, narrow, winding lanes that are deep and enclosed. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of the prominent Bronze Age barrow of Roskruge Beacon, or the Iron Age sites at Halliggye fogou, Gear hillfort and Caer Vallack. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground', 'Coastal Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy

	development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not affect the plantations of the Trelowarren Estate as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the majestic scale of the cliffs, the strong sense of isolation, and the winding narrow roads) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A gently undulating plateau landscape with some visible slopes as well as hidden area (incised by several small valleys). The indented east coast includes cliffs of variable height, sloping to a rocky shoreline where reefs of rock run out to sea. These include headlands at Manacle Point, Nare Point, Low Point and Dowland Point.
Sense of openness / enclosure	A rural farmed landscape with hedges and tree belts resulting in a landscape with some open and some more enclosed areas. The rough ground of the coastal edge is particularly open.
Field pattern and scale	The landscape has a strong pattern of medium medieval fields with predominantly sinuous boundaries (Cornish hedges with trees), with some areas of enlarged, modern fields in parts (the largest area being around Lanarth).
Landcover	Farming land mainly improved grassland with some arable. Trees occur, especially in the valleys and sheltered folds in the ground and there are some areas of ornamental woodland planting.
Perceptual qualities	The landscape includes a few nucleated villages and isolated farmsteads with fishing villages along the coast. It is a tranquil and strongly rural landscape with the wooded valleys conveying a sense of 'secrecy' and a wild coastline. The sense of tranquillity is affected locally by quarrying along the coast. The rocky coastline is a popular tourism destination in the summer months, reducing the landscape's perceptions of tranquillity during these periods.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC type of 'Rough Ground' (along the coast and some patches inland) as of 'high' vulnerability to development. Areas of 'Medieval Farmland', which make up the majority of the LCA, are classed as of moderate-high vulnerability. Locations of moderate vulnerability are associated with the smaller areas of 'Modern' enclosure.
Distinctive landscape features	The LCA description notes the large roadstone quarries on the cliffs from Lowland Point to Porthallow and the plantations of the Trelowarren Estate as distinctive features of the landscape. These are unlikely to be affected by solar PV development.
Scenic quality	All of the LCA falls within the 'South Coast Western' part of the Cornwall AONB. Qualities of this part of the AONB that may particularly be affected by solar PV development are the unenclosed downland plateau with strong sense of isolation and exposure (not part of this LCA) and the intricate field pattern.
Overall sensitivity assessment	Although the presence of some enclosed areas, presence of farmland, and apparent lack of distinctive features (as listed in the LCA description) could indicate a lower sensitivity to solar PV development, the naturalistic coastline with prominent headlands, relatively wild coast, predominantly pastoral character and high scenic quality increase levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV development. The open tracts of rough ground along the coast and its immediate hinterland would be particularly sensitive to solar PV development.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The scale of the rolling hills and medium sized field pattern means that this landscape would be particularly sensitive to 'medium' and 'large' scale PV developments. The open, naturalistic and highly visible coastline would be sensitive to any scale of solar PV development.		

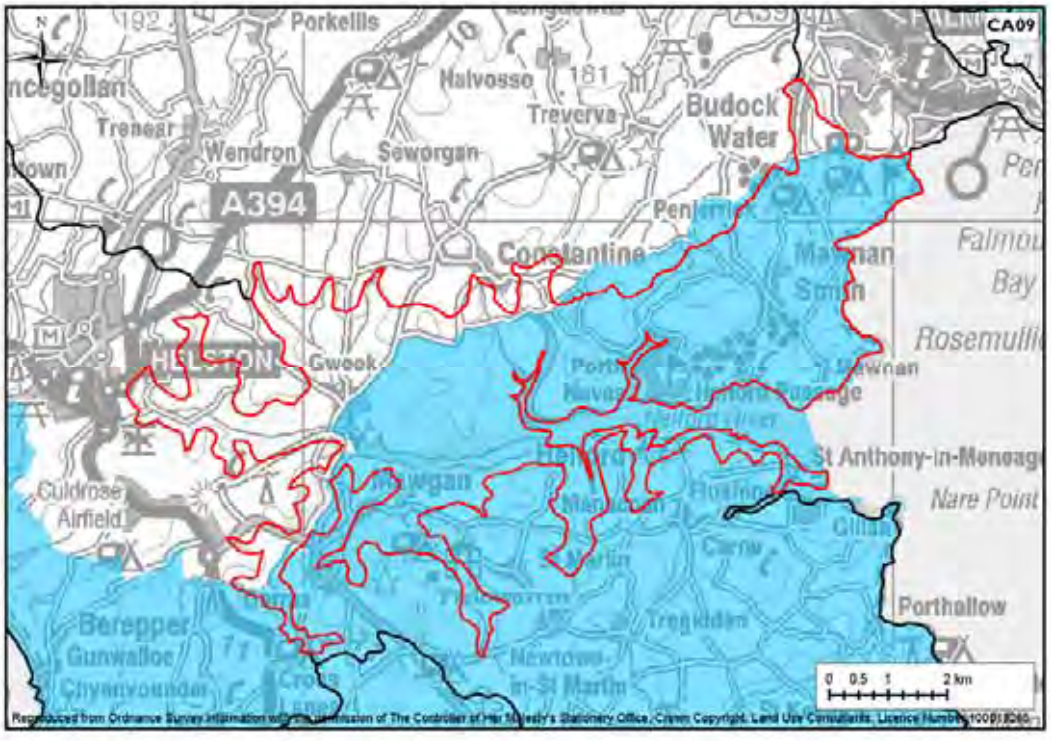
Landscape strategy and Guidance for Large-scale Solar PV Development

Landscape strategy	The landscape strategy is for a **landscape without solar PV development** (except for very occasional very small scale well sited developments associated with existing buildings in more enclosed areas) and **no solar PV developments** along the undeveloped and open coastline and its immediate hinterland.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate PV development within dips and sheltered folds in the undulating landform; where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Avoid locating development on upper slopes or n slopes along the coastal edge, where PV panels could be particularly visible. • Avoid damage and alterations to the network of old, narrow, winding lanes. • Avoid siting solar PV development within the HLC Types of 'Upland Rough Ground', 'Coastal Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being highly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the plantations of the Trelowarren Estate as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the intricate field pattern) – ensure choice of site and scale of development does not detract from this quality.

CA09: Helford Ria

Key Landscape Characteristics[1]

- *Sheltered deepwater ria with a broad river system and feeder creeks.*
- *Steep sided valleys covered in dense, mature broadleaved woodland.*
- *Dramatic scenery of varying scale, with extensive river views from higher land.*
- *Pastoral or mixed farmland with trees on the gently undulating plateau which surrounds the ria, with a medium scale, predominantly medieval field pattern.*
- *Flatter coastal zone to the north of the river, with pasture and rough grazing, cliff habitats and mixed tree groups.*
- *Bracken and scrub-covered east-facing coastline outside mouth of river.*
- *Wooded parkland estates (Glendurgan and Trebah); groups of trees and woodland in field corners on the plateau and trees on Cornish Hedges.*
- *Distinctive groups of Monterey pines which contrast with the broadleaved woodland.*
- *Dominant intertidal mudflats in the river corridor.*
- *Clustered settlement pattern with small often isolated farms and nucleated villages along the creeks; lime wash on granite buildings is locally characteristic, as is cob.*
- *Recreational use of the river by sailing boats with numerous moorings and small quays and significant recreation, tourism and amenity centred on traditional villages.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	Sheltered and broad deepwater ria of the Helford River, surrounded by a complex of small tidal creeks. Land rises up from the ria shores to form a strongly undulating series of convex hills dissected by steep, narrow valleys draining to the ria below. The LCA to the east is fringed by an open coastline with rocky cliffs and small, narrow sandy beaches, and includes the prominent headland of Rosemullion Head. It is a dramatic landscape of varying scale, with extensive river views from higher land.		
Land cover pattern and presence of human scale features	Landcover is more complex in the valleys with many creeks, mixed farmland, trees, parkland estates and ornamental gardens. Lower lying areas are dominated by small medieval fields defined by sinuous Cornish hedges, while higher slopes and hills have larger post-medieval fields. Human scale features include Cornish hedges, frequent trees (including groups of Monterey Pine), boats and cottages – particularly in the valleys – the valleys have an intimate and domestic feel.		
Tracks/transport pattern	Generally the area is served by winding sunken lanes with overhanging vegetation, although there are some straight roads rolling over hills. Some of the higher summits are only accessible by farm tracks.		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the small upland ridges between the creeks and the well wooded character of the steep slopes. The LCA description also notes a number of Iron Age defended settlements and camps on prominent slopes overlooking the Helford Ria.		
Perceptual qualities	Although much is farmed, there are also extensive semi-natural habitats. Although this CA has an overriding tranquil feel, the river is popular for watersports and fishing and there is modern housing/holiday home development along the river. Budock Vean Golf Course is located on the northern banks of the ria. The east coast is more open and exposed, contributing a more 'wild' character to the landscape.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Rough Ground' (along the coast and some patches inland) and 'Ornamental' (associated with parkland estates) as of 'high' vulnerability to development. Large areas of 'Medieval Farmland', which make up the majority of the LCA, are assessed as of moderate-high vulnerability to wind turbines. Areas of lower sensitivity are associated with the smaller areas of the HLC type 'Modern Enclosures (Amalgamation of AEL)' – assessed as low-moderate vulnerability – and 'Modern Enclosures (Intakes)' – assessed as of low vulnerability.		
Distinctive landscape features	The LCA describes the steeply sloping valleys with mature woodland down to the water's edge, the busy broad river and narrow secret creeks, the compact villages linked by winding narrow lanes, and the renowned valley gardens as distinctive features of the landscape. Some of these could be affected by wind energy development.		
Scenic quality	Much of the (74%) falls within the South Coast Western part of the Cornwall AONB. Qualities that may particularly be affected by wind energy development are the prominence and skyline of earthworks above the estuary, and the scale of the features identified as contributing to the interest of the landscape.		

Criteria	Lower sensitivity	⟷	Higher sensitivity
Overall sensitivity assessment	Although the convex landform and simple landcover patterns on the hills to the north could indicate a lower sensitivity to wind energy development, the more complex landcover patterns and the presence of winding sunken lanes in the ria system, and the high scenic quality across much of the area heighten levels of sensitivity. Overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development (the hills outside the AONB have a lower sensitivity and the undeveloped coast and its immediate hinterland has a higher).		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Due to the scale and height of the hills (up to 70m), the landscape would be particularly sensitive to 'large' turbines and turbines at the higher end of the 'medium' scale. The valley system and undeveloped coast would be highly sensitive to any turbines, except for very small turbines associated with existing buildings.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Due to the relatively small scale of the hills between valleys, the landscape would be particularly sensitive to 'medium', large' and 'very large' clusters. The valley system and undeveloped coast would be highly sensitive to any turbines except for single very small turbines associated with existing buildings.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines**, up to and including the smaller end of the medium size, on the hills between the valleys outside the AONB, a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings)within the AONB, and **no turbines** along the undeveloped coast and its immediate hinterland. There may be more than one wind energy development in the LCA outside the AONB, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape, particularly when within the ria system.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines within the ria system or along the naturalistic coastal edge – the hills between the valleys are the most suitable locations for such development. • Avoid damage and alterations to the area's distinctive sunken lanes. • Ensure wind energy development does not prevent the understanding and appreciation of the Iron Age defended settlements and camps on prominent slopes overlooking the Helford Ria. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground', 'Coastal Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as

	being particularly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not dominate or adversely affect the mature woodland in the valleys, the 'secret' character of the creeks, the winding narrow lanes, or the renowned valley gardens as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the prominence and skyline of earthworks above the estuary and the scale of the features identified as contributing to the interest of the landscape) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A landscape of many prominent visible slopes – the slopes surround the broad deepwater ria of the Helford River and its complex of small tidal creeks. Land rises up from the ria shores to form a strongly undulating series of convex hills dissected by steep, narrow valleys draining to the ria below. The LCA to the east is fringed by an open coastline with rocky cliffs and small, narrow sandy beaches, and includes the prominent headland of Rosemullion Head.
Sense of openness / enclosure	This landscape has contrasting levels of enclosure – with the broad and wide body of water comprising the Helford River contrasting with the small, sheltered creeks and steep valleys clothed in vast areas of woodland. The coastal edge and higher hills are more open with less tree cover.
Field pattern and scale	Small medieval fields are defined by sinuous Cornish hedges, with larger post-medieval fields on some higher slopes. The landscape includes areas of open, unenclosed land along the coast and on some of the higher hills.
Landcover	A mixed farmland landscape (mostly pasture along the ria edges with some arable), with woodland, estates and notable gardens.
Perceptual qualities	Although much is farmed, there are also extensive semi-natural habitats. Although this CA has an overriding tranquil feel, the river is popular for watersports and fishing and there is modern housing/holiday home development along the river. Budock Vean Golf Course is located on the northern banks of the ria. The east coast is more open and exposed, contributing a more 'wild' character to the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the types of 'Rough Ground' (along the coast and some patches inland) and 'Ornamental' (associated with parkland estates) as of 'high' vulnerability to development. Areas of 'Medieval Farmland', which make up the majority of the LCA, are classed as of moderate-high vulnerability. Areas of lower sensitivity are associated with the smaller areas of the HLC type 'Modern Enclosures (Amalgamation of AEL)' – assessed as of low-moderate vulnerability – and 'Modern Enclosures (Intakes)' – assessed as of moderate vulnerability.
Distinctive landscape features	The LCA describes the steeply sloping valleys with mature woodland down to the water's edge, the busy broad river and narrow secret creeks, the compact villages linked by winding narrow lanes, and the renowned valley gardens as distinctive features of the landscape. Some of these could be affected by solar PV development.
Scenic quality	Much of the LCA (74%) falls within the South Coast Western part of the Cornwall AONB. Qualities that may particularly be affected by solar PV development are the ancient woodland, coastal heathland and the pattern of small fields.
Overall sensitivity assessment	Although this landscape has a sense of enclosure created by large amount of woodland and trees and human influence (which could indicate lower sensitivity to solar PV development), the presence of prominent visible slopes along the ria, pastoral character and high scenic quality increase levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to

Criteria	Lower sensitivity	⟷	Higher sensitivity
	solar PV development. The landscape's prominent and pastoral valley slopes, and undeveloped coastal edge would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The complex and varied landcover pattern and small medieval field patterns means that it would be particularly sensitive to solar PV developments within the 'small', 'medium' and 'large' size ranges.		

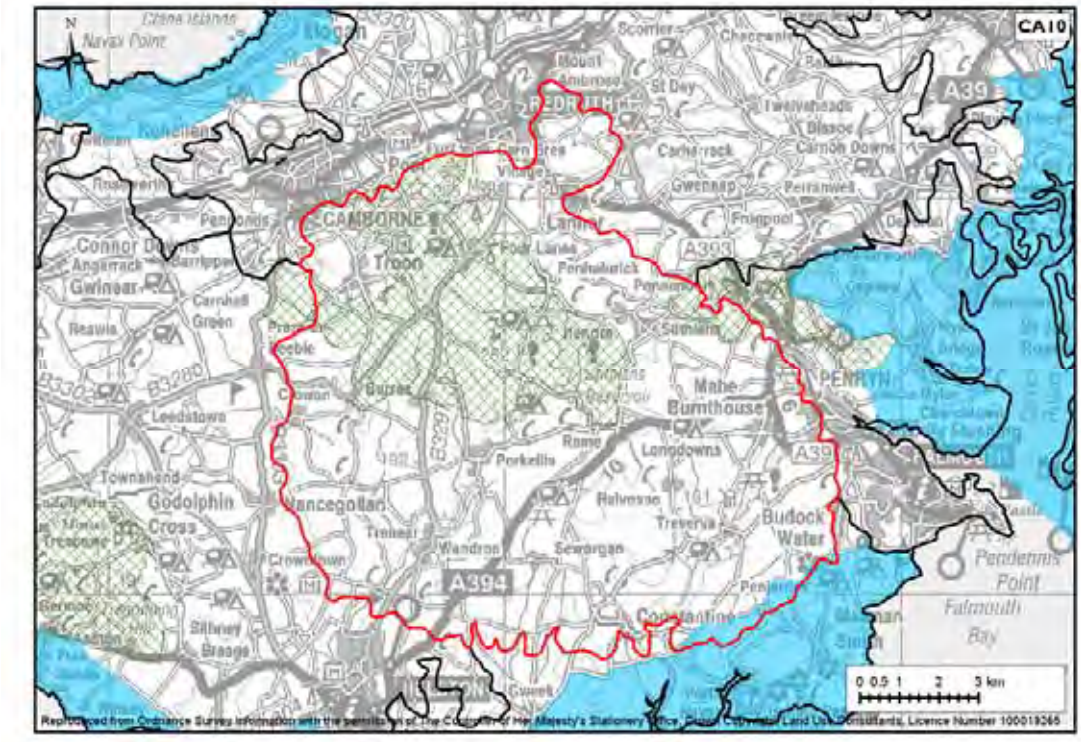
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for a **landscape without solar PV development** (except for very occasional very small scale well sited developments with **no solar PV development** on the landscape's prominent and pastoral valley slopes, or along the undeveloped coastal edge. There may be more than solar PV development in the LCA, but they should be clearly separated so that, although each PV development may influence the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape or views along the ria.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development within dips and sheltered folds in the undulating landform of the hills; areas where PV development would be less visible and have less of an influence on landscape character. • Avoid locating development on upper slopes, along undeveloped estuary edges or on the naturalistic coastal edge and maintain the green backdrop to the ria. • Ensure the LCA retains a pastoral and wooded character and that cumulative development does not change this. • Prevent damage to the landscape's winding, sunken lanes during the installation phase (including through road widening and the removal / cutting back of overhanging vegetation). • Avoid, wherever possible, siting turbines within the HLC Types of 'Upland Rough Ground', 'Coastal Rough Ground', 'Ornamental' and 'Medieval' farmland – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and renowned valley gardens) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not dominate or adversely affect the wooded character of the valley sides, the 'secret' character of the narrow creeks, the winding narrow lanes, or the renowned valley gardens as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the ancient woodland, coastal heathland and the pattern of small fields) – ensure choice of site and scale of development does not detract from these.

CA10: Carnmenellis

Key Landscape Characteristics

- *Gently undulating open and exposed elevated granite plateau, boggy in places, with radiating valleys at edge.*
- *Significant remains of mining and quarrying industry including mine engine house and related structures and settlements particular around Carn Brea to the north and around Porkellis.*
- *Permanent pasture and rough grazing, with some horticulture on south facing slopes.*
- *Cornish hedges and some hedgerows enclosing small to medium scale fields of Anciently Enclosed Land, once highly managed.*
- *Few hedgerow trees on plateau and narrow areas of woodland (mostly Wet Woodland) in valleys.*
- *Fragmented remnant Lowland Heathland in high parts of Landscape Character Area with associated species in Cornish hedges.*
- *Settlement pattern of mainly dispersed villages of medieval origin.*
- *Pylons, masts and poles prominent in places.*
- *Long views from elevated areas.*
- *Upland recently enclosed as small farms and 'miners' smallholdings.*[1]



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	An open, gently undulating and large scale elevated plateau (reaching 250m at Carnmenellis), cut by many radiating stream valleys and dropping to lower ground at the edges of the area. Prominent hill summits (Carn Brea and Carn Marth) feature along the northern edge of the plateau.		
Land cover pattern and presence of human scale features	The landscape has a varied pattern of irregular, small to medium scale fields (of medieval origin) dominating the lower areas while in upland areas this is broken up by larger fields of post medieval origin, forming strongly rectilinear field patterns. There are some smaller areas of unenclosed rough ground and a few very small areas of modern enclosed land interspersed throughout the area. Land cover pattern is varied, made up predominantly of pasture and rough grazing with some horticulture on south facing slopes. There are limited areas of broadleaved plantations mainly confined to the river valleys in the south and south-east of the area. Human scale features include Cornish hedges, hedgerows, farm buildings, and mining structures.		
Tracks/transport pattern	This LCA contains existing roads including the A394, A39 and the B3297. Elsewhere are narrow lanes with sharp bends following the rectilinear field boundaries and a significant number of tracks providing access to isolated buildings sited off the roads.		
Skylines	The LCA description identifies the de Dunstanville / Bassett monument on Carn Brea as dominating the skyline above Redruth and which, with the nearby 'castle', is widely visible across mid and west Cornwall. The key characteristics also refer to the significant remains of mining and quarrying industry (including mine engine house and related structures), particularly around Carn Brea to the north and around Porkellis; and the pylons, masts and poles that are prominent in places (including a mast at Four Lanes, standing at 152m. There are also some existing wind turbines on the skyline including the two turbines at Roskrow Barton, Penryn (75m to tip).		
Perceptual qualities	The northern part of the LCA is strongly influenced by modern development and major transport infrastructure relating to the Camborne-Pool-Redruth conurbation. Similarly, the eastern edge includes similar development at Penryn, close to the sprawling settlement of Falmouth (which falls mainly within the adjacent CA13). Other human influences include a number of reservoirs, the largest being the centrally sited Stithians Reservoir. However, the LCA description refers to '*an appealing remoteness despite the large number of isolated dwellings and telegraph poles*'. The LCA description also refers to this area as a '*bleak and exposed landscape*'.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Upland Rough Ground' (which is found in many parts of the landscape) and areas of 'Ornamental' parkland to be highly vulnerable to wind turbines. 'Medieval Farmland', assessed as moderate-high vulnerability, makes up a significant proportion of the LCA in combination with 'Post-Medieval Farmland' and 'Industrial Relict' – both assessed as of moderate vulnerability. Areas of lower vulnerability are associated with the smaller areas of '20th Century Settlement' and 'Water reservoirs' – assessed as of moderate-low vulnerability.		
Distinctive landscape features	The LCA description notes the Cornish hedges and hedgerows enclosing the small,		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	irregular field pattern of permanent pasture, the dispersed settlement pattern with mining associations of modest cottages and terraces, the engine houses, narrow rural lanes and woodland in valleys, Carn Brea (visible for many miles around) and the prominent communications mast at Four Lanes as distinctive features of this landscape. Wind energy development could affect some of these.		
Scenic quality	A very small strip along the southern border of the LCA (under 2%) is designated as AONB. A large area in the north of the LCA falls within The Carn Brea, Carnmenellis and Carn Marth AGLV [NB the paper map includes a separate area to the east of main AGLV around Carn Marth which is not shown on the GIS data]- special qualities include the mining areas, engine houses and stone walls and the prominence of Carn Brea as a landmark. A small part in the west of the LCA falls within The St Gluvias AGLV [NB the paper map includes an additional area to the north which is not shown on the GIS data]- special qualities include the Kennall Vale woodland and estate beech plantings.		
Overall sensitivity assessment	Although the relatively large scale landform of the plateau, relatively simple landcover, presence of simple rectilinear field patterns, and strong human influence in parts could indicate a lower sensitivity to wind energy development, the presence of rough ground and the significant remains of mining and quarrying industry on the skyline (particularly around Carn Brea to the north and around Porkellis) increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development and a **moderate-high** sensitivity within the AONB. The distinctive hill summit of Carn Brea would be particularly sensitive.		
Recommendations on turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large, the presence of varied small-medium scale landscape patterns and many mining heritage features means that this landscape is likely to be particularly sensitive to turbines within the upper end of the 'large' category.		
Recommendations on cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the landform is relatively large, the scale of the undulations and the presence of varied small-medium scale landscape patterns means that this landscape would be particularly sensitive to 'medium', 'large' and 'very large' cluster sizes.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines**, comprising turbines up to and including the smaller end of the large size. There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB development limited to occasional very small scale

	single turbines linked to existing buildings (eg farm buildings).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines on the historically important Carn Brea. • Aim to locate turbines in larger scale areas of modern fields. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, the remains of mining and quarrying industry (including mine engine house and related structures), particularly around Carn Brea to the north and around Porkellis. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being highly vulnerable to wind farm development. • Consider views from local viewpoints and popular routes (e.g. from the viewpoint at the top of Carn Brea, and popular locations around the reservoirs) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the Cornish hedges and hedgerows enclosing the small, irregular field pattern of permanent pasture, the engine houses, narrow rural lanes, woodland in valleys, or Carn Brea as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Carn Brea, Carnmenellis and Carn Marth AGLV (particularly the mining areas, engine houses, stone walls and the prominence of Carn Brea as a landmark) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Gluvias AGLV (particularly the Kennall Vale woodland and estate beech plantings) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	An open, gently undulating and large scale elevated plateau, cut by many radiating stream valleys and dropping to lower ground at the edges of the area. Prominent hill summits (Carn Brea and Carn Marth) feature along the northern edge of the plateau.		
Sense of openness / enclosure	The upland plateau is open and exposed to the elements with limited shelter provided by the small wooded valleys that cut through the landform. Cornish hedges with little vegetation cover enclose the landscape's fields.		
Field pattern and scale	The landscape has a varied pattern of irregular, small to medium scale fields (of medieval origin) dominating the lower areas while in upland areas this is broken up by larger fields of post medieval origin, forming strongly rectilinear field patterns. There are some smaller areas of unenclosed rough ground and a few very small areas of modern enclosed land interspersed throughout the area.		
Landcover	Predominantly agricultural land - mainly pasture with some arable and horticulture. There are some also narrow areas of broadleaved woodland, scrub and bracken and fragmented patches of heathland.		
Perceptual qualities	The northern part of the LCA is strongly influenced by modern development and major transport infrastructure relating to the Camborne-Pool-Redruth conurbation. Similarly, the eastern edge includes similar development at Penryn, close to the sprawling settlement of Falmouth (which falls mainly within the adjacent CA13). Generally, the landscape has a scattered settlement pattern, mainly focused on areas of former mining activity. Elsewhere, isolated dwellings, farms and former miners' smallholdings are set within a remote upland landscape. A number of reservoirs erode perceptions of remoteness locally, the largest being the centrally sited Stithians Reservoir.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Upland Rough Ground' (which is found in many parts of the landscape) and areas of 'Ornamental' parkland to be highly vulnerable. 'Medieval Farmland', assessed as moderate-high vulnerability, makes up a significant proportion of the LCA in combination with 'Post-Medieval Farmland' and 'Industrial Relict' – both assessed as of moderate vulnerability.		
Distinctive landscape features	The LCA description notes the Cornish hedges and hedgerows enclosing the small, irregular field pattern of permanent pasture, the dispersed settlement pattern with mining associations of modest cottages and terraces, the engine houses, narrow rural lanes and woodland in valleys, Carn Brea (visible for many miles around) and the prominent communications mast at Four Lanes as distinctive features of this landscape. Some of these could be affected by solar PV development.		
Scenic quality	A very small strip along the southern border of the LCA (under 2%) is designated as AONB. A large area in the north of the LCA falls within The Carn Brea, Carnmenellis and Carn Marth AGLV [NB the paper map includes a separate area to the east of main AGLV around Carn Marth which is not shown on the GIS data]- special qualities include the mining areas, engine houses and stone walls and the prominence of Carn		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Brea as a landmark. A small part in the west of the LCA falls within The St Gluvias AGLV [NB the paper map includes an additional area to the north which is not shown on the GIS data] - special qualities include the Kennall Vale woodland, and estate beech plantings		
Overall sensitivity assessment			
	Although the presence of undulations in the landform and human influence on the landscape may indicate a lower sensitivity to solar PV development, the sense of openness, largely pastoral/semi-natural character of the plateau and varied pattern of irregular, small to medium scale fields increase sensitivity to the extent that overall this LCA is considered to have a **moderate-high** sensitivity to solar PV development. Areas of rough ground would be particularly sensitive.		
Recommendations on sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The general openness of this LCA and presence of small scale, historic field patterns means that this landscape would be particularly sensitive to "large' scale solar PV developments.		

Landscape strategy and Guidance for Solar PV Development

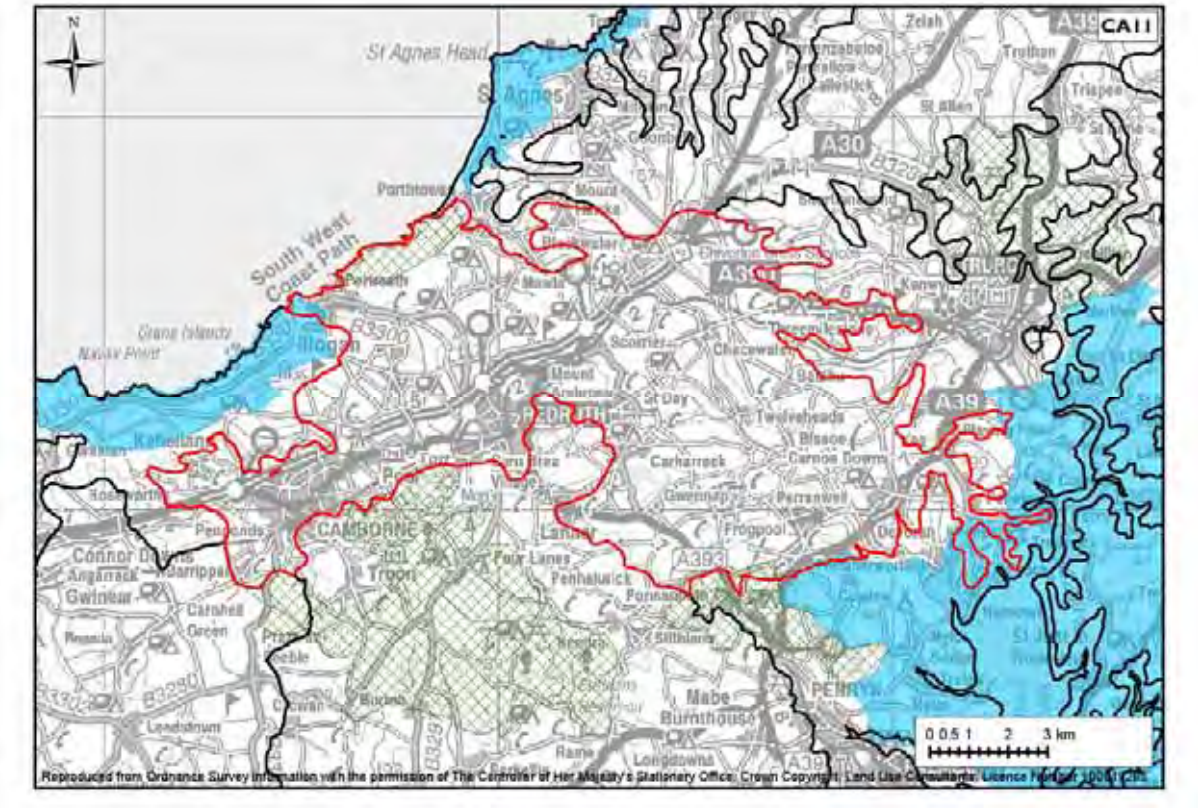
Landscape strategy	The landscape strategy is for **a landscape with occasional small to medium size solar PV developments** located in sheltered folds in the landscape (scale of development should relate to landscape scale which varies across the LCA). Within the AONB development limited to very **occasional** very small scale PV development. There may be multiple solar PV developments in the LCA, but they should be clearly separated so that, although each development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating solar PV development in areas of remnant heathland. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as Cornish hedges and woodland to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Prevent damage to the landscape's small-scale road network during the installation phase (including through road widening and the removal / cutting back of Cornish hedges). • Avoid siting solar PV development within the HLC Types of 'Upland Rough Ground' and 'Ornamental' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. from the viewpoint at the top of Carn Brea, and popular locations around the reservoirs) when considering the siting and design of Solar PV development in the landscape

	– avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure Solar PV development does not adversely affect the Cornish hedges enclosing the irregular field pattern of permanent pasture, the dispersed settlement pattern, the narrow rural lanes, or woodland in valleys as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Carn Brea, Carnmenellis and Carn Marth AGLV (particularly the mining areas, engine houses and stone walls and the prominence of Carn Brea as a landmark) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Gluvias AGLV (particularly the Kennall Vale woodland, and estate beech plantings) – ensure choice of site and scale of development does not detract from these.

CA11: Redruth, Camborne and Gwennap

Key Landscape Characteristics[1]

- *Rolling slate and siltstone landscape with small scale inland but more open on the north coast.*
- *Post industrial mining landscape with many visible mining relics, including old engine houses and revegetating spoil heaps with remnant surviving or developing woodland, heath or wetland.*
- *Extensive Lowland Heathland with bracken and scrub along coastal strip*
- *Pastoral landscape of improved and rough grazing with extensive areas of rough land.*
- *Strong field pattern enclosing small-medium scale fields and narrow lanes.*
- *Trees, occurring in hedges, valleys, corner of fields and around farm buildings.*
- *Valleys which are shallow and narrow, containing small streams.*
- *A well populated landscape containing Cornwall's largest built-up area.*
- *Many built structures giving the landscape a cluttered appearance.*



[1] Taken directly from: Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	This relatively small scale undulating landscape is characterised by two catchment basins separated by a larger scale low ridge of the North Downs. It also includes a larger scale plateau on the northern coastline between Portreath and Porthtowan. The north westerly basin drains to the north coast at Portreath and the second (more extensive basin to the east of Redruth) drains south east to the Carnon River and beyond to the sea at Devoran. The streams in these catchment basins have formed incised, narrow valleys in the landscape.
Land cover pattern and presence of human scale features	The landscape has a strong field pattern of small, irregular fields of anciently enclosed land with some straight sided fields of recently enclosed land on higher ground. In areas surrounding former mines there are distinctive clusters of miner's smallholdings. Cornish hedges reinforce the strong patterns of enclosure. Land cover pattern is varied including improved grassland/pasture, some arable, and rough grazing, extensive disturbed areas of scrub, bracken and heath which have colonised former mined land, woodland in valleys and slag heaps (e.g. north of Gwennap and Tailings Dam associated with Wheal Jane former mine just north of Bissoe). Frequent human scale features include Cornish hedges, farm buildings, remnants of the mining industry (engine houses, tramways) and hedgerow trees. The LCA description notes that the remains of the mining industry create a complex, small scale landscape.
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A30 and the A39. A network of minor roads and small lanes link the dispersed but relatively densely settled rural areas and there are relatively few restrictions in terms of narrow hedged lanes.
Skylines	Although the LCA description does not refer specifically to skylines, it notes many visible mining relics, including old engine houses, as one of its key characteristics. The most visible historic features are the remains of the mining industry include derelict engine houses (remains of the mining industry) which form distinctive silhouettes on the skyline. There are also miners' cottages, tips, spoil heaps and Methodist chapels. The LCA description also refers to many built structures giving the landscape a cluttered appearance – as well as historic features are telecommunications masts located on the military airfield at the coast north of Portreath and on high ground at Perranaworthal.
Perceptual qualities	Although this LCA is relatively densely populated and includes one of Cornwall's largest built-up areas there are still pockets of peacefulness and remoteness associated with regenerating natural landscapes in former mining landscapes. The presence of many built structures in combination with the busy A30 dual carriageway crossing the north of the area, has contributed to the erosion of tranquillity. In addition is the military base, RAF Portreath, situated on the coast just east of Portreath.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Ornamental' and 'Rough Ground' (coastal and upland) to be highly vulnerable to wind turbines. Scattered areas of 'Medieval Farmland' are assessed to be moderate-high vulnerability while areas of 'Post-Medieval Farmland' (which make up a significant proportion of the LCA) and 'Industrial Relict', are assessed as of moderate vulnerability. Areas of '20th Century Settlement' and 'Water, reservoirs'

Criteria	Lower sensitivity	⟷	Higher sensitivity
	are assessed as of low-moderate vulnerability whilst areas of lower sensitivity are associated with areas of 'Military' and small areas of 'Industrial active' assessed as of low vulnerability.		
Distinctive landscape features	The LCA describes the remains of the mining industry including derelict engine houses, tips, mining tracks and Methodist chapels (creating a complex, small scale landscape); Carn Marth; Gwennap Pit and the railway viaducts as distinctive features of this landscape. Some of these features could be affected by wind energy development.		
Scenic quality	Most of the LCA is not designated. Some edges fall within the Cornwall AONB (less than 2% of the LCA) and part of the northern coastline lies within the Portreath AGLV [also known a Nancekuke AGLV – the paper mapping omits the disused airfield from the designation]. Special qualities include the wild and spectacular nature of the coastal cliffs and the Portreath valley woodland.		
Overall sensitivity assessment	Although the presence of man's influence on the landscape and relatively low scenic quality could indicate a lower sensitivity to wind energy development, the relatively small scale of the landscape, the presence of a high density of distinctive prominent engine houses on the skyline, and the complexity of the landscape increase sensitivity so that overall this LCA is considered to have a **moderate** sensitivity to wind energy development and a **moderate-high** sensitivity within the AONB. The naturalistic coastal edge and its immediate hinterland would be particularly sensitive while the larger scale plateau to the north around the airfield would be less sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The relatively small scale undulating nature of this landscape means that it would be particularly sensitive to 'large' turbines. Areas close to small scale historic features may also be particularly sensitive to 'small' or 'medium' scale turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The relatively small scale undulating nature of this landscape means that it would be particularly sensitive to 'medium', 'large' and 'very large' scale clusters of wind turbines. Areas close to small scale historic features may also be particularly sensitive to small clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single or small clusters of turbines**, comprising turbines up the medium scale (less in areas close to small scale historic features) and **no development** on the naturalistic coastal edge. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB development limited to occasional very small scale single turbines linked to existing

	buildings (eg farm buildings)
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the naturalistic coastline, particularly its prominent headlands and cliff tops. • Locate larger turbines on higher ground and in areas of larger scale fields, away from the complex small scale historic landscapes. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such as the clusters of large Bronze Age barrows (Two Burrows and Three Burrows) and the many engine houses. • Avoid, wherever possible, siting turbines within the HLC Types of 'Ornamental', 'Coastal Rough Ground' and 'Upland Rough Ground' – assessed by Cornwall Council as being highly vulnerable to wind farm development. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, the remains of the mining industry, Carn Marth (in the adjacent LCA), Gwennap Pit or railway viaducts as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Portreath AGLV (particularly the wild and spectacular nature of the coastal cliffs and the Portreath valley woodland) – ensure choice of site and scale of development does not detract from these.

Criteria for Assessing Landscape Sensitivity to Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	This is an undulating landscape with some visible slopes and some hidden lower lying areas. The slopes of the plateau in the north and the low ridge of the North Downs are relatively prominent.
Sense of openness / enclosure	Includes the open exposed north coast to the contrasting sheltered valleys which drain the higher ground to the north and south coasts. Cornish hedges supporting scrubby vegetation enclose the small, irregular fields in the valleys and on hillsides as well as the often larger, straight sided fields on higher ground. Strips of woodland further contribute to a sense of enclosure along the valley floors and in occasional patches of the valley sides.
Field pattern and scale	Strong field patterns vary in scale from the small - medium irregular fields of anciently enclosed land occurring in the valleys and hillsides to the more predominant, straight sided fields of post-medieval origin on higher ground. In areas surrounding former mines there are distinctive clusters of miner's smallholdings.
Landcover	A landscape dominated by agricultural land mainly improved grassland/pasture with some arable and rough grazing. There are extensive disturbed areas of scrub, bracken and heath which have colonised former mined land, slag heaps and some woodland in valleys.
Perceptual qualities	Although this LCA is relatively densely populated and includes one of Cornwall's largest built-up areas there are still pockets of peacefulness and remoteness associated with regenerating natural landscapes in former mining landscapes. The presence of many built structures 'cluttering' the landscape, in combination with the busy A30 dual carriageway crossing the north of the area, has contributed to the erosion of tranquillity. In addition the military base, RAF Portreath, is situated on the coast just east of Portreath.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses areas the HLC types of 'Rough Ground (Coastal and Upland)' and 'Ornamental' to be highly vulnerable to development. Scattered areas of 'Medieval Farmland' are assessed as of 'moderate-high' vulnerability whilst the large areas of 'Post-Medieval Farmland (Intakes)' are assessed as 'moderate' vulnerability to solar PV development. Areas of 'Military' land (associated with RAF Portreath) and patches of 'Industrial Relict' are also assessed as of 'moderate' vulnerability, whilst areas of 'Industrial Active' land are assessed as of 'low-moderate' vulnerability.
Distinctive landscape features	The LCA describes the remains of the mining industry including derelict engine houses, tips, mining tracks and Methodist chapels (creating a complex, small scale landscape), Carn Marth, Gwennap Pit and the railway viaducts as distinctive features of this landscape. Some of these could be affected by solar PV development.
Scenic quality	Most of the LCA is not designated. Some edges fall within the Cornwall AONB (less than 2% of the LCA) and part of the northern coastline lies within the Portreath AGLV [also known a Nancekuke AGLV – the paper mapping omits the disused airfield from the designation]. Special qualities include the wild and spectacular nature of the coastal cliffs and the Portreath valley woodland.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Overall sensitivity assessment	Although the presence of some hidden lower lying areas, the presence of arable land, existing human influence and the relatively low scenic quality could indicate a lower sensitivity to solar PV development, the prominent slopes, sense of openness in higher areas and along the coast, and regenerating natural landscapes increase levels of sensitivity. Overall, this landscape is assessed as having a **moderate** sensitivity to solar PV development and a **moderate-high** sensitivity within the AONB. The open undeveloped coastal edge and its immediate hinterland, steep slopes and areas of regenerating natural landscapes in former mining areas would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The size of fields including some areas of small, irregular medieval fields indicates that this LCA would be particularly sensitive to 'large' categories of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

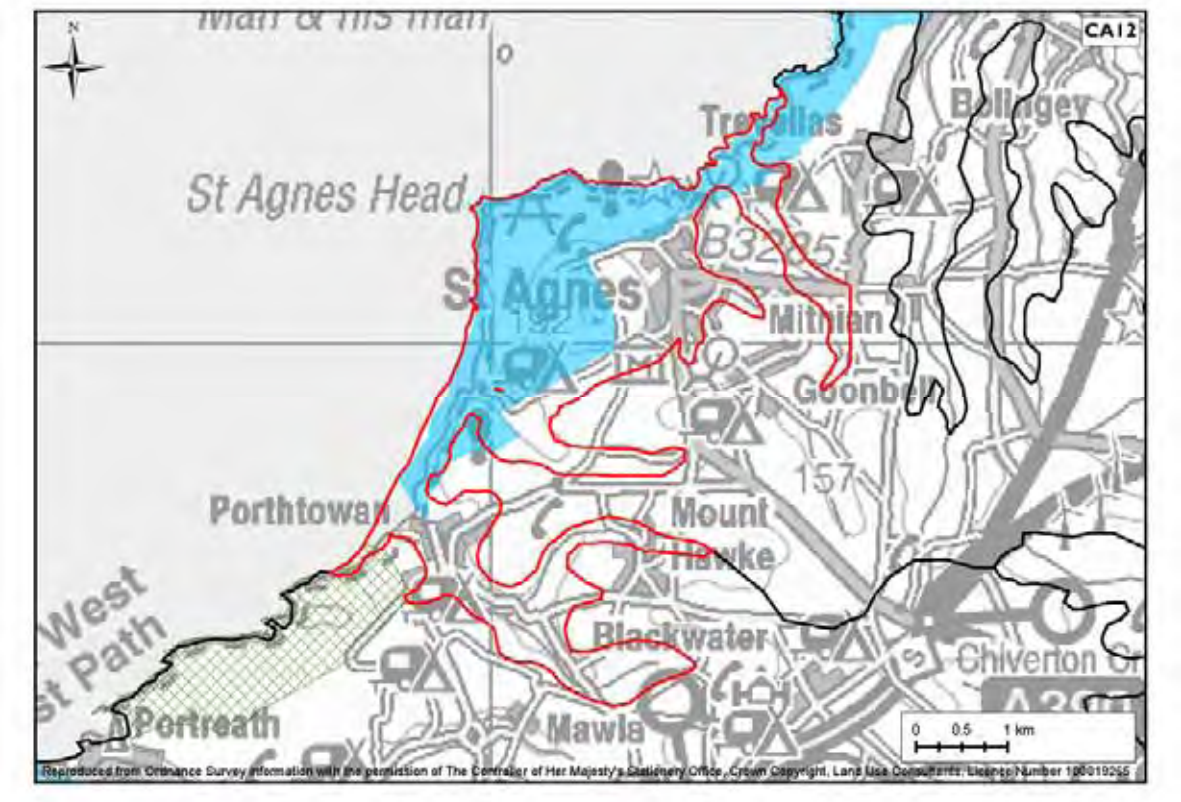
Landscape strategy	The landscape strategy is for **a landscape with occasional PV developments** (up to and including medium in size) and **no development** along the open undeveloped coastal edge. There may be several PV developments in the LCA, but these should be clearly separated so that, although each development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB development limited to occasional very small scale PV development linked to settlement.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating PV development along the open undeveloped coastal edge, on steep slopes or in areas of regenerating natural landscapes in former mining areas. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Avoid siting solar PV development within the HLC Types of 'Ornamental' and 'Rough Ground' – assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the remains of the mining industry including derelict engine houses, tips, mining tracks and Methodist chapels (creating a complex, small scale landscape), Carn Marth, Gwennap Pit and the railway viaducts as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Portreath AGLV (particularly the wild and spectacular nature of the coastal cliffs and the

	Portreath valley woodland) – ensure choice of site and scale of development does not detract from these.

CA12: St Agnes

Key Landscape Characteristics[1]

- *Coastal plateau of slate killas with granite intrusion, rising to St Agnes Beacon.*
- *High slate cliffs form a dramatic and varied coastline with sandy coves at the mouth of streams and sandy low tide beaches.*
- *Open and exposed landscape with almost no tree cover on plateau and hill top.*
- *Extensive evidence of past mining of tin and copper with derelict sites, bare ground and features such as engine houses, a harbour and mining tracks.*
- *Extensive areas of Lowland Heathland and unenclosed rough ground of scrub and bracken on coastal cliffs and valleys, often associated with mine sites.*
- *A mainly recent enclosure pattern of small to medium fields of improved permanent pasture and rough grazing with more recent farming over former miner's smallholdings.*
- *Villages cluster as terraces on the steep valley sides at the coast with scattered former mining cottages and new farms on the plateau.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale			
	St Agnes Beacon is a distinct landform feature. This a landscape of varying scales – from the large expansive St Agnes Beacon (rising to 192m AOD) and the exposed, open coastline, to the narrow and very enclosed valleys. The landscape is incised by steep valleys at Porthtowan, Trevellas Combe and Chapel Coombe. The cliffs are high and unstable with some wavecut platforms and beaches at Porthtowan/Chapel Porth.		
Land cover pattern and presence of human scale features			
	A variety of patterns – from the matrix of small to medium scale fields (including miners' smallholdings) enclosing both permanent pasture and rough grazing, to the post-medieval strongly rectilinear enclosure on former rough ground, and the remaining rough ground with a significant amount of lowland heathland. Large areas of scrub, bracken and some broadleaved woodland add to the variety. Human scale features include stunted trees within farmland, Cornish hedges, mining buildings/ structures, cottages and farms.		
Tracks/transport pattern			
	Apart from the B3277/B3285 which runs through St Agnes, other roads are minor, including some former access routes to the mining areas. St Agnes Beacon and many parts of the coastal edge are not accessible by road. Coastal rough ground and St Agnes Beacon are free of tracks/roads.		
Skylines			
	Although the LCA description does not refer specifically to skylines, it notes that the distinctive landform of St Agnes Beacon, a large, heath covered granite intrusion rising to 192m, which dominates the CA – this is a prominent undeveloped and distinctive skyline. In addition the CA description refers to mining heritage remains including engine houses including the iconic engine house of Wheal Coates. It also notes a group of Bronze Age cairns on St Agnes Beacon, Tubby's Head cliff castle and the medieval religious cult site at Chapel Porth (all Scheduled Monuments). Modern linear development spread from St Agnes is visible on some of the hill slopes surrounding the town.		
Perceptual qualities			
	A farmed landscape with significant tracts of rough ground along the 'wild' coast and the high hill summit of St Agnes Beacon. There is also a strong sense of relative remoteness and the deep narrow valleys. This is in contrast to areas of modern development (including caravan sites on higher ground) around the main settlement of St Agnes.		
Historic landscape character			
	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Upland Rough Ground' and 'Coastal Rough Ground', which make up a significant proportion of the LCA, to be highly vulnerable to wind turbines. Patches of 'Medieval' farmland on the fringes of the landscape (near the border with CA14) are assessed as of 'moderate-high' vulnerability, whilst fragments of 'Industrial: Relict' land are assessed as of 'moderate-low'. The lowest vulnerability score ('low') is associated with areas of modern settlement at St Agnes.		
Distinctive landscape features			
	The LCA describes St Agnes Beacon, the coastal Lowland Heathland, remains of chimneys, engine houses, tracks and disused roads, spoil heaps and rough ground, the small terraces in the villages and old sea harbours. The remains of the mining industry are particularly important in this CA.		

Criteria	Lower sensitivity	⟷	Higher sensitivity
Scenic quality	The landscape's coastline and inland fringes from Porth Towan fall within the 'St Agnes' part of the Cornwall AONB (42% lies within AONB). The coast and an area inland (which includes part of the settlement of St Agnes) is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the large scale of the cliffs, views north and south along the coast, the prominence of features of the mining industry, the view of Wheal Coates Engine House poised on the edge of the coastal slope above the cove at Chapel Porth, seen against the expansive coastal views beyond (an iconic view of the Cornish Coast); the prominence and skylines of visible historic remains including cairns and cliff castles.		
Overall sensitivity assessment	Although part of this CA is farmed and includes human influence around St Agnes (which could indicate lower levels of sensitivity to wind turbines), the distinctive landform, large areas of rough ground and moorland lacking tracks, distinctive skyline features (including iconic engine houses), 'wild' coastal character and high scenic quality increase levels of sensitivity to the extent that overall this CA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's remote and open coastline and prominent and distinctive beacon would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The overall size of this CA, combined with its small scale field patterns and sense of 'wildness' means that the landscape would be particularly sensitive to 'small', 'medium' and 'large' turbines. The edges of St Agnes, where human influence is greater, may also be able to accommodate some 'small' turbines. The landscape's remote and open coastline and prominent and distinctive beacon would be particularly sensitive to all scales of turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The overall size of this CA, combined with its small scale field patterns and sense of 'wildness' means that the landscape would be particularly sensitive to anything but single turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings, or perhaps some small turbines associated with larger scale development on the edges of St Agnes), and **no turbines along the landscape's remote and open coastline or on the prominent and distinctive beacon**.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid siting development along the landscape's remote and open coastline or on the prominent and distinctive beacon.

	• Where possible, link development to existing farm buildings or businesses, or areas of modern industrial or commercial development on the fringes of St Agnes. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the iconic engine house of Wheal Coates and other mining heritage structures, Bronze Age cairns on St Agnes Beacon, Tubby's Head cliff castle and the medieval religious cult site at Chapel Porth. • Avoid, wherever possible, siting turbines within the HLC Types of 'Upland Rough Ground' and 'Coastal Rough Ground'– assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure energy development does not dominate views from the top of St Agnes Beacon. • Ensure wind energy development does not dominate or adversely affect the distinctive skyline of St Agnes Beacon, the coastal Lowland Heathland, remains of chimneys, engine houses, tracks and disused roads, spoil heaps and rough ground, the small terraces in the villages and old sea harbours as distinctive features of this CA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the large scale of the cliffs, views north and south along the coast, the prominence of features of the mining industry including the view of Wheal Coates Engine House, and the skylines of cairns and cliff castle) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform			
	A coastal headland dominated by the prominent landform of St Agnes Beacon (192m AOD) and other visible slopes. The landscape is incised by steep valleys at Porthtowan, Trevellas Combe and Chapel Coombe, all of which have slopes of around 100m deep. The cliffs are high and unstable with some wave-cut platforms and beaches at Porthtowan/Chapel Porth. Short fast streams drain the area down the narrow valleys.		
Sense of openness / enclosure			
	This is an open, windswept landscape with little shelter. Fields are bounded by treeless Cornish hedges, and woodland is limited to patches along valleys.		
Field pattern and scale			
	The enclosed field pattern has a strong visual influence on the landscape forming a matrix of small to medium scale fields (including miners' smallholdings) enclosing both permanent pasture and rough grazing. Enclosure of former rough ground is strongly rectilinear in form and with straight, uniform boundaries.		
Landcover			
	A landscape dominated by improved grassland in enclosures (some arable on upper inland slopes of valleys) and a significant amount of Lowland Heathland. Also bare ground on the tips associated with mining and large areas of scrub, bracken and some broadleaved woodland in the valleys. A small area of sand dune lies at Porthtowan.		
Perceptual qualities			
	A farmed landscape with significant tracts of rough ground along the 'wild' coast and the high hill summit of St Agnes Beacon. There is also a strong sense of relative remoteness and the deep narrow valleys. This is in contrast to areas of modern development (including caravan sites on higher ground) around the main settlement of St Agnes.		
Historic landscape character			
	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Rough Ground', which make up a significant proportion of the LCA, to be highly vulnerable to development. Patches of 'Medieval' farmland on the fringes of the landscape (near the border with CA14) are assessed as of 'moderate-high' vulnerability, whilst fragments of 'Industrial: Relict' land are assessed as of 'moderate'.		
Distinctive landscape features			
	The LCA describes St Agnes Beacon, the coastal Lowland Heathland, remains of chimneys, engine houses, tracks and disused roads, spoil heaps and rough ground, the small terraces in the villages and old sea harbours. The remains of the mining industry are particularly important in this CA and the lowland heathland would be particularly sensitive to development of solar PV development.		
Scenic quality			
	The landscape's coastline and inland fringes from Porth Towan fall within the 'St Agnes' part of the Cornwall AONB (42% lies within AONB). The coast and an area inland (which includes part of the settlement of St Agnes) is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the views north and south along the coast, coastal heathland, and the green pastures encircling the beacon.		
Overall sensitivity assessment			
	Although the areas of regular field pattern and presence of contemporary human influence around St Agnes could indicate lower levels of sensitivity to solar PV development, the CA's prominent landform, open and exposed character,		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	pastoral/heathland character, steep valley slopes, sense of wildness, presence of large tracts of heathland and high scenic quality increase levels of sensitivity to the extent that overall this CA is considered to have a **moderate-high** sensitivity to solar PV development. The landscape's open coastline with unbroken tracts of heathland, prominent slopes of St Agnes Beacon and steep-sided naturalistic valleys would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The overall size of this CA, combined with its small scale field patterns and sense of 'wildness' means that the landscape would be particularly sensitive to anything but the very smallest schemes.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for a **landscape without solar PV development** (except for very occasional very small scale well sited developments), and **no solar PV development** within the unbroken tracts of heathland, prominent slopes of St Agnes Beacon or on the steep-sided naturalistic valleys.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid siting development within the unbroken tracts of heathland, prominent slopes of St Agnes Beacon or on the steep-sided naturalistic valleys. • Avoid siting development in areas of more intricate former miners' smallholdings, which form strong historic patterns in the landscape. • Locate development within dips and sheltered folds in the farmed areas, where PV development would be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Use existing landscape features, such as secondary woodland, scrub and Cornish hedges (where high enough) to screen views of solar PV developments. • Explore opportunities to locate development linked to existing industrial land and brownfield sites (e.g. around St Agnes). • Avoid siting solar PV development within the HLC Zone of 'Rough Ground'– assessed by Cornwall Council as being highly vulnerable to solar PV development. • Ensure development does not erode the characteristic green pastoral character of the landscape. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and from the top of St Agnes Beacon) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect St Agnes Beacon, the coastal Lowland Heathland, remains of chimneys, engine houses, tracks and disused roads, spoil heaps and rough ground, the small terraces in the villages

	and old sea harbours as distinctive features of this CA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the views north and south along the coast, the coastal heathland, and the green pastures encircling the beacon) – ensure choice of site and scale of development does not detract from these.

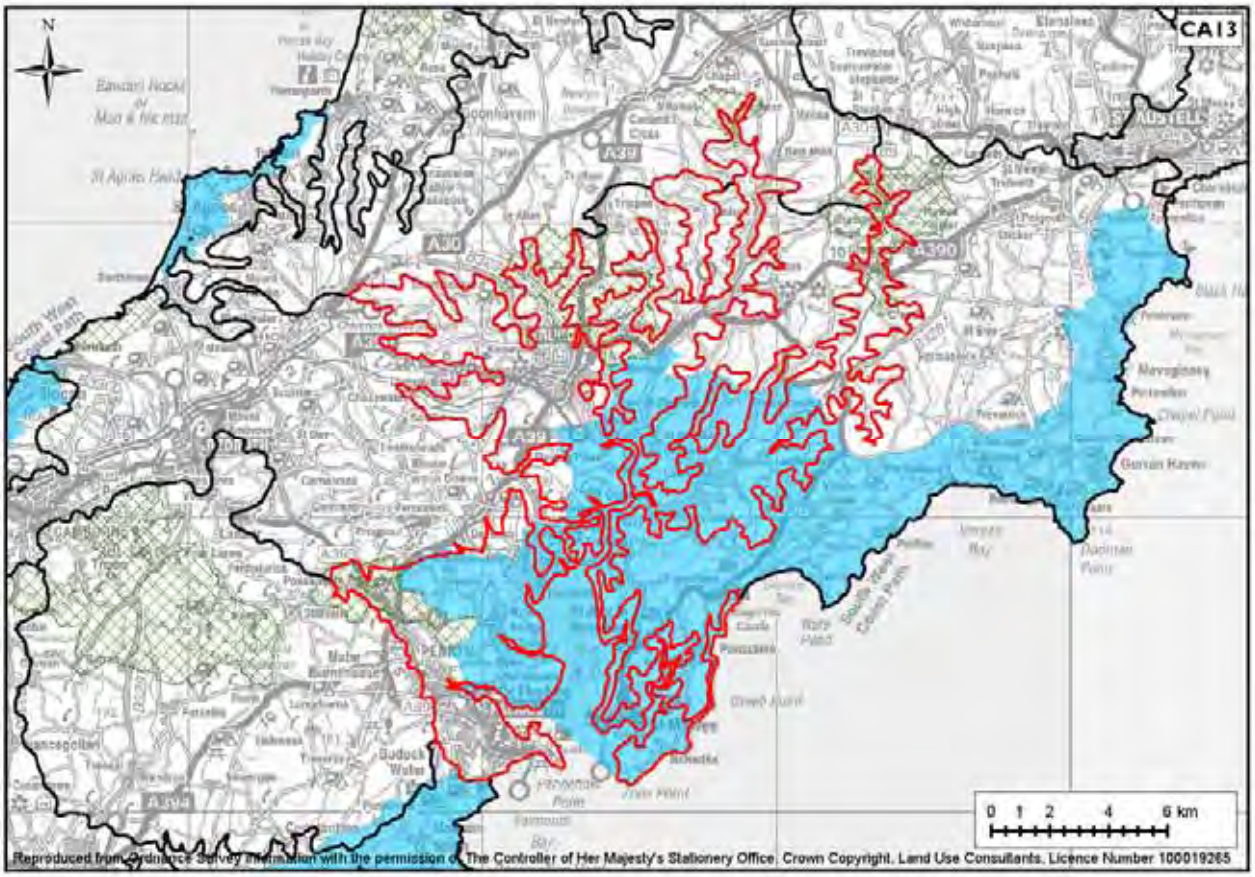
CA13: Fal Ria, Truro and Falmouth

Key Landscape Characteristics[1]

- *An interlocking and winding ria (drowned river valley) system of small creeks and river valleys that drain into the River Fal that broadens to form the Fal Estuary.*
- *Muddy creeks with brackish open water and wet grassland, merging with Coastal Saltmarsh close to tidal limits.*
- *Semi-natural woodland and Ancient Woodland on steep slopes, with ornamental and conifer estate planting inland on the undulating plateau with Monterey Pines a feature. Where woodland does not dominate the slopes there are pasture fields usually with scrub vegetation down to the water's edge.*
- *Extensive forestry north of Ladock and west of Tresillian.*
- *Farmland is a mix of pasture and arable with some areas of upland rough ground with a small field pattern of anciently enclosed land with more regular larger fields indicating areas of more recent enclosure. Fields are bounded by Cornish Hedges with extensive tree cover on these boundaries, adding to the wooded feel.*
- *Creeks that are dominated by former ports in small villages, with an industrial, water-related character of small quays and landing stages.*
- *Harbours and defence fortifications at the mouth of the estuary. Quays and tide mills at the heads of creeks.*
- *A coastal zone of low rocky cliffs backed by farmland interspersed with discrete woodlands.*
- *Transition between coastal and tidal river waterscapes, with many boats and ships emphasizing the marine character.*
- *Medieval settlements at the heads of creeks with strong vernacular of slate with render, painted pink, cream or white with frequent medieval churches. Linear villages occur along main transport routes on the valley floors with some larger urban and industrial areas.*
- *Tree lines linking villages, farms and cottages and forming tunnels.*
- *A busy landscape with much movement of people between the urban centres and lots of river traffic.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]


CA13
N
A39
A30
A390
0 1 2 4 6 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office. Crown Copyright. Land Use Consultants. Licence Number 100019265

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A river landscape of low rounded hills divided by an intricate system of small twisting valleys that drain into the vast ria system at the heart of the area. The River Fal broadens to form the expansive Fal Estuary – one of the largest natural harbours in the world. In the south the estuary is fringed by a coastal strip of low cliffs and headlands sheltering sandy beaches.
Land cover pattern and presence of human scale features	A landscape with a mixture of small-medium medieval fields with sinuous boundaries in the valleys and post-medieval and recent enclosure of former heath and rough ground on higher ground. Variation in landcover is provided by dense woodland and plantations in valleys and rough, open grazing on higher land, and extensive mudflats, saltmarsh and brackish wetland habitats along the estuary. Human scale features include Cornish hedges, frequent trees (including Monterey pines), farms, cottages, quays and tide mills.
Tracks/transport pattern	Apart from the A390 in the north and the A39 on the western side of the ria, there is a relatively good network of minor roads. However, many of the smaller roads are winding and well treed minor roads and some parts of the area are inaccessible.
Skylines	Although the LCA description does not refer specifically to skylines, it notes the low cliffs and headlands, prominent defence fortifications (Pendennis and St Mawes castles) at the mouth of the estuary, as well as a late 19th century battery and lighthouse on St Anthony Head. The western fringes of the Fal Estuary are dominated by sprawling development at Falmouth and Penryn, including large-scale industrial and commercial buildings at Falmouth Docks. The city of Truro also occupies a significant area of elevated land above one of the ria branches. The wind farm at Four Burrows in the north-west of the LCA and some prominent pylon lines are also features of the skyline.
Perceptual qualities	This is a landscape of contrasts; parts of the area are dominated by urban and industrial development related to Falmouth, Penryn and the city of Truro while other areas are very remote. The area to the east of the main estuary is much more rural and less easily accessible. The upper fingers of the ria's tributary valleys also provide a contrasting sense of relative remoteness and tranquillity.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA, as of moderate-high vulnerability to wind turbines. Areas of 'Ornamental' ground associated with the LCA's parkland estates is assessed as of 'high' vulnerability to wind turbines, as are the small areas of 'Upland Rough Ground' on the higher ridges and 'Coastal Rough Ground' along the Roseland. 'Post-medieval Enclosed Land (Reorganisation of AEL)' and 'Post-medieval Enclosed Land (Intakes)', scattered throughout the area are assessed as of 'moderate' vulnerability. Smaller areas of 'Modern' enclosures (Amalgamation of AEL) and (Intakes) are assessed as of 'low-moderate' and 'low' vulnerability to wind energy development respectively. Areas of low vulnerability are also associated with the HLC Type 'Plantations and Scrub', found along some valley sides, as well as the modern development related to the main settlements in the landscape.
Distinctive landscape features	The LCA describes the good views over Falmouth Docks from Castle Drive, and of the river from ferries; fortifications at the entrance to the estuary (Pendennis and St

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Mawes castles); Truro Cathedral; former ports, such as Penryn, Pill, Roundwood, Restronguet; Collegewood viaduct at Penryn; and Tresillian maltings as distinctive features of this LCA. Some of these could be sensitive to wind turbine development.		
Scenic quality	Large parts of the LCA surrounding the estuary, ria and along the coast fall within the 'South Coast Central' part of the Cornwall AONB (41% of the LCA is AONB). The eastern coastline (part of the Roseland Peninsula) is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the prominence and skyline of distinctive landmarks and historic remains including castles at St.Mawes and its counterpart at Pendennis Castle and St.Anthony's lighthouse, and the small lanes densely edged on both sides with mature trees creating enclosed leafy tunnels. Part of the western ria slopes falls within the St Gluvias AGLV. Special qualities include the Kennall Vale woodland, and estate beech plantings.		
Overall sensitivity assessment	Although the large scale landform of low rounded hills, presence of a road network and presence of human influence (particularly around Truro and Falmouth) could indicate lower levels of sensitivity to wind energy development, the tranquil character of many parts of the landscape (particularly to the east of the main estuary), the presence of landmarks on the skyline and high scenic quality (particularly surrounding the estuary and coast) increase levels of sensitivity such as that overall this LCA is considered to have a **moderate** sensitivity to wind energy development outside the AONB and a **moderate-high** sensitivity within the AONB. The landscape's intimate wooded creeks, undeveloped estuary edges and naturalistic coastal edge and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The scale of the low hills (less than100m AOD) and the presence of many human scale features means the CA would be particularly sensitive to 'large' turbines. The landscape's intimate wooded creeks, undeveloped estuary edges and naturalistic coastal edge would be particularly sensitive to all scales of wind turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The scale of undulations means this CA would be particularly sensitive to 'large' and 'very large' clusters of turbines. The landscape's intimate wooded creeks, undeveloped estuary edges and naturalistic coastal edge would be particularly sensitive to all scales of development.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small to medium sized clusters of turbines**, comprising turbines that may be up to and including medium scale outside the AONB with **no turbines** in the intimate wooded creeks, along undeveloped estuary edges or on the naturalistic coastal edge and its immediate hinterland. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked

	to existing buildings eg farm buildings). There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in the intimate wooded creeks, along undeveloped estuary edges or on the naturalistic coastal edge – more suitable locations would be on the low hills above the ria's branching valleys. • Consider opportunities for locating turbines in more developed areas, such as business parks and industrial areas on the edges of settlements. • Avoid siting turbines on prominent coastal headlands and at the mouth of the estuary (St Anthony Head and Pedennis Point). • Avoid damage and alterations to the network of winding well-treed minor roads. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including Pendennis and St Mawes castles, and the battery and lighthouse on St Anthony Head. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and from ferries across the estuary) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not dominate or adversely affect the fortifications at the entrance to the estuary (Pendennis and St Mawes castles); Truro Cathedral; former ports, such as Penryn, Pill, Roundwood, Restronguet; Collegewood viaduct at Penryn; and Tresillian maltings as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the prominence and skyline of distinctive landmarks and historic remains including castles at St.Mawes and its counterpart at Pendennis Castle and St.Anthony's lighthouse, and the small lanes densely edged on both sides with mature trees creating enclosed leafy tunnels) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Gluvias AGLV (particularly the Kennall Vale woodland, and estate beech plantings) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	An interlocking and winding ria (drowned river valley) system comprising a series of small interlocking creeks and steep river valleys draining into the River Fal. Low, strongly undulating hills and ridges sit above the ria landscape, with some summits providing a contrasting sense of openness and scale. The River Fal broadens to form the expansive Fal Estuary – one of the largest natural harbours in the world. In the south the estuary is fringed by a coastal strip of low cliffs and headlands sheltering sandy beaches.		
Sense of openness / enclosure	This landscape has contrasting levels of enclosure – with the broad and wide body of water comprising the Fal Ria and Estuary and the open hills contrasting with the small, sheltered creeks and lower slopes clothed in vast areas of woodland, plantations and lines of trees. The coastal edge is also open.		
Field pattern and scale	Most of the ridges between the valleys are characterised by small-medium medieval fields with sinous boundaries, whilst there are a few areas of post-medieval and recent enclosure of former heath and rough ground, with a larger scale pattern reinforced by rectilinear fields with straight boundaries.		
Landcover	Most of the land cover is pastoral farmland and estate lands with dense woodland interspersed with unsettled rough ground mainly in the inland parts of the valley system. A significant area is the built environment of Truro and Falmouth. The ria has extensive mudflats within the estuary grading to saltmarsh and brackish wetland habitats.		
Perceptual qualities	This is a landscape of contrasts; parts of the area are dominated by urban and industrial development related to Falmouth, Penryn and the city of Truro while other areas are very remote. The area to the east of the main estuary is much more rural and less easily accessible. The upper fingers of the ria's tributary valleys also provide a contrasting sense of relative remoteness and tranquillity.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC Type 'Medieval Farmland', which makes up a significant proportion of the LCA, as of moderate-high vulnerability to development. Areas of 'Ornamental' ground associated with the LCA's parkland estates is assessed as of 'high' vulnerability, as are the small areas of 'Upland Rough Ground' on the higher ridges and 'Coastal Rough Ground' along the Roseland. 'Post-medieval Enclosed Land (Reorganisation of AEL)' and 'Post-medieval Enclosed Land (Intakes)', scattered throughout the area are assessed as of 'moderate' vulnerability. Smaller areas of 'Modern' enclosures (Amalgamation of AEL) and (Intakes) are assessed as of 'low' and 'low-moderate' vulnerability to solar PV development respectively.		
Distinctive landscape features	The LCA describes the good views over Falmouth Docks from Castle Drive, and of the river from ferries; fortifications at the entrance to the estuary (Pendennis and St Mawes castles); Truro Cathedral; former ports, such as Penryn, Pill, Roundwood, Restronguet; Collegewood viaduct at Penryn; and Tresillian maltings as distinctive features of this LCA. Relatively few of these would be sensitive to solar PV development.		
Scenic quality	Large parts of the LCA surrounding the estuary, ria and along the coast fall within		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	the 'South Coast Central' part of the Cornwall AONB (41% of the CA is AONB). The eastern coastline (part of the Roseland Peninsula) is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the Sessile Oak woodland cloaking the slopes, the seasonal changes in colour provided by the mix of pastoral and extensive arable uses, the strong framework of Cornish hedges, and the rugged undomesticated openness of the coastal margins. Part of the western ria slopes falls within the St Gluvias AGLV. Special qualities include the Kennall Vale woodland, and estate beech plantings.		
Overall sensitivity assessment			Although the presence of human influence and sense of enclosure on lower slopes and in folds in the landscape could indicate a lower sensitivity to solar PV development, the open upper slopes and coastal edges, the predominantly pastoral character, presence of steep slopes and high scenic quality all increase levels of sensitivity so that overall, this landscape is assessed as having a **moderate** sensitivity to solar PV outside the AONB and a **moderate-high** sensitivity within the AONB. The landscape's intimate wooded creeks, undeveloped estuary edges and naturalistic coastal edge and its immediate hinterland would be particularly sensitive.
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***			The predominantly small medieval field pattern means that this CA would be particularly sensitive to 'medium' and 'large' solar PV developments. The landscape's upper slopes, undeveloped estuary edges and naturalistic coastal edge would be particularly sensitive to all scales of solar PV development.

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** (size of development should relate to landscape scale which varies within the LCA) with **no solar PV development** on upper slopes, along undeveloped estuary edges or on the naturalistic coastal edge and its immediate hinterland. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development within dips and sheltered folds in the undulating landform of the hills; areas where PV development would be less visible and have less of an influence on landscape character. • Avoid locating development on upper slopes, along undeveloped estuary edges or on the naturalistic coastal edge and maintain the green backdrop to the rias. • Prevent damage to the landscape's winding, tree-funnelled roads during the installation phase (including through road widening and the removal / cutting back of overhanging vegetation). • Avoid locating solar PV development within the HLC Zone of 'Rough Ground', and HLC Type of 'Ornamental' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Ensure the LCA retains a pastoral and wooded character and that cumulative

	development does not change this. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and from ferries across the estuary) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not dominate or adversely affect the fortifications at the entrance to the estuary (Pendennis and St Mawes castles); Truro Cathedral; former ports, such as Penryn, Pill, Roundwood, Restronguet; Collegewood viaduct at Penryn; and Tresillian maltings as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the Sessile Oak woodland cloaking the slopes, the seasonal changes in colour provided by the mix of pastoral and extensive arable uses, the strong framework of Cornish hedges, and the rugged undomesticated openness of the coastal margins) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St Gluvias AGLV (particularly the Kennall Vale woodland, and estate beech plantings) – ensure choice of site and scale of development does not detract from these.

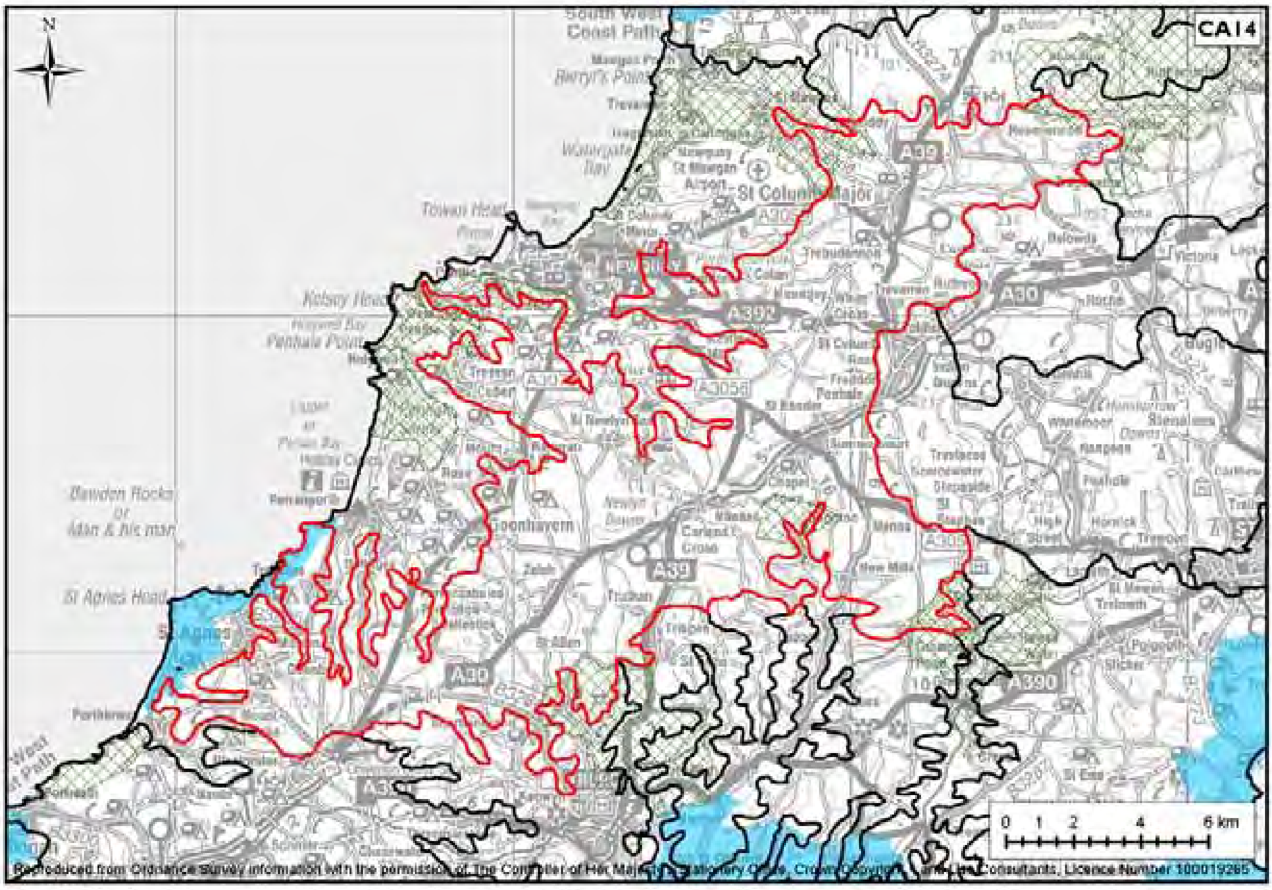
CA14: Newlyn Downs

Key Landscape Characteristics[1]

- *Open, gently undulating plateau with shallow valleys, incised with minor river valleys. In the north, these reach the coast.*
- *Medium to large scale broadly rectilinear fields of pasture or arable.*
- *Low Cornish hedges and hedgerows.*
- *Significant area of Lowland Heathland at Newlyn Downs and along the coast between Perranporth and St Agnes.*
- *Woodland cover more prevalent in valleys, mainly broadleaved with Wet Woodland with limited mixed plantations.*
- *Dispersed settlement clusters with estate farms. Some nucleated settlements around enlarged medieval churchtowns.*
- *Prominent barrows on higher ground, numerous late prehistoric defended / enclosed farmsteads (rounds) and mining remains in the west.*
- *A30 along the higher ground with associated development (roadside settlements).*
- *Windfarms at two sites along the ridge line.*
- *Long views to the north and the coast.*
- *A small area south of Chapeltown is within the St Erme AGLV.*
- *The northern tip (ear Rosenannon) is in the Camel and Allen Valleys AGLV.*
- *The north-eastern tip (in the Vale of Mawgan) is within the Watergate and Lanherne AGLV).*
- *The area around Crantock is within the Perranporth and Holywell AGLV*
- *The landscape around Trenowth is within the Trenowth AGLV.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]


CA14
N
0 1 2 4 6 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright, Land Use Consultants, Licence Number 100019265

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A large-scale landform with a gently undulating plateau, which falls away at the LCA boundary. Valleys are generally shallow although some are deeper in the north of this extensive LCA.
Land cover pattern and presence of human scale features	Mostly simple land cover pattern of medium-sized fields of improved grassland, pasture and arable land with some lowland heath and a few large estate woodland blocks in the valleys. Human scale features include hedgerows and settlements (including farmsteads and churches). There are also existing wind turbines in the landscape. The field pattern varies across this extensive LCA, with medieval enclosure in the east, medieval strips in the north, and larger medieval enclosures in the south. Many fields are bounded with hedgerows.
Tracks/transport pattern	There is a comparatively good transport network across this LCA, including a number of major roads, particularly in the south. There are a number of roads on higher ground, and these are relatively straight in many parts, although in some more ancient enclosed areas there are networks of winding narrow lanes. There is a good network of farm tracks and lanes across the LCA, which is particularly extensive in the south.
Skylines	Although the LCA description does not specifically refer to skylines, it refers to the open, gently undulating plateau and prominent barrows on higher ground as key characteristics. The historic features section notes that the spinal ridge was the focus for extensive clusters of large Bronze Age barrows (as at Two Burrows, Three Burrows, Four Burrows and Carland Cross) and that there are substantial areas of mining remains including engine houses (concentrated in the western part of the LCA around St Newlyn East, Zelah, Goonhavern, and Mithian). However, the ridge is already developed in parts – there are two windfarms located along the ridge (Carland Cross and Four Burrows) which form features on the skyline.
Perceptual qualities	The LCA is a landscape with considerable human influence, much of it recent. This includes an extensive road network, caravan parks and two wind farms. There are several major roads resulting in noise and visual intrusion, although there are some areas which remain tranquil, such as in the far north east. Some of the villages have remained unchanged and these areas retain a tranquil rural character.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of moderate-high vulnerability to wind turbines. Other HLC types which cover large tracts of the LCA are Post-Medieval Farmland, which is moderately vulnerable to wind development, and 20th Century Farmland, which has low vulnerability to wind development. Patches of Upland Rough Ground, particularly higher ground and around areas of previous mining/development, are assessed as having high vulnerability to wind development.
Distinctive landscape features	The LCA notes the wide rolling pastoral and arable character with Cornish hedges, and prominent windfarms as distinctive features of the landscape. These features do not indicate a high sensitivity to wind energy development.
Scenic quality	A very small part of the coastal edge is AONB (less than1% of LCA). Small parts of

Criteria	Lower sensitivity	⟷	Higher sensitivity
	the LCA are designated for their scenic value, as part of various AGLVs. However, the combined area of these sections of AGLVs covers only a small area of this extensive LCA. Some very small parts of the northern edge of the LCA are also located within the St Agnes Heritage Coast.		
Overall sensitivity assessment	Although there are some human scale features and historic skyline features within this LCA, the large scale plateau landform, simple land cover pattern, presence of existing human influence, simple skylines, relative absence of distinctive features and relatively low scenic quality means this LCA is considered to have **low-moderate** sensitivity to wind development and **moderate-high** sensitivity within the AONB. Areas of lowland heathland and the coastal edge and its immediate hinterland would be particularly sensitive.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landscape is relatively large in the Cornwall context, parts of this LCA may be particularly sensitive to turbines at the larger end of the 'large' category.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the landform is relatively large scale, the scale of the undulations and scale of landcover patterns means that this LCA would be particularly sensitive to 'large' and 'very large' clusters of turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with wind farms** with small or medium clusters of turbines, comprising turbines up to and including the smaller end of the 'large' category, as well as smaller single turbines associated with farm buildings and businesses. There may be several wind energy developments in the LCA and the landscape may be perceived as having wind farms visible in different directions, so that collectively they may have a strong influence on the character of the landscape. Within the AONB the strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in the most remote and tranquil locations, particularly within areas of lowland heath on Newlyn Downs and on the coast between St Agnes and Perranporth. • Areas of Medieval Farmland are more sensitive to wind turbines (particularly large scale turbines) than areas of modern or post-medieval fields. • Avoid siting turbines within the HLC types of 'Rough Ground' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Consider views of the skyline from the settlements and the coast (including the South West Coastal Path) when siting and designing wind development – aim for a balanced composition of turbines.

	• Take into account accompanying generic guidance on siting multiple windfarms in this LCA.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	A relatively large scale undulating plateau. Valleys are generally shallow although some are deeper in the north of this extensive LCA.		
Sense of openness / enclosure	This is a relatively open landscape in elevated areas which affords long views, with shallow valleys in the south, and deeper valleys in the north. The fields tend to be bounded by hedges, and several of the valleys are wooded, particularly in the south.		
Field pattern and scale	The field pattern varies across this extensive LCA, with medieval enclosure in the east, medieval strips in the north, and larger medieval enclosures in the south. Many fields are bounded with hedgerows. These various types of medieval enclosure cover about half of the LCA, and the remainder is more rectilinear modern scale agriculture.		
Landcover	Mostly improved grassland and pasture with a substantial proportion of arable land. There is some lowland heathland and rough ground of scrub and bracken. Also in this LCA are remnants of old mine spoil heaps which have developed naturally regenerating heath vegetation. Small areas of broadleaved woodland occur in sheltered hollows and valleys. A few larger estate woodland blocks occur.		
Perceptual qualities	The LCA is a landscape with considerable human influence, much of it recent. This includes an extensive road network, caravan parks and two wind farms. There are several major roads resulting in noise and visual intrusion, although there are some areas which remain tranquil, such as in the far north east. Some of the villages have remained unchanged and these areas retain a tranquil rural character.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of moderate-high vulnerability to solar PV development. Other HLC types which cover large tracts of the LCA are Post-Medieval Farmland, and 20th Century Farmland which both have moderate vulnerability to solar PV development. There are patches of 'Upland Rough Ground', particularly higher ground and around areas of previous mining/development, and these are assessed as having high vulnerability to solar PV development.		
Distinctive landscape features	The distinctive feature of this landscape is its wide rolling pastoral and arable character with Cornish hedges. Windfarms form prominent elements. Solar PV development could change the agricultural character.		
Scenic quality	A very small part of the coastal edge is AONB (less than1% of LCA). Small parts of the LCA are designated for their scenic value, as part of various AGLVs. However, the combined area of these sections of AGLVs covers only a small area of this extensive LCA. Some very small parts of the northern edge of the LCA are also located within the St Agnes Heritage Coast.		
Overall sensitivity assessment	Although the human influence on the landscape, sense of enclosure in places and mixed agricultural land use could indicate a lower sensitivity to solar PV development, the sense of openness on the plateau and presence of lowland heathland and rough ground of scrub and bracken increase sensitivity to solar PV		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	development. Overall, this LCA is considered to have **moderate** sensitivity to solar PV development and **moderate-high** sensitivity within the AONB. Areas of lowland heathland and the coastal edge and its immediate hinterland would be particularly sensitive.		
Sensitivities to different scales of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Scale of the landcover pattern varies within this LCA – some areas may be particularly sensitive to 'large' scale solar PV development. Areas of lowland heath and the coastal edge would be sensitive to any solar PV development.		

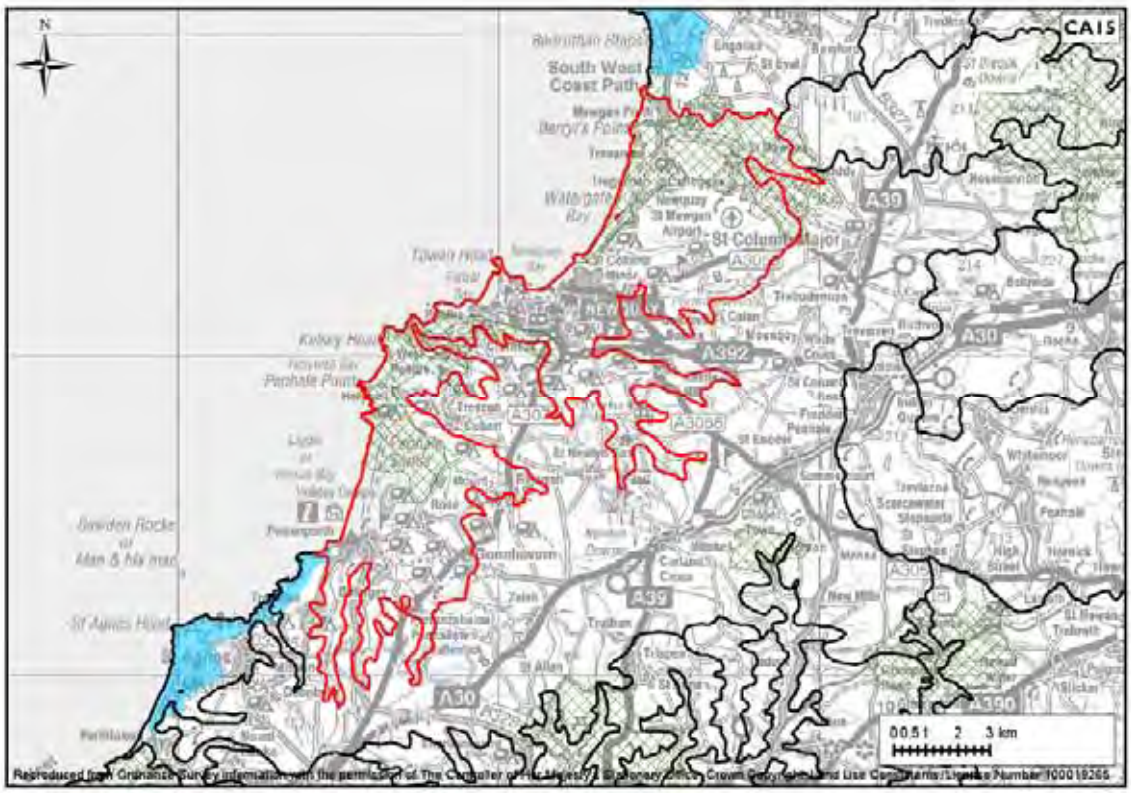
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** sited on lower slopes (up to and including large scale - size should relate to landscape scale which varies) and **no solar PV development** on areas of lowland heath or along the undeveloped coastal edge and its immediate hinterland. There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development within dips and sheltered folds in the undulating landform of the plateau; areas where PV development would be less visible and have less of an influence on landscape character. • Avoid locating development on lowland heath or along the coastal edge. • Consider views from local viewpoints and popular routes/Rights of Way when considering the siting and design of solar PV development – avoid locating solar PV development where it would be overlooked at close quarters. • Avoid locating solar PV development within the HLC Zone of 'Upland Rough Ground' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Ensure that solar PV development does not adversely affect its wide rolling pastoral and arable character with Cornish hedges, as a distinctive feature of this landscape.

CA15: Newquay and Perranporth Coast

Key Landscape Characteristics[1]

- *Gently undulating north-west facing coastal shelf dissected by small streams with narrow valleys to the sea.*
- *Open and exposed landscape with little tree cover.*
- *High slate cliffs form a dramatic and varied coastline with long sandy west facing surf beaches.*
- *Extensive areas of rough ground, scrub, and sand dune systems.*
- *Small to medium scale field pattern.*
- *Large settlements based on tourism and other clustered settlements with small or estate farms.*
- *Caravan and campsites scattered across the coast and hinterland.*
- *Tourist signage and other features on roads.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	Relatively large scale rolling coastal landscape with some plateau areas, but incised by a number of narrow valleys which create more complex landform. Distinctive landform features include two large bays (Perran Bay and Watergate Bay), and smaller sandy coves (Holywell, Crantock and Fistal beaches) separated from each other by dramatic cliffs and headlands (Kelsey Head, Pentire Point East and West, and Towan head). In addition there are extensive sands and coastal dunes (Penhale Sands) at Perran Bay.		
Land cover pattern and presence of human scale features	The landscape has a varied pattern of medium scale fields (of post medieval origin) dominating the south of the area, with irregular, small to medium scale fields of medieval origin more prevalent in the north. There is a small area of particularly distinctive long, narrow medieval fields at Trevarrian and Tregurrian, south of Mawgan Porth. In addition there are a few small areas of modern enclosed land interspersed throughout the LCA. Extensive areas of coastal rough ground and sand dunes (mainly in the south of the area associated with Perran Bay and Holywell Bay), areas of woodland alongside some of the valley streams and occasional patches of unenclosed rough ground also add variety. Frequent human scale features include Cornish hedges, farmsteads, scattered caravan and campsites, and some hedgerow trees (in more sheltered areas away from the coast).		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A392, A3059 and A3075. With the exception of the wide flat foreshore of Perran Bay and the open space surrounding Newquay Cornwall Airport, remaining areas are linked by a network of minor roads and some winding lanes with high hedges. There are some restrictions in terms of winding narrow hedged lanes.		
Skylines	Although the key characteristics of this LCA do not specifically mention skylines, they do highlight the high slate cliffs which form a dramatic and varied coastline. The LCA description also refers to caravan parks located on skylines (where they form noticeable glistening white blocks in the green landscape) and some important coastal headland skylines with historic landmark features including Bronze Age barrows and Iron Age promontory forts or cliff castles (Penhale Point, Kelsey Head, Trevelgue Head and Griffin's Point).		
Perceptual qualities	The popularity of this area as a tourist destination and the resulting associated settlements (in particular around Newquay, Perranporth and the coves of Porth and Mawgan Porth) brings activity to this landscape. The presence of Newquay airport in the north of the area also increases activity and human influence. Despite the dominance of the commercial tourism industry, the strong influence of the sea, cliff tops, headlands and extensive sand dunes offers a contrasting wildness.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Coastal and Upland Rough Ground' (along the coast and small patches on higher valley slopes inland) to be highly vulnerable to wind turbines. Large areas of 'Medieval Farmland', making up over a third of the LCA's land area, are assessed as of 'moderate-high' vulnerability. Smaller pockets of 'Post-Medieval Farmland' and 'Recreational' land are assessed as of 'moderate' vulnerability, whilst areas of lower sensitivity are associated with small areas of '20th Century Farmland (amalgamations of AEL)' and '20th Century Settlement'– assessed as of 'low-moderate' vulnerability and larger areas of 'Military' land assessed as of 'low' vulnerability to wind turbines.		

	Lower sensitivity	⟷	Higher sensitivity
	This study did not assess the areas of 'Dunes', which form a significant proportion of the LCA.		
Distinctive landscape features			
	The LCA describes the long wide west facing surf beaches, the cliffs, coastal rough ground, dunes and holiday parks as distinctive features of this landscape. Wind energy development could affect some of these.		
Scenic quality			
	Substantial portions of the north of the LCA lie within the Watergate & Lanherne AGLV. Special qualities include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate. Large parts of the centre and south of the LCA lie within the Perranporth & Holywell AGLV [NB the paper mapping includes an additional area in the south at Reen Sands and in the north along the fringes of Newquay that is not shown on the GIS data]. Special qualities include the integrity of the front of the sand dunes, the semi-natural and impressive nature of the cliffs (particularly at Pentire Point), and the wooded valley around the old mining area of Treamble.		
Overall sensitivity assessment			
	Although the large scale landform and presence of extensive human influence could indicate a lower sensitivity to wind energy development, the presence of a dramatic coastline, undulating topography, irregular small to medium scale fields, areas of rough ground, important coastal skylines and sense wildness of the coastline increase sensitivity so that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. Areas close to urban edges and the airport have a **moderate** sensitivity. The wild and undeveloped coastal edge and its immediate hinterland would be particularly sensitive (**high**).		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the landform is relatively large scale, the scale of hills and heights of cliffs indicate that this landscape would be particularly sensitive to 'large' scale turbines. The wild and rugged coastline would be sensitive to any wind turbine development.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The small to medium scale field pattern and presence of undulations indicates that this landscape would be particularly sensitive to the larger groups of turbines (i.e. 'medium', 'large' and 'very large' clusters. The wild and rugged coastline would be sensitive to any scale of turbine development.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines** up to and including medium height, located away from the cliff edge (turbine size should relate to landscape scale within the LCA). There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a

	defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the undeveloped coastal edge, particularly its prominent headlands and cliff tops. • Locate turbines where they can relate to existing built structures - small turbines may be associated with existing farm buildings. • Consider opportunities to locate turbines on the edge of larger settlements where they may relate to existing built development. • Areas of distinctive long narrow fields, of medevial origin, at Trevarrian and Tregurrian, south of Mawgan Porth, will be particularly sensitive to larger scale turbines. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such as the Iron Age Fort at Trevelgue and cliff castles (including Penhale Point, Kelsey Head, Trevelgue Head and Griffin's Point). • Avoid siting turbines within the HLC Types of 'Upland Rough Ground' and 'Coastal Rough Ground'– assessed by Cornwall Council as being highly vulnerable to wind farm development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – aim for a balanced composition as seen from this important route. • Ensure wind energy development does not adversely affect the long wide west facing surf beaches, cliffs, coastal rough ground and dunes as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Watergate & Lanherne AGLV (particularly the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, the woodland at old Carnanton Estate) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Perranporth & Holywell AGLV (particularly the integrity of the front of the sand dunes, the semi-natural and impressive nature of the cliffs (particularly at Pentire Point), and the wooded valley around the old mining area of Treamble) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

	Lower sensitivity ⟷ Higher sensitivity
Landform	Relatively large scale rolling coastal landscape with some plateau areas, incised by a number of narrow valleys as they drain to the north coast. There are two large bays (Perran Bay and Watergate Bay), and smaller sandy coves (Holywell, Crantock and Fistal beaches) separated from each other by dramatic cliffs and headlands (Kelsey Head, Pentire Point East and West, and Towan head). In addition there are extensive open sands and coastal dunes (Penhale Sands) at Perran Bay.
Sense of openness / enclosure	The north-west facing coastline is exposed and windswept with raised headlands and extensive dune areas offering little shelter. Inland the narrow valleys draining higher ground provide shelter and a sense of enclosure. Patches of woodland and more vegetated Cornish hedges further reinforce the sense of enclosure inland and along the valleys.
Field pattern and scale	The landscape has a varied pattern of medium scale fields (of post medieval origin) dominating the south of the area, with irregular, small to medium scale fields (of medieval origin) more prevalent in the north. There is a small area of particularly distinctive long, narrow medieval fields at Trevarrian and Tregurrian, south of Mawgan Porth. In addition there are a few small areas of modern enclosed land and occasional patches of unenclosed rough ground interspersed throughout the LCA.
Landcover	Landcover is predominantly rural with improved grassland/pasture with some arable. In addition there are extensive areas of coastal rough ground and sand dunes (mainly in the south of the area associated with Perran Bay and Holywell Bay). There limited areas of woodland occurring in strips alongside some of the valley streams and occasional patches of unenclosed rough ground interspersed throughout the LCA.
Perceptual qualities	The popularity of this area as a tourist destination and the resulting associated settlements (in particular around Newquay, Perranporth and the coves of Porth and Mawgan Porth) greatly reduces levels of tranquillity. The presence of Newquay airport in the north of the area also increases traffic to this area. Despite the dominance of the commercial tourism industry, the strong influence of the sea, cliff tops, headlands and extensive sand dunes offers a contrasting sense of wildness and escape from the influence of man.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Coastal and Upland Rough Ground' (along the coast and small patches on higher valley slopes inland) to be highly vulnerable to development. Large areas of 'Medieval Farmland', making up over a third of the LCA's land area, are assessed as of 'moderate-high' vulnerability. Smaller pockets of 'Post-Medieval Farmland (Intakes)', 'Modern Farmland (Intakes)' 'Recreational' and 'Military' land are assessed as of 'moderate' vulnerability. Locations of lower sensitivity are associated with small areas of 'Modern Farmland (amalgamations of AEL)' scattered throughout. This study did not assess the areas of 'Dunes', which form a significant proportion of the LCA.
Distinctive landscape features	The LCA describes the long wide west facing surf beaches, the cliffs, coastal rough ground, dunes and holiday parks as distinctive features of this landscape. Some of these could be affected by solar PV development.
Scenic quality	

	Lower sensitivity	⟷	Higher sensitivity
	Substantial portions of the north of the LCA lie within the Watergate & Lanherne AGLV. Special qualities include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate. Large parts of the centre and south of the LCA lie within the Perranporth & Holywell AGLV [NB the paper mapping includes an additional area in the south at Reen Sands and in the north along the fringes of Newquay that is not shown on the GIS data]. Special qualities include the integrity of the front of the sand dunes, the semi-natural and impressive nature of the cliffs (particularly at Pentire Point), and the wooded valley around the old mining area of Treamble.		
Overall sensitivity assessment			
	Although the presence of areas of enclosure provided by topography and vegetation inland, the agricultural land use and human influence could indicate a lower sensitivity to solar PV development, the presence of some steep slopes, the sense of openness (particularly along the coast) and extensive areas of coastal rough ground and sand dunes increase sensitivity to the extent that overall, the LCA is judged to be of **moderate-high** sensitivity to solar PV development. The open undeveloped coastal edge and its immediate hinterland would be particularly sensitive.		
Sensitivities to different scales of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Since the field pattern in this landscape is generally small-medium in scale, the landscape would be particularly sensitive to 'medium' and 'large' scale solar PV developments. The significant tracts of dunes, wild and rugged coast and areas of coastal rough ground would be particularly sensitive to any scale of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

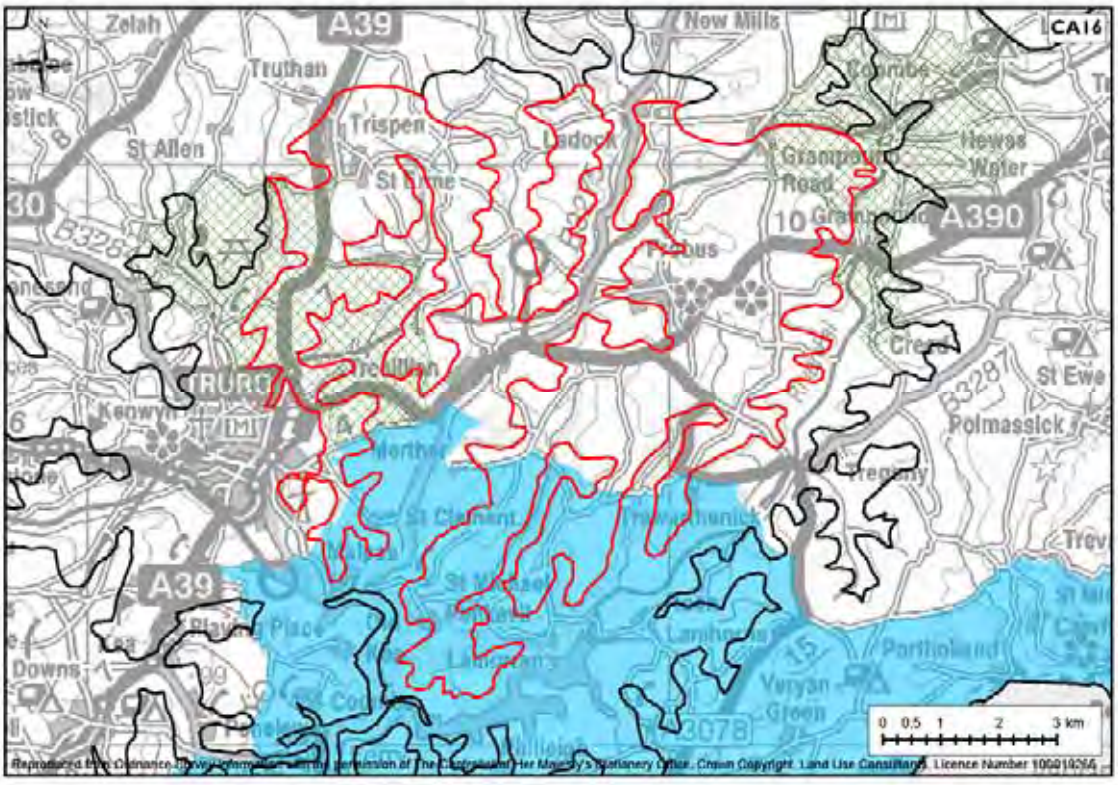
Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small scale solar PV developments** sited in sheltered locations, located away from the undeveloped coastal edge. There may be more than one solar PV development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development along the tracts of dunes, wild and rugged coast and areas of coastal rough ground. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields (including at Trevarrian and Tregurrian, south of Mawgan Porth) by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in

	the landscape – avoid locating solar PV development where it would be directly overlooked at close quarters. • Avoid siting solar PV development within the HLC Types of 'Upland Rough Ground' and 'Coastal Rough Ground' – assessed by Cornwall Council as being highly vulnerable. • Ensure solar PV development does not adversely affect the long wide west facing surf beaches, the cliffs, coastal rough ground and dunes as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Watergate & Lanherne AGLV (particularly the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, the woodland at old Carnanton Estate) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Perranporth & Holywell AGLV (particularly the integrity of the front of the sand dunes, the semi-natural and impressive nature of the cliffs (particularly at Pentire Point),, and the wooded valley around the old mining area of Treamble) – ensure choice of site and scale of development does not detract from these.

CA16: Mid Fal Plateau

Key Landscape Characteristics[1]

- *Gently undulating upland plateau.*
- *High proportion of arable farmland, although still predominantly pastoral.*
- *Estate farmland and plantations, with areas of ornamental planting.*
- *Sunken lanes with visible stone facing.*
- *Few trees on Cornish hedges, but many trees along transport corridors.*
- *Defined by proximity to the upper river valleys of Truro and Fal, and to the town of Truro.*
- *Field pattern regular but not planned.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale			
	A gently undulating, medium scale, elevated plateau, dissected by the Tresillian River and its tributaries and bounded by the Truro (west) and Fal (east) rivers. The small wooded stream valleys (tributaries to the main rivers) dissecting the landscape contrast in scale with the higher more exposed plateau areas.		
Land cover pattern and presence of human scale features			
	This is a landscape with medium to large scale fields (smaller fields predominantly medieval in origin) with a variety in landcover dominated by arable farmland and some areas of improved pasture (in the west) and estate farmland around Tregothnan and Trewithen. Woodland is confined to the sheltered valleys (around St Michael Penkevil and south of Probus), smaller blocks associated with farms on the higher ground and some ornamental woodland around the Trewithen estate (east of Probus). There are few hedgerow trees with the exception of in the west where Cornish hedges support some mature trees. Human scale features include scattered farmsteads, isolated dwellings and Cornish hedges with some mature trees.		
Tracks/transport pattern			
	A landscape containing some existing roads and vehicular tracks (including the A39 and the A390), but including some restrictions in terms of tight, narrow and winding lanes, enclosed by steep sided hedges which are often well trimmed and some are sunken lanes with visible stone facing. Some of the higher parts of the plateau have few roads.		
Skylines			
	Although the LCA description does not refer specifically to skylines, it notes a number of historic features sited on higher ground including a substantial Iron Age hillfort at Golden overlooking the Fal valley, Polwhele Castle (prehistoric or Roman period) west of Tregurra and the medieval church tower at Probus.		
Perceptual qualities			
	This is a sparsely populated landscape with settlement mainly concentrated around the villages of Probus, Trispen and Ladock. The peaceful rural areas appear well managed and have a relatively unspoilt character. Less tranquil areas are associated with settlement and development in particular the periphery of Truro in the south and Probus in the north-east.		
Historic landscape character			
	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses areas of 'Ornamental' land (associated with the Trewithen and Trewarthenick estates), and small patches of 'Upland Rough Ground' on higher ground as of 'high' vulnerability to wind turbine development. Large areas of 'Medieval Farmland', which make up the majority of the LCA, are assessed as of 'moderate-high' vulnerability. Areas of lower vulnerability are associated with the smaller areas of 'Post Medieval Farmland' (intakes) - assessed as of 'moderate' vulnerability and '20th Century Farmland (Amalgamations of AEL)' - assessed as of 'low-moderate' vulnerability.		
Distinctive landscape features			
	The LCA describes the ornamental gardens and woodland at Trewithen (Grade II*) and Tregothnan as distinctive features of this landscape. These are unlikely to be affected by wind energy development.		
Scenic quality			
	The southern parts of the LCA fall within the South Coast Central part of the Cornwall AONB (19% of the LCA is AONB). Qualities that may particularly be affected by wind energy development are the prominence and skyline of distinctive landmarks and historic remains including castles at St. Mawes and its counterpart at		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Pendennis Castle, and St. Anthony's lighthouse, and the small lanes densely edged on both sides with mature trees creating enclosed leafy tunnels. Parts of the west lie within the St. Clement AGLV (also known as St Erme AGLV) – special qualities include the Cornish hedges and narrow wooded valleys. A small corner of the north-west lies within the Trenowth AGLV [NB on the paper mapping this AGLV forms part of the Fal Valley AGLV] – special qualities include the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts.		
Overall sensitivity assessment			Although the gently undulating, medium scale, elevated plateau landform, the working agricultural nature of the landscape and relative lack of distinctive landscape features indicate lower sensitivity to wind energy development, the presence of historic features on skylines (Iron Age hillfort at Golden overlooking the Fal valley, Polwhele Castle west of Tregurra and the medieval church tower at Probus), the presence of extensive areas of 'Medieval Farmland' and high scenic quality in the south increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development and a **moderate-high** sensitivity within the AONB.
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***			This medium scale of the undulating plateau and the height of the hills (mostly under 100m) means that this LCA would be particularly sensitive to turbines at the upper end of the 'large' scale.
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***			The scale of the undulations in the landform and the presence of medium and sometimes small scale fields means that the landscape would be particularly sensitive to 'medium', 'large' and 'very large' clusters of turbines.

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small clusters of turbines, or single turbines**, comprising turbines up to the lower end of the 'large' scale (turbine size and cluster size should relate to landscape scale which varies within the LCA). Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA : • Ensure wind energy development does not dominate, or prevent the

	understanding and appreciation of historic landmarks on the skyline, including the national important Iron Age hillfort at Golden, Polwhele Castle west of Tregurra, and Probus's medieval church tower. • Avoid, wherever possible, siting turbines within the HLC Types of 'Ornamental' parkland (associated with the Trewithen and Trewarthenick estates) and 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable to wind farm development. • Consider views from local viewpoints and popular routes (e.g. the adjacent estuary landscapes and visitors to ornamental gardens) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the ornamental gardens and woodland at Trewithen (Grade II*) and Tregothnan as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the South Coast Central part of the Cornwall AONB (particularly the prominence of distinctive landmarks and historic remains including castles at St. Mawes, its counterpart at Pendennis Castle, and St. Anthony's lighthouse, and the small lanes densely edged on both sides with mature trees creating enclosed leafy tunnels) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St. Clement AGLV (particularly the Cornish hedges and narrow wooded valleys) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Trenowth AGLV (particularly the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts.) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A gently undulating, medium scale, elevated plateau, dissected by the Tresillian River and its tributaries and bounded by the Truro (west) and Fal (east) rivers. The small wooded stream valleys (tributaries to the main rivers) dissecting the landscape contrast in scale with the higher more exposed plateau areas.
Sense of openness / enclosure	The more elevated areas of this plateau are exposed while the wooded valleys provide some enclosure. Medieval fields covering most of this LCA are enclosed with Cornish hedges which in western areas support some mature trees.
Field pattern and scale	There is a regular pattern of medium scale fields, predominantly medieval in origin, dominating the area. There are some smaller areas of larger, strongly rectilinear fields of post medieval origin and larger more recent fields scattered on higher ground throughout the area.
Landcover	Landcover is predominantly farmland with a high proportion of arable, with improved pastures, with some mature trees on Cornish hedges and areas of broadleaved and ornamental woodland.
Perceptual qualities	This is a sparsely populated landscape with settlement mainly concentrated around the villages of Probus, Trispen and Ladock. The peaceful rural areas have a relatively unspoilt character. Less tranquil areas are associated with settlement and development in particular the periphery of Truro in the south and Probus in the north-east. The presence of significant areas of intensive farming (including arable) conveys a human influence to the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses areas of 'Ornamental' land (associated with the Trewithen and Trewarthenick estates), and small patches of 'Upland Rough Ground' on higher ground as of 'high' vulnerability to development. Large areas of 'Medieval Farmland', which make up the majority of the LCA, are assessed as of 'moderate-high' vulnerability. Areas of lower vulnerability are associated with the smaller areas of 'Post Medieval Farmland' (intakes) - assessed as of 'moderate' vulnerability and '20th Century Farmland (Amalgamations of AEL)' - assessed as of 'low-moderate' vulnerability.
Distinctive landscape features	The LCA describes the ornamental gardens and woodland at Trewithen (Grade II*) and Tregothnan as distinctive features of this landscape. These could be affected by solar PV development.
Scenic quality	The southern parts of the LCA fall within the South Coast Central part of the Cornwall AONB (19% of the LCA is AONB). Qualities that may particularly be affected by solar PV development are the Sessile Oak woodland cloaking the slopes, the seasonal changes in colour provided by the mix of pastoral and extensive arable uses, the strong framework of Cornish hedges, and the rugged undomesticated openness of the coastal margins. Parts of the west lie within the St. Clement AGLV (also known as St Erme AGLV) – special qualities include the Cornish hedges and narrow wooded valleys. A small corner of the north-west lies within the Trenowth AGLV [NB on the paper mapping this AGLV forms part of the Fal Valley AGLV] – special qualities include the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts.		
Overall sensitivity assessment	Although the presence of some low lying areas, enclosure provided by hedges and trees, and actively farmed character (including arable land) could indicate lower sensitivity to solar PV development, the medieval field patterns, sense of openness on higher ground and high scenic quality in the south of the LCA increase levels of sensitivity to this form of renewable energy development. Overall, the LCA is judged to be of **moderate** sensitivity to solar PV developments and a **moderate-high** sensitivity within the AONB. The more elevated areas and slopes will be more sensitive than the more enclosed lower lying parts of the LCA.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	In more open areas or areas with smaller scale field patterns, the LCA is likely to be particularly sensitive to 'large' scale solar PV development.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional PV developments** located on lower slopes and in sheltered folds in the landscape (scale of development should relate to landscape scale). Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several developments in the LCA, but these should be clearly separated so that, although each development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on the more open upper slopes - locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Avoid siting solar PV development within the HLC Types of 'Ornamental' land – assessed by Cornwall Council as being highly vulnerable to solar PV development. • Ensure solar PV development does not adversely affect the ornamental gardens and woodland at Trewithen (Grade II*) and Tregothnan as distinctive features of this landscape. • Consider views from local viewpoints and popular routes (e.g. the adjacent estuary landscapes and visitors to ornamental gardens) when considering the siting and design of solar PV development in the landscape – avoid locating solar PV development where it would be directly overlooked at close quarters. • Protect the factors which contribute to the scenic quality of the South Coast

	part of the Central Cornwall AONB (particularly the Sessile Oak woodland cloaking the slopes, the seasonal changes in colour provided by the mix of pastoral and extensive arable uses, the strong framework of Cornish hedges, and the rugged undomesticated openness of the coastal margins) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the St. Clement AGLV (particularly the Cornish hedges and narrow wooded valleys) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Trenowth AGLV (particularly the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts.) – ensure choice of site and scale of development does not detract from these.

CA17: St Austell or Hensbarrow China Clay Area

Key Landscape Characteristics[1]

- *High extensive spoil heaps and vivid blue settling ponds, lakes and mica dams.*
- *Extensive industrial buildings, both active and derelict.*
- *Fluctuation and change in condition and relationship of landscape elements.*
- *Settlement pattern of large mining villages and terraces, and many industrial buildings.*
- *Huge scale of spoil heaps, contrasting with small scale of farmland.*
- *Small areas of pastoral farmland and rough grazing.*
- *Fragmented areas of Lowland Heathland, scrub and broadleaved woodland with areas of natural regeneration and restoration of heathland, woodland and rough ground.*
- *High density of open water in the form of pools*
- *Small-scale field pattern of miners' smallholdings around St Dennis.*
- *Visible time-depth of structures and patterns within landscape - Bronze Age barrows, medieval field pattern, 19th C mining relics and modern china clay workings.*

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A dramatic, large scale but complex landscape of large spoils heaps and settling ponds, with both man-made and natural undulations. The northern part of the LCA consists of shallow basins interspersed with higher granite, whilst the southern half is cut by deep narrow valleys.		
Land cover pattern and presence of human scale features	Varied land cover, largely industrial with some original heath (including heath restoration at Singlerose Tip, Caerloggas Downs), rough grazing and small patches of agricultural land still remain. Much of the land cover in this LCA is open quarries and spoil heaps, resulting from the extensive mining activity. The field pattern has been largely eroded and replaced with an open, unenclosed landscape of spoil heaps, china pits and settling ponds. Where the original field pattern remains it tends to be small-scale, reflecting its Medieval heritage. Human-scale features include miners' villages and terraces – although there are many other features that are much larger in scale.		
Tracks/transport pattern	The A391 cuts through the Landscape Character area from north to south linking St Austell with the major trunk road (A30). The A3058 runs along the southern boundary. Much of the old road system has disappeared under the china clay workings.		
Skylines	Although the LCA does not refer specifically to skylines, it does refer to the high extensive spoil heaps as a key characteristic of the landscape. It also notes dominant visual elements as the large white spoil heaps, either conical or flat topped in form, and aqua-blue pools. The outward presenting faces of the Clay area are important landscape features presenting the face of China Clay to Cornwall. Although the skyline has been significantly modified by recent human activity, the natural topography includes some granite outcrops in the north of the LCA (at St Dennis and Roche). There are also numerous historic landmarks on the skyline, including St Stephen's Beacon (a prehistoric enclosure and Scheduled Monument, St Dennis church (near the northern boundary of the LCA), and a 15th century chapel on the tor of Roche Rock.		
Perceptual qualities	This landscape is highly affected by human influence with extensive china clay mines. Amongst this landscape, there are scattered farmsteads as well as several mining villages including Nanpean, Foxhole, Stenalees, Bugle, Indian Queens and Fraddo.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the 'Active Industrial' parts of the landscape to have low/moderate vulnerability to wind development, and the 'Relict Industrial' to have moderate vulnerability to wind development. These two HLC types combine to cover the majority of the LCA. The remaining areas are a mosaic of 'Medieval Farmland' and 'Post-Medieval Farmland', which has moderate/high and moderate vulnerability to wind development, respectively. There are also a few patches of 'Upland Rough Ground', which have high vulnerability, and '20th Century Settlements', which has low/moderate vulnerability.		
Distinctive landscape features	The LCA description notes the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape. Some of these could be affected by		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	wind energy development.		
Scenic quality	None of the LCA is designated for its scenic value. The dominant scale of the china clay workings and the size of the spoil heaps are dramatic, as is the sense of a dynamic and changing landscape.		
Overall sensitivity assessment	Although this is a large scale industrial landscape with significant human influence, the presence of the prominent and distinctive skyline of huge pale spoil heaps and the presence of historic skyline features increase levels of sensitivity to wind energy development. Overall, this LCA is considered to have a **moderate** sensitivity to wind energy development. The natural granite outcrops of Roche and St Dennis and the outer boundary tips and landforms of the area would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	In theory this landscape does not have greater sensitivity to one turbine size more than another, as long as any development accords with the guidance below.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	This landscape would be particularly sensitive to the largest scale clusters (over 25 turbines).		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	Since this landscape already has a number of landmark features within it, the landscape **strategy** is for **a landscape with occasional wind energy development** within the central part of the LCA - comprising small, medium or large clusters of turbines, comprising turbines up to and including the 'large' size (turbine size and cluster size should relate to landscape scale which varies within the LCA). Whilst each wind energy/ solar PV development influences the perception of the landscape at close proximity, they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any wind energy developments within this LCA: • Locate turbines in the mining landscapes in the centre of the LCA (away from the outward presenting edge of the Clay area) and in the areas of more regular field patterns which tend to occur on higher ground away from the river valleys and older settlements. • Site turbines away from the natural granite outcrops of Roche and St Dennis and the outer boundary tips and landforms of the area so that these are retained as distinctive features on the skyline. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including St

	Stephen's Beacon, St Dennis church and the 15th century chapel on the tor of Roche Rock. • Avoid locating the largest scale wind energy development in areas of very small, ancient fields (especially in the east, at Stenalees, Penwithick, in the north, around St Dennis, and in the south, at Goverseth and Carpalla). • Consider how turbines fit with existing skyline features when siting and designing wind development – turbines may be better sited on the top of flat tips than close to distinctive conical forms, and away from the outward presenting edge of the Clay area. • Ensure wind energy development does not dominate the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape.

.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	Although this is an upland landscape with some visible slopes, there are also more 'hidden' areas within it, including basins and valleys.
Sense of openness / enclosure	Most of the LCA is an open large-scale landscape, although some enclosed areas are created by the scattered spoil heaps and industrial buildings/infrastructure in industrial areas and by woodland in the remnant pastoral areas.
Field pattern and scale	The field pattern has been largely eroded and replaced with an open, unenclosed landscape of spoil heaps, china pits and settling ponds. Where the original field pattern remains it tends to be small-scale, reflecting its Medieval heritage.
Landcover	Largely industrial, with some original heath and some heath restoration (e.g. at Singlerose Tip, Caerloggas Downs, where indigenous heather has been established) and rough grazing. Small patches of the original agricultural land still remain amongst the industrial activity (pastoral).
Perceptual qualities	This open landscape is heavily affected by human influence, due to the dominance of the china clay workings and spoils heaps. The exceptions are the scattered areas of pastoral farmland and relict/restored heath and woodland. Overall, this is a landscape with significant human influence.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV assesses the 'Active Industrial' parts of the landscape to have low/moderate sensitivity to solar PV development, and the 'Relict Industrial' to have moderate sensitivity to solar PV development. These two HLC types combine to cover the majority of the LCA. The remaining areas are a mosaic of 'Medieval Farmland' and 'Post-Medieval Farmland', which has moderate/high and moderate sensitivity to solar PV development, respectively. There are also a few patches of 'Upland Rough Ground', which have high sensitivity, and '20th Century Settlements', which has low/moderate sensitivity.
Distinctive landscape features	The LCA description notes the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape. Some of these could be affected by solar PV development.
Scenic quality	None of the LCA is designated for its scenic value
Overall sensitivity assessment	Although the upland and open nature of the landscape extensive areas of heath, and pastoral character of the remaining agricultural areas could indicate a higher sensitivity to solar PV development, the extensive human influence and presence of brownfield sites lowers sensitivity so that overall this landscape is considered to have a **moderate** sensitivity to solar PV development. The natural granite outcrops of Roche and St Dennis and the areas of unenclosed heath would be particularly sensitive.
Recommendations	In brownfield sites the landscape does not have greater sensitivity to one size more

Criteria	Lower sensitivity	⟷	Higher sensitivity
on sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	than another, as long as any development accords with the guidance below. In areas where the original small scale field pattern remains, the LCA is likely to be particularly sensitive to 'large' scale solar PV development.		

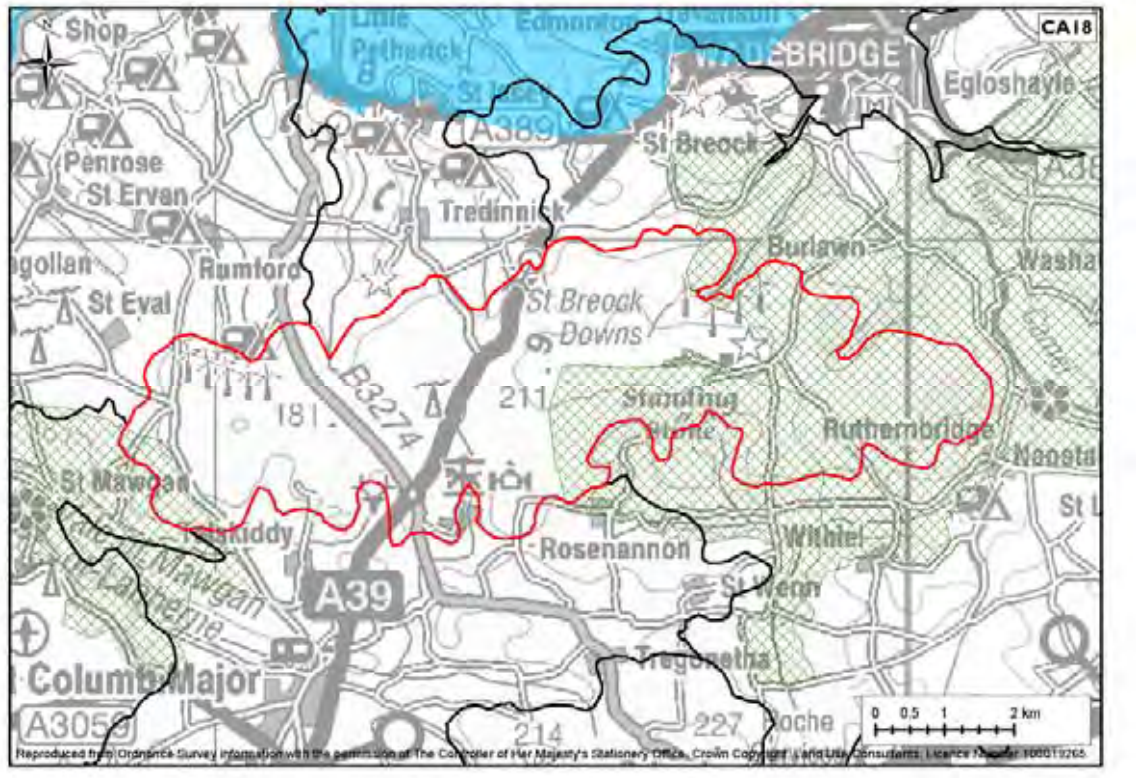
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The **landscape strategy** is for **a landscape with occasional solar PV developments** (up to and including large scale on brownfield sites or up to and including medium scale in areas that have an intact field pattern). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of this dramatic landscape.
Siting Guidance	See Annex 3 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any solar PV energy developments within this LCA: • Avoid siting PV development on the natural granite outcrops of Roche and St Dennis, in areas of unenclosed heath or on steep slopes of this upland area. • Aim to locate solar PV developments in the low-lying areas within the china clay workings. • The scale of development should relate to its context – areas of intact fields will be more sensitive to larger scale developments than brownfield sites. • Use existing landscape features, such as spoil heaps and clay workings, hedgerows and pioneer scrub habitats to screen development wherever possible. • Ensure development does not dominate or adversely affect the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape.

CA18: St Breock Downs

Key Landscape Characteristics[1]

- *Rounded and undulating hard rock ridge.*
- *Open landscape, previously much rough ground and heath, with mix of medium and large field sizes,*
- *Enclosed by Cornish hedges, stone walls and wire fences.*
- *Patches of semi-natural vegetation and two large areas of heath.*
- *Wide views over surrounding lower land including Camel estuary and south to coast.*
- *Windfarm and mast development are prominent features.*
- *Coniferous plantations to the east and limited, small broadleaved copses elsewhere.*
- *Numerous prehistoric monuments.*
- *The eastern parts of the LCA are within the Camel and Allen Valleys AGLV, whilst the extreme western edge is within the Watergate and Lanherne AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A large-scale, simple landscape including a ridge of rolling hills with valleys on either side.
Land cover pattern and presence of human scale features	Land cover pattern is broadly consistent, and consists of mainly medium-scale enclosed agricultural land. A large part of the land is pastoral, although there is also a significant amount of arable land. Human scale features include post and wire fences, scattered farm settlements, and a few stone walls on higher ground in east of the LCA. There are also existing wind turbines in the landscape. Much of the LCA is large and medium scale 19-20th century field systems, and the boundaries tend to be post and wire fencing, with few hedgerows.
Tracks/transport pattern	Larger roads include the A39 (north –south) and the B3274 dual carriageway (NW-SE). There are a number of minor roads, some of which are fairly straight, although those in the east of the LCA are more winding, and many are narrow. There is less access to the semi natural heathland areas.
Skylines	Whilst the LCA does not make specific reference to skylines, the OS maps indicate that this landscape has a fairly prominent but simple skyline characterised by its gentle rolling hills (with existing wind farms at Bears Down and St Breock Downs). The description also notes a number of prehistoric ritual monuments, including standing stones at St Breock Longstone, and the Nine Maidens stone row. There are also communication masts at Denzell Downs and Nine Maidens.
Perceptual qualities	Although this landscape has been enclosed for pasture and supports some coniferous plantations, two windfarms, and masts at Denzell Downs and Nine Maidens, it has relatively little settlement within it.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind development assesses the HLC types of 'Post-Medieval Farmland' and '20th Century Farmland', which comprise most of the LCA, to have moderate and low/moderate vulnerability to wind turbines, respectively. Patches of 'Upland Rough Ground' have moderate/high vulnerability, whilst the few patches of plantation and scrub are considered to have low vulnerability to wind development.
Distinctive landscape features	The LCA description notes the two highly visible tracts of Lowland Heathland, prehistoric ritual monuments (including barrows, a stone row and several standing stones), windfarms and masts as distinctive features of this landscape. Some of these could be affected by wind energy development.
Scenic quality	The eastern parts of the LCA (up to and including Rosenannon Down) fall within the Camel and Allen Valleys AGLV, as shown on the GIS maps [NB the paper maps show the AGLV boundary located further east]. The scenic qualities of this AGLV include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow. The far western corner of the LCA is within the Watergate and Lanherne AGLV. The scenic qualities of this AGLV include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, the woodland at old Carnanton Estate.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Overall sensitivity assessment	Although the presence of prehistoric ritual monuments and tracts of lowland heath could indicate a higher sensitivity to wind energy development, the large scale simple landform, large scale simple land cover pattern, and existing human influence indicate lower sensitivity to wind energy development so that overall this LCA is considered to have a **low-moderate** sensitivity to wind energy development.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	This LCA is of relatively large scale in the Cornwall context, however it is likely to be particularly sensitive to turbines at the larger end of the 'large' scale.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the landform is relatively large scale in the Cornwall context, it would be particularly sensitive to 'large' and 'very large' clusters of turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with wind farms** comprising small or medium clusters of turbines up to the smaller end of the 'large' scale, located on the ridge where they relate to one another in terms of cluster size and turbine type. There may be several wind energy developments in the LCA so that collectively they may have a strong influence on the character of the landscape.
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any wind energy developments within this LCA: • Avoid locating wind energy development or tracks on the areas of semi-natural dry heath. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, such as the standing stones at Nine Maidens and St Breock Longstone. • Consider views from local viewpoints and popular routes including Saints Way when siting wind energy development – aim for a balanced composition of turbines on the skyline. • Aim for consistency between different developments in terms of group size, layout and spacing of turbines when locating further wind energy development within this LCA. • Utilise the landscape's woodland, plantations, trees and thick Cornish hedges to filter views of turbines and screen ground-level features of developments wherever possible. • Protect the factors which contribute to the scenic quality of the Camel and Allen Valleys AGLV and the Watergate and Lanherne AGLV, particularly the ancient woodland – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	An upland landscape with many prominent slopes. To the south, there are some valleys.
Sense of openness / enclosure	Most of the LCA is open with long views. There are few wooded areas or hedgerows in the landscape.
Field pattern and scale	The majority of the fields are medium and large scale 19th/20th century enclosure.
Landcover	The landcover is primarily improved pasture with a significant proportion of arable, some heath and other semi-natural vegetation. Conifer plantations are located to the east.[2]
Perceptual qualities	Although this landscape has been enclosed by man and supports some coniferous plantations, two windfarms, a mast at Denzell Downs and the A39, it has relatively little settlement within it and most of the area is tranquil with limited noise and visual intrusion.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Post-Medieval Farmland' and '20th Century Farmland', which comprise most of the LCA, to have moderate vulnerability to solar PV development. Patches of 'Upland Rough Ground' have high vulnerability. There are also a few patches of plantation and scrub, were not assessed as part of the Cornwall HLC study, as they are considered inappropriate for solar PV development.
Distinctive landscape features	The LCA description notes the two highly visible tracts of Lowland Heathland, prehistoric ritual monuments (including barrows, a stone row and several standing stones), windfarms and masts as distinctive features of this landscape. Some of these could be affected by solar PV development.
Scenic quality	The eastern parts of the LCA (up to and including Rosenannon Down) fall within the Camel and Allen Valleys AGLV, as shown on the GIS maps [NB the paper maps show the AGLV boundary located further east]. The scenic qualities of this AGLV include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow. The far western corner of the LCA is within the Watergate and Lanherne AGLV. The scenic qualities of this AGLV include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, the woodland at old Carnanton Estate.
Overall sensitivity assessment	Although the presence of existing human influence and predominantly agricultural use of the land reduce sensitivity to PV development, the extremely open nature of the landscape and presence of many visible slopes increase sensitivity to the extent that overall the landscape is judged to be of **high** sensitivity to solar PV development.
Sensitivities to different sizes of	This LCA is sensitive to all scales of solar PV developments, except for the smallest scale schemes linked to existing buildings and settlement.

[2] Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Criteria	Lower sensitivity	⟷	Higher sensitivity
solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***			

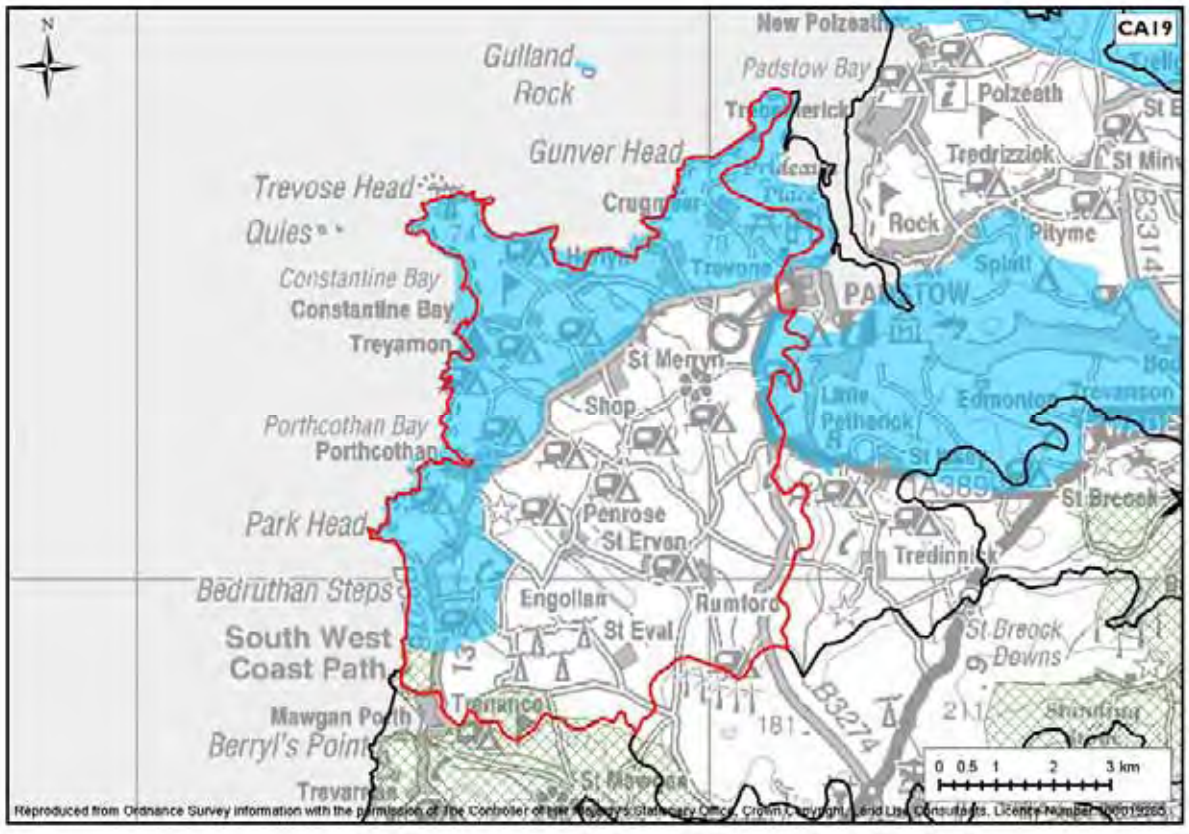
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape without solar PV developments** (except for very small very occasional developments associated with existing buildings and settlement).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Only very small scale developments are likely to be accommodated in this landscape, associated with existing buildings/settlement. • Locate development in sheltered folds in the landscape where it will be least visible and have least influence on landscape character – avoid hilltops and open downland areas. • Use existing landscape features, such as dense Cornish hedges, mature trees, scrub and plantations to screen development wherever possible. • Consider views from local viewpoints and popular routes (including Saints Way) when considering the siting and design of solar PV development in the landscape – avoid locating solar PV development where it would be overlooked at close quarters. • Avoid, wherever possible, siting solar PV development within the HLC Zone of 'Upland Rough Ground' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Ensure solar PV development does not adversely affect the two highly visible tracts of Lowland Heathland or prehistoric ritual monuments (including barrows, a stone row and several standing stones) as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Camel and Allen Valleys AGLV (particularly the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, and parkland landscape around Pencarrow) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Watergate and Lanherne AGLV (particularly the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate) – ensure choice of site and scale of development does not detract from these.

CA19: Trevose Head and Coastal Plateau

Key Landscape Characteristics[1]

- *Gently rolling, low lying, exposed coastal plateau.*
- *Coastline of cliffs with heads and some stacks, including Bedruthan Steps and Trevose Head.*
- *Strong medieval field pattern of medium sized fields with Cornish hedges, slate walls and hedgerows with few trees except in valleys.*
- *Coastal Sand Dunes at Constantine Bay.*
- *Limited riparian woodland cover in valley bottoms.*
- *Rural settlement pattern of small farms and farm hamlets with a number of twentieth-century nucleated settlements focused on tourism.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	An open and windswept, gently rolling and low lying coastal plateau, with large scale rocky cliffs and some areas of harder greenstone that give rise to the higher headlands of Trevose Head, Park Head and Stepper Point. Between the headlands, softer slates create shallow stream valleys behind sandy bays such as Harlyn, Trevone and the dunes at Constantine.		
Land cover pattern and presence of human scale features	This landscape is dominated by simple landcover of pastoral fields (with some arable interspersed) – these are generally medium scale and of medieval origin bounded by low, turf covered hedges or slate walls, although there are some areas of larger post medieval fields. There are very few trees except in sheltered folds in the land and in the narrow stream valleys. Coastal sand dunes and areas of heath, rough ground and scrub along the coast add to the variety of landcover. Human scale features include the occasional tree and scattered dwellings.		
Tracks/transport pattern	Apart from the A389, B3276 and B3274 is a fairly even network of narrow winding lanes bounded by Cornish hedges or stone walls predominantly of slate except where lanes cut into the solid bedrock.		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the headlands of Trevose Head, Park Head and Stepper Point, as well as the many prehistoric features along the coast including important clusters of Bronze Age barrows at Park Head and Cataclews Point, spectacular cliff castles at Winecove Point and Redcliffe Castle, Iron Age and Roman period defended farmsteads, defensive prehistoric sites at St Eval and near Bogee Farm, and a 19th century lighthouse at Trevose Head, daymark at Stepper Point and the St Eval Church tower ("*St Eval Church tower stands out in this rather flat landscape*"). The rocky coastline, with its prominent headlands and stacks (particularly the spectacular Bedruthan Steps), is an important natural skyline feature in its own right. A transmitter station with a series of masts on the old airfield at St Eval is visible on the skyline.		
Perceptual qualities	This is a relatively remote rural landscape with dispersed settlement and a remoter coastline (away from the tourism-related development). The most dramatic and uplifting elements are at the coast - Bedruthan Steps being the highlight, but also the other headlands and gentle coves. Quarrying activity at St Eval, disused airfields at St Merryn and St Eval, the transmitter station, caravan / camping sites and a golf course along the coast are occasional human influences.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Coastal Rough Ground', which also extends inland along the stream valleys, as of 'high' sensitivity to wind turbines. Large areas of 'Medieval' land, which make up much of the landscape, are assessed as of moderate-high vulnerability, whilst areas of lower sensitivity are associated with locations of 'Post-Medieval (Intakes)', particularly backing the coast, and 'Modern Enclosures (Intakes)' as of 'moderate-low' and 'low' vulnerability respectively. The LCA's areas of modern development and disused airfields are also assessed as of 'moderate-low' and 'low' vulnerability respectively.		
Distinctive landscape features	The LCA describes the rocky coastline such as at Trevose Head and Bedruthan Steps, the use of slate in buildings and walls and Cornish hedges and St Eval Church		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	tower as distinctive features of this landscape.		
Scenic quality	Most of the LCA's coastline falls within the 'Trevose Head to Stepper Point' part of the Cornwall AONB (40% of the LCA is AONB). Part is also defined as Heritage Coast (Trevose Head). Qualities that may particularly be affected by wind energy development are the large scale of the cliffs, panoramic views along the Camel Estuary, sense of 'wildness' near the coast, prominence of visible prehistoric features, and the narrow winding lanes bounded by slate hedges. The southern fringes of the LCA fall within the Watergate and Lanherne AGLV – special qualities include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate.		
Overall sensitivity assessment	Although the large scale and simple landcover, the presence of some existing human influence and its accessibility could lower sensitivity to wind energy development, the spectacular coastline, coastal landmark features, relatively remote character and high scenic quality heighten levels of sensitivity to turbines such that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's dramatic and highly scenic coastline and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The large scale, simple inland plateau would be particularly sensitive to 'large' turbines whilst the rugged and highly visible coastline would be sensitive to all sizes of wind turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The inland plateau, with its predominantly medieval field patterns, would be particularly sensitive to 'medium', 'large' and 'very large' clusters of wind turbines. The rugged and highly visible coastline would be sensitive to all scales of wind energy development.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines and possibly small clusters of turbines**, comprising turbines that may be up to and including medium scale with **no turbines** along the coastal edge/coastal headlands. Within the rest of the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA:

	• Locate wind energy development away from the rugged and highly visible coastline, particularly its prominent headlands and stacks (e.g. Bedruthan Steps, Trevose Head, Park Head and Stepper Point). • Explore the opportunity to link development to existing brownfield or industrial land, such as the disused airfields. • Locate very small turbines next to existing buildings. • Avoid damage and alterations to the narrow lanes and slate-faced Cornish hedges. • Ensure any ancillary development is in character with the local vernacular (especially use of slate in buildings and walls). • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, landmarks on the skyline including the lighthouse at Trevose Point, St Eval church tower, Bronze Age barrows and cliff castles along the coast. • Avoid siting turbines within the HLC Type 'Coastal Rough Ground' – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the rocky coastline, such as at Trevose Head and Bedruthan Steps, or St Eval Church tower as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the large scale of the cliffs, panoramic views along the Camel Estuary, sense of 'wildness' near the coast, prominence of visible prehistoric features, and the narrow winding lanes bounded by slate hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Watergate and Lanherne AGLV (particularly the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A gently rolling coastal plateau, with rocky cliffs and some areas of harder greenstone that give rise to the higher headlands of Trevose Head, Park Head and Stepper Point. Between the headlands, softer slates create shallow stream valleys behind sandy bays such as Harlyn, Trevone and the dunes at Constantine.
Sense of openness / enclosure	This is an open and windswept landscape, with patchy tree cover largely limited to stream valleys. Fields are bounded by low, turf covered hedges or slate walls, giving little additional shelter to the area.
Field pattern and scale	Field boundary pattern formed by the medium scale fields of medieval origin that appear larger due to the gentle topography and the lack of tree cover. Large rectilinear fields of recent origin frequently back the coastal strip where intensive arable cultivation is dominant. There are some areas of medieval strip fields fossilised in the present field pattern.
Landcover	Predominantly agricultural land – a mixture of pasture and arable, with some semi-natural landcover along the coast.
Perceptual qualities	This is a relatively remote rural landscape with dispersed settlement and a remoter coastline (away from the tourism-related development). The most dramatic and uplifting elements are at the coast - Bedruthan Steps being the highlight, but also the other headlands and gentle coves. Quarrying activity at St Eval, disused airfields at St Merryn and St Eval, the transmitter station, caravan / camping sites and a golf course along the coast are occasional human influences.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC Zone of 'Rough Ground', found along the coast and inland valleys, to be highly vulnerable to solar PV development. Large areas of 'Medieval' land, which comprises much of the landscape, are assessed as moderate-high vulnerability. Locations of 'Post-Medieval (Intakes)' and 'Modern Enclosures (Intakes)', particularly backing the coast, are assessed as of 'moderate' vulnerability, as are the LCA's disused airfields.
Distinctive landscape features	The LCA describes the rocky coastline such as at Trevose Head and Bedruthan Steps, the use of slate in buildings and walls and Cornish hedges and St Eval Church tower as distinctive features of this landscape.
Scenic quality	Most of the LCA's coastline falls within the 'Trevose Head to Stepper Point' part of the Cornwall AONB (40% of the LCA is AONB). Part is also defined as Heritage Coast (Trevose Head). Qualities that may particularly be affected by solar PV development are the panoramic views along the Camel Estuary, the field pattern, the sense of 'wildness' near the coast (rough ground and alkaline grassland and wildflowers). The southern fringes of the LCA fall within the Watergate and Lanherne AGLV – special qualities include the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate.
Overall sensitivity assessment	Although the LCA's gently rolling landform, relatively large fields and presence of arable land could indicate a lower sensitivity to solar PV development, its sense of

Criteria	Lower sensitivity	⟷	Higher sensitivity
	extreme openness and relative remoteness, rugged and distinctive coastline and high scenic quality, increase sensitivity to the extent that overall this LCA is considered to have a **moderate-high** sensitivity to solar PV development. The naturalistic, open coastline and its immediate hinterland, and areas of historically important medieval strip fields would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The size of fields and sense of extreme openness mean that this landscape would be particularly sensitive to 'large' scale solar PV developments. The naturalistic, open coastline and areas of historically important medieval strip fields would be sensitive to any scale of solar PV development.		

Landscape strategy and Guidance for Large-scale Solar PV Development

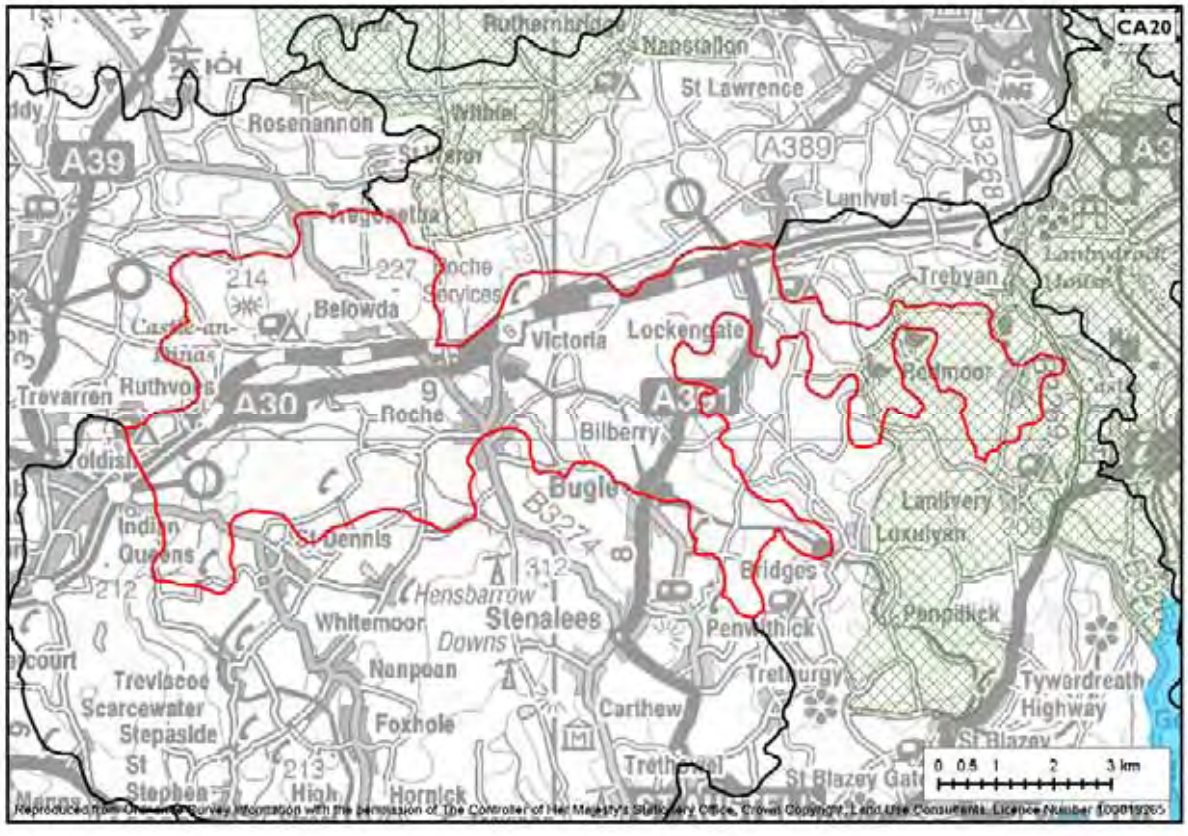
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** sited on brownfield sites or in more enclosed areas (up to and including medium size - size of development should relate to landscape scale) with **no PV development** along the coastal edge/ coastal headlands. Within the remainder of the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid the location of solar PV developments along the remote and naturalistic coastal edge, including its prominent headlands. • Aim to locate solar PV developments in gentle folds in the landscape where they will be less visible and therefore have less of an influence on landscape character. • Avoid siting PV development in the medieval strip fields fossilised in the present field pattern. • Preserve field patterns by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Prevent damage to the landscape's winding roads and distinctive slate hedges and walls during the installation phase. • Explore opportunities to site solar PV development within or linked to existing industrial/brownfield land (e.g. the St Meryan and St Eval airfields). • Ensure any ancillary development is in character with the local vernacular (especially use of slate in buildings and walls). • Avoid siting solar PV development within the HLC Zone of 'Rough Ground' – assessed by Cornwall Council as being highly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (including Rights of Way) when considering the siting and design of solar PV development in the landscape. • Consider views from local viewpoints and popular routes (e.g. the South West

	Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the rocky coastline, such as at Trevose Head and Bedruthan Steps, or St Eval Church tower as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the panoramic views along the Camel Estuary, the field pattern, the sense of 'wildness' near the coast (rough ground and alkaline grassland and wildflowers) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Watergate and Lanherne AGLV (particularly the dominance of the headlands of Beryls Point, Griffins Point and Trenance Point, the marshes and trees in the Vale of Lanherne, and the woodland at old Carnanton Estate) – ensure choice of site and scale of development does not detract from these.

CA20: Mid Cornwall Moors

Key Landscape Characteristics[1]

- *High ground in a series of interlinked 'soft' ridges with outcrops of bare granite and tors.*
- *Pastoral land use on rising ground, with large expanses of open low-lying wetland with wet woodland and rough grazing.*
- *Exposed upland feel, with few hedgerow trees.*
- *Wooded around upper river valleys, with much wet woodland.*
- *Lightly settled with isolated farms, but with major transport routes.*
- *Strong visual influence of adjoining china clay area.*
- *The eastern area of the LCA is part of the Helman Tor Luxulyan Valley AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	An undulating landscape with a large lowland basin at its core and with two prominent hills in the north-west.
Land cover pattern and presence of human scale features	Land cover pattern is varied, made up of open plateau moorlands such as Goss Moor, and more undulating landscape to the north with pastoral land use, grazing, and scattered settlements. Upland areas are exposed with few trees or hedgerows, whilst the valleys are more wooded. The field pattern and scale varies across the LCA, as does the land cover pattern, with lowland medieval stripfield systems with human-scale features such as curving Cornish hedgerows and farm buildings in the more undulating northern areas, and wooded valleys and larger rectangular fields on the slopes.
Tracks/transport pattern	A landscape containing some existing roads and vehicular tracks (including the A30 and B3274), but including some restrictions in terms a local road network of small winding lanes. Goss Moor is devoid of tracks.
Skylines	Although the LCA does not specifically refer to 'skylines', '*outcrops of bare granite and tors*' are listed as one of the key characteristics of the LCA. The LCA description also notes Castle-an-Dinas (one of the largest and best preserved Iron Age hillforts in Cornwall) and Belowda Beacon as distinctive features to the west. The remainder of the area does not have a prominent skyline, but from within the LCA pylons are features of the skyline.
Perceptual qualities	Parts of the moorland landscape have a wilderness feel to them, but pylons and roads are never far away. Most of the area is impacted by visual and noise intrusion, resulting from the transport corridor, pylons and china clay workings visible to the south (CA17: St Austell or Henbarrow China Clay Area). The exceptions to this are the hills at Castle Downs and Belowda Beacon, and the rural farmland around Bowling Green and Red Moor to the south east of the LCA.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the large stretches of 'Upland Rough Ground' which covers a quarter of the LCA as of high vulnerability to wind turbine development. The 'Medieval Farmland' on the surrounding slopes has moderate/high vulnerability to wind development. The Post-medieval Enclosed Land' and 'Modern Enclosed Land' which together cover a third of the LCA, is assessed as of moderate and low/moderate vulnerability to wind turbines, respectively. 'Disused Industrial' areas scattered across the LCA are also moderately vulnerable to wind development, whilst patches of '20th Century Settlements' are less vulnerable (low).
Distinctive landscape features	The LCA description notes Castle-an-Dinas and Belowda Beacon, the Helman Tor rock outcrop (in the adjacent LCA), large boulders in fields (used in hedges and as gate posts), stone-faced hedges, extensive areas of wet heath and wet woodland, and the electricity substation and power station near St Dennis with associated pylons as distinctive features of the landscape. Some of these could be affected by wind energy development.
Scenic quality	The eastern parts of the LCA fall within the Helman Tor Luxulyan Valley AGLV, although only the Helman Tor part of the AGLV is relevant to the LCA. The special

Criteria	Lower sensitivity	⟷	Higher sensitivity
	qualities of this landscape include boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, and the dominance of Helman Tor as a landmark feature (in the adjacent LCA). In other parts of the LCA, pylons are widely visible and intrusive, although where not visible the area still has scenic qualities, particularly in the undulating hills to the north of the area.		
Overall sensitivity assessment	Although the generally flat nature of the landform and human influence (in the form of pylons, roads and railway line) could indicate lower sensitivity to wind energy development, the large areas of wet woodland and fen, the prominent skyline features of Castle-an-Dinas, Belowda Beacon and Helman Tor (in the adjacent LCA), and the 'wilderness' feel of the moorland landscapes increase this area's sensitive to wind turbines. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development. The undeveloped moorland landscapes and the skyline of Castle-an-Dinas (one of the largest and best preserved Iron Age hillforts in Cornwall) would be particularly sensitive to wind energy development.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	This LCA is likely to be particularly sensitive to 'large' turbines due to the human scale of features in the landscape.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Does to the small scale and varied landscape pattern this LCA would be particularly sensitive to 'medium', 'large' and very 'large' turbine clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	This is a varied LCA. The landscape strategy is for **a landscape with occasional single turbines, or small clusters of turbines**, comprising turbines up to and including a medium size (or small turbines in the small scale fields to the east) and **no turbines** in the undeveloped moorland landscapes or on the prominent skyline of Castle Downs (crowned by Castle-an-Dinas). There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any wind energy developments within this LCA: • Avoid locating wind energy development on the undeveloped moorland/ wetland habitats (such as at Goss and Tregoss Moors) or on the prominent skyline of Castle Downs (crowned by Castle-an-Dinas).

	• In the smaller scale enclosed landscapes to the east, single turbines may be most appropriate, sited adjacent to existing buildings or clusters of buildings. • Avoid siting wind turbines within the HLC Types of 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the Saints Way and Helman Tor) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect Castle-an-Dinas and Belowda Beacon, the Helman Tor rock outcrop (in the adjacent LCA), large boulders in fields (used in hedges and as gate posts), stone-faced hedges, or extensive areas of wet heath and wet woodland as distinctive features of the LCA. • Protect the boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature that contribute to the scenic quality of the Helman Tor Luxulyan Valley AGLV.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	An undulating landscape with a large lowland basin at its core and with two prominent hills in the north.
Sense of openness / enclosure	This is a landscape with varied enclosure – from open moors and prominent open hills to enclosed farmland. Presence of hedgerows means that the eastern parts of the LCA feel more enclosed.
Field pattern and scale	The field pattern and scale varies across the LCA. The landscape has a strong medieval stripfield pattern in some lowland areas, e.g. Belowda and Tregoss, with larger rectangular fields on higher ground in the north. The upland areas are characterised by extensive tracts of open heathland and wetland/wet woodland habitat, whilst the slopes are mainly open, unenclosed rough grazing land.
Landcover	A mixture of farmland and wildland with a low proportion of arable.
Perceptual qualities	Parts of the moorland landscape have a wilderness feel to them, but pylons and roads are never far away. Most of the area is impacted by visual and noise intrusion, resulting from the transport corridor, pylons and china clay workings visible to the south (CA17: St Austell or Henbarrow China Clay Area). The exceptions to this are the hills at Castle Downs and Belowda Beacon, and the rural farmland around Bowling Green and Red Moor to the south east of the LCA.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the large stretches of 'Upland Rough Ground' which covers a large proportion of the LCA to have high vulnerability to solar PV development. The associated 'Medieval Farmland' on the lower slopes has moderate/high vulnerability to solar PV development. 'Post-Medieval Farmland', and 'Modern Enclosed Land' which together cover a third of the LCA, is assessed as of moderate vulnerability to solar PV. 'Disused Industrial' are also moderately vulnerable to solar PV development, whilst patches of '20th Century Settlements' and 'Communications' were assessed to have low vulnerability.
Distinctive landscape features	The LCA description notes Castle-an-Dinas and Belowda Beacon, the Helman Tor rock outcrop, large boulders in fields (used in hedges and as gate posts), stone-faced hedges, extensive areas of wet heath and wet woodland, and the electricity substation and power station near St Dennis with associated pylons as distinctive features of the landscape. Some of these could be affected by solar PV development.
Scenic quality	The eastern parts of the LCA fall within the Helman Tor Luxulyan Valley AGLV, although only the Helman Tor part of the AGLV is relevant to the LCA. The special qualities of this landscape include boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature. In some other parts of the LCA, pylons are widely visible and intrusive. The undulating hills to the north of the area contribute to scenic quality.
Overall sensitivity assessment	Whilst the undulating lowland nature of the landscape, existing human influence, and presence of enclosed farmland to the east might indicate lower sensitivity to solar PV

Criteria	Lower sensitivity	⟷	Higher sensitivity
	development, the visible slopes of the hills to the north and the presence of areas of moorland with a 'wilderness' character increase sensitivity. Overall, the landscape is judged to have a **moderate** sensitivity to solar PV development. The undeveloped moorland landscapes and the prominent slopes of the hills in the north (including the medieval stripfield systems around Belowda) would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The varied scale of fields indicates that suitable sizes would vary across the LCA. The undeveloped moorland landscapes and the prominent slopes of the hills in the north (including the medieval stripfield systems around Belowda) would be particularly sensitive to any scale of development.		

Landscape strategy and Guidance for Solar PV Development

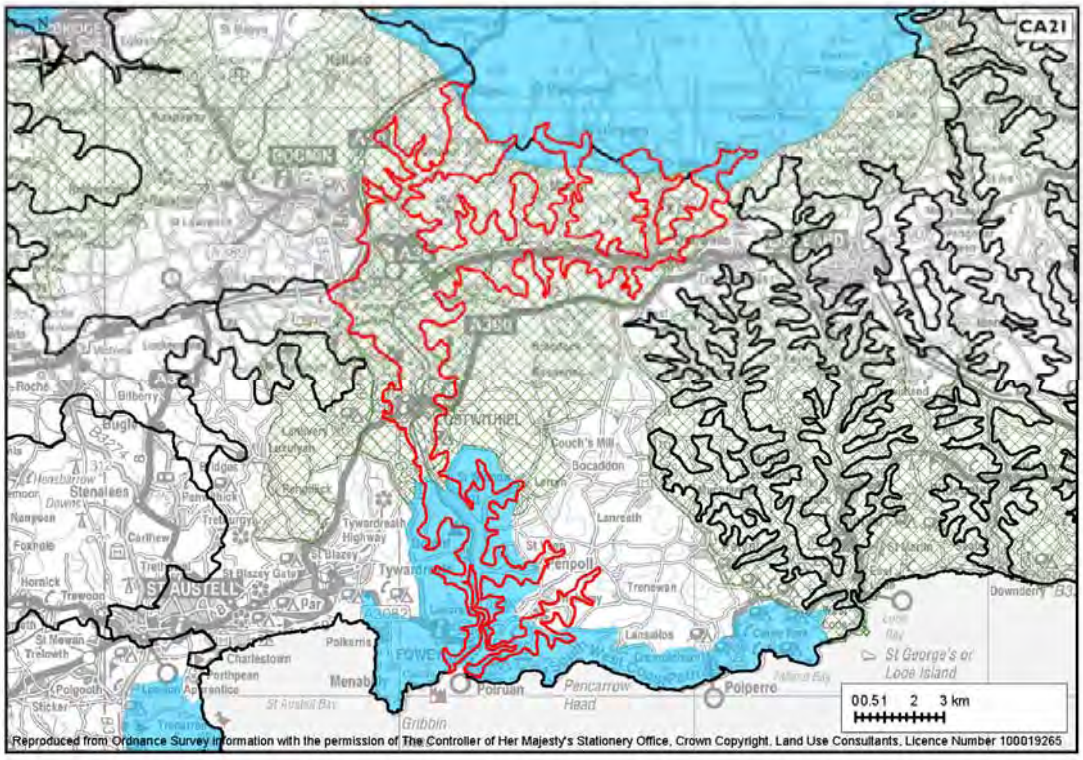
Landscape strategy	This is a varied LCA. The landscape strategy is for **a landscape with occasional solar PV developments** in sheltered areas and lower slopes (up to and including large size - size of development should relate to landscape scale which varies within the LCA) and **no PV development** on the undeveloped moorland landscapes or prominent slopes of the hills in the north. There may be more than one solar PV development in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape
Siting Guidance	See Annex 3 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any solar PV developments within this LCA: • Avoid siting solar PV development in the undeveloped moorland landscapes (e.g. Goss/Tregoss Moors) or on prominent slopes of the hills in the north of the LCA. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character, or on brownfield sites. • The scale of development should relate to its context – areas of small scale fields in the east will be sensitive to larger scale developments. • Preserve the strong field patterns, particularly relating to medieval fields in the east, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as Cornish hedges, hedgerows, woodland and regenerating vegetation to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Consider views from local viewpoints and popular routes (e.g. Saints Way and Helman Tor) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect Castle-an-Dinas and Belowda Beacon, the Helman Tor rock outcrop, large boulders in fields (used in hedges and as gate posts), stone-faced hedges, or extensive areas of wet heath and wet woodland as distinctive features of this landscape.

	• Protect the boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature that contribute to the scenic quality of the Helman Tor Luxulyan Valley AGLV.

CA21: Fowey Valley

Key Landscape Characteristics[1]

- *Series of steep river valleys flowing south into the River Fowey, terminating at the Fowey deep water ria system.*
- *Tidal river and associated creeks and streams, small areas of intertidal Mudflats, Coastal Saltmarsh, neutral grassland and Wet Woodland on the upper reaches.*
- *Dominant oak woodland on steep slopes down to river's edge, interspersed with small pastoral fields on less steep slopes.*
- *Estate parkland and ornamental planting including Lanhydrock (NT) and Glynn with extensive woodland plantation and parkland trees.*
- *Strong influence of road and rail transportation along the river valley.*
- *Large sheltered active deep-water harbour with much water-based recreational activity and commercial shipping.*
- *Larger settlements expanded by their function as a port.*
- *Smaller nucleated hamlets along the banks of the river and at the heads of creeks, medieval in origin, some with medieval churches.*
- *Extensive conifer plantations at the upper end of valley.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A major river valley system flowing westwards, gathering a number of tributaries that flow southwards off Bodmin Moor (CA32). Close to Lanhydrock, the valley opens out to include some adjacent hills, before it turns south to the coast developing into a large-scale ria system. The valleys of both the main river and its tributaries are steep sided, producing a dramatic landform - and varying between intimate and larger scales.		
Land cover pattern and presence of human scale features	The farmland comprises small medieval fields defined by sinuous Cornish hedges with hedgerows. Some larger scale, more recent fields are found in places, as well as post-medieval rectilinear fields on the fringes of Bodmin Moor. In the valleys woodland, coastal saltmarsh and wetland habitats contribute to the complexity of landcover. Human scale features include Cornish hedges, frequent trees, farms, isolated dwellings, bridges and quays. The landscape's extensive tree cover emphasises the tight enclosure of the valleys, resulting in a small, human-scale feel to the landscape overall.		
Tracks/transport pattern	Despite the presence of the A38 which runs along the upper part of the river (Glynn Valley), elsewhere there are few lanes and those that exist are narrow lanes bounded by Cornish hedges – typically small lanes plunge perpendicularly down the slopes.		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the Roman military fort near Restormel Castle, overlooking the highest navigable point of the Fowey, Restormel Castle itself, the remains of a motte and bailey castle at Old Cardinham, St Catherine's Castle in Fowey, and fine medieval churches at Cardinham, St Neot, St Winnow and St Sampson – it is likely that these are important skyline features.		
Perceptual qualities	The twisting creeks of the ria with the trees down to the water's edge appears both tranquil and mysterious in complete contrast to the busy harbour area at Fowey. Parts have a busy character, particularly in the summer months. Overall though, much of this landscape has a tranquil and rural character.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Medieval Farmland' and 'Ancient Woodland', which make up a significant proportion of the LCA, as of moderate-high vulnerability to wind turbines. Areas of 'Ornamental' ground associated with the LCA's parkland estates is assessed as of 'high' vulnerability to wind turbines, as are the patches of 'Upland Rough Ground' found on upper valley slopes. Significant areas of 'Post-medieval Enclosed Land (Intakes)', particularly in the middle section of the LCA are assessed as of 'moderate' vulnerability to wind turbines. Smaller areas of 'Modern' enclosures (Amalgamation of AEL) are assessed as of 'low-moderate' vulnerability, whilst the landscape's 'Plantations and Scrub', found along some valley sides, as well as the modern development related to the main settlements in the landscape, are assessed as of 'low' vulnerability. The LCA's areas of 'Intertidal and Inshore Water' were not assessed as part of this study.		
Distinctive landscape features	The LCA describes Restormel Castle; Golitha Falls; Cardinham Woods and Glynn Valley; the wide stretch of open water with trees down to waters edge; prominent		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	streams and wooded valleys; Clay wharves at Golant; busy harbour at Fowey; Polruan passenger ferry and Bodinnick vehicle ferry across mouth of river; Porphyry Hall; parkland around Lanhydrock (NT) and Glynn House as distinctive features of the landscape. The woods are particularly extensive in this LCA.		
Scenic quality	The southern part of the Fowey Ria falls within the 'South Coast Eastern' section of the Cornwall AONB (the coastal margins also defined as Heritage Coast). Qualities that may particularly be affected by wind energy development are the spectacular promontory of Gribben Head with its prominent beacon, and the panoramic views along the coast and across the Fowey Estuary. The fringes of the northern valleys on the edge of Bodmin Moor fall within the 'Bodmin Moor' section of the Cornwall AONB. Approximately 23% of the LCA is AONB. The central part of the Fowey valley falls within the Boconnoc AGLV (valued for the prominence of Restormel Castle and the ornamental parkland character of the Boconnoc Estate) and the westward course of the Fowey, and its tributaries on the fringes of Bodmin Moor, fall within the Mid Fowey AGLV (valued for the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock).		
Overall sensitivity assessment	Although the large hills around Lanhydrock, the presence of larger scale, more recent fields in places and presence of the A38 may indicate lower levels of sensitivity to wind energy developments, the dramatic landform of the majority of the valley system, the complexity of landcover, human scale of the valleys, skyline features overlooking the valley, tranquil character and high scenic quality heighten levels of sensitivity to the extent that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. Areas of ancient woodland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The scale of the valley system varies along its length – with smaller scale and steeper sections to the north and south, and a more open larger scale area in the middle. Although this middle section is of a larger scale than the other parts, it would still be particularly sensitive to large scale wind turbines. The rest of the valley system would be particularly sensitive to 'medium' and 'large' scale wind turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The size and scale of this valley system means that it would be particularly sensitive to anything other than single turbines of small clusters (where space allows).		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines, or small clusters,** comprising turbines up to and including medium scale in the middle section of the LCA, and with **occasional small turbines** in the remainder of the valley system outside the AONB (turbine size and cluster size should relate to landscape scale which varies within the LCA). Within the AONB a **landscape**

	without wind energy development (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be more than one wind energy development in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in the most remote and tranquil locations of the landscape, particularly within the steep sided, largely undeveloped tributary valleys and ria creeks. • Avoid siting turbines at the ria mouth (e.g. on the headland above St Catherine's Point). • Avoid damage and alterations to the network of small scale and steep rural lanes. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, skyline features, including the Roman military fort and castle of Restormel, St Catherine's Castle at the mouth of the ria, the remains of a motte and bailey castle at Old Cardinham, or the medieval church towers at Cardinham, St Neot, St Winnow and St Sampson. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground', 'Ornamental' and 'Ancient Woodland' – assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and Saints' Way) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect Restormel Castle; Golitha Falls; Cardinham Woods and Glynn Valley; the wide stretch of open water with trees down to waters edge; prominent streams and wooded valleys; Clay wharves at Golant; busy harbour at Fowey; Porphyry Hall; parkland around Lanhydrock (NT) and Glynn House as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the spectacular promontory of Gribben Head with its prominent beacon, and the panoramic views along the coast and across the Fowey Estuary) - ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Boconnoc AGLV and the Mid Fowey AGLV (including the historic feature of Restormel Castle, large blocks of woodland parklands of Lanhydrock and Glynn House, valley woodland and water meadows) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A major river valley system flowing westwards, gathering a number of tributaries that flow southwards off Bodmin Moor (CA32). Close to Lanhydrock, the valley opens out to include some adjacent hills, before it turns south to the coast developing into a large-scale ria system. The valleys of both the main river and its tributaries are steep sided, producing a dramatic landform.
Sense of openness / enclosure	The thick woodland cover across much of the landscape, along with its steep valley sides and river banks, gives the landscape a strong sense of enclosure. This contrasts with the open floodplain landscape of the Fowey ria in its lower courses and the more open elevated hills around Lanhydrock.
Field pattern and scale	The farmland comprises small medieval fields defined by sinuous Cornish hedges with hedgerows. Some larger scale, more recent fields are found in places, as well as post-medieval rectilinear fields on the fringes of Bodmin Moor. Patches of unenclosed rough ground are found on some of the higher valley slopes.
Landcover	Most of the land cover is woodland (broadleaved and mixed), as well as significant areas of conifer plantation, e.g. in the Glynn Valley and at Cardinham. Ornamental parkland with frequent mature trees related to the Lanhydrock, Ethy and Glynn estates has a local influence on landscape character. Farmland is mainly pastoral, with a few occasional areas of arable land.
Perceptual qualities	The twisting creeks of the ria with the trees down to the water's edge appears both tranquil and mysterious in complete contrast to the busy harbour area at Fowey. Parts have a busy character, particularly in the summer months. Overall though, much of this landscape has a tranquil and rural character.
Cultural heritage	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC type of 'Medieval Farmland', which makes up the majority of the LCA's farmed area, as of moderate-high vulnerability. Areas of 'Ornamental' ground associated with the LCA's parkland estates is assessed as of 'high' vulnerability to solar PV development, as are the patches of 'Upland Rough Ground' found on upper valley slopes. Significant areas of 'Post-medieval Enclosed Land (Intakes)', particularly in the middle section of the LCA are assessed as of 'moderate' vulnerability to solar PV development. Smaller areas of 'Modern' enclosures (Amalgamation of AEL) are assessed as of 'low-moderate' vulnerability. The LCA's large areas of 'Ancient Woodland', 'Plantations and Scrub' and 'Intertidal and Inshore Water' were not assessed as part of this study.
Distinctive landscape features	The LCA describes Restormel Castle; Golitha Falls; Cardinham Woods and Glynn Valley; the wide stretch of open water with trees down to waters edge; prominent streams and wooded valleys; Clay wharves at Golant; busy harbour at Fowey; Polruan passenger ferry and Bodinnick vehicle ferry across mouth of river; Porphyry Hall; parkland around Lanhydrock (NT) and Glynn House as distinctive features of the landscape. The woods are particularly extensive in this LCA.
Scenic quality	The southern part of the Fowey Ria falls within the 'South Coast Eastern' section of the Cornwall AONB (the coastal margins also defined as Heritage Coast). Qualities that may particularly be affected by solar PV development are the spectacular and

Criteria	Lower sensitivity	⟷	Higher sensitivity
	well wooded Menabilly Valley, the medieval field patterns, the vineyards visible amongst the more traditional agricultural uses, and the exposed rugged character of the coast and Gribben Head. The fringes of the northern valleys on the edge of Bodmin Moor fall within the 'Bodmin Moor' section of the Cornwall AONB. Approximately 23% of the LCA is AONB. The central part of the Fowey valley falls within the Boconnoc AGLV (valued for the prominence of Restormel Castle and the ornamental parkland character of the Boconnoc Estate) and the westward course of the Fowey, and its tributaries on the fringes of Bodmin Moor, fall within the Mid Fowey AGLV (valued for the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock).		
Overall sensitivity assessment			
	Although the LCA's strong sense of enclosure and presence of some modern fields cover could indicate a lower sensitivity to solar PV development, the landscape's steep landform, wooded and pastoral landcover, 'tranquil and mysterious' character and relatively high scenic quality increase levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV development. The landscape's steep wooded valley slopes and river banks would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The complex and varied landform of the LCA, with its steep sided wooded valleys, creeks and river banks, predominantly small medieval field pattern and significant areas of ornamental parkland means that it would be particularly sensitive to solar PV developments within the 'medium' and 'large' size range. Some of the larger, rectilinear fields may be less sensitive to 'medium' scale developments as long as they are sensitively sited.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** (or medium scale in areas of larger, rectilinear fields - size of development should relate to landscape scale which varies within the LCA). Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be more than one solar PV development in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on the steep upper slopes of the valleys where PV panels would be particularly visible - aim to locate on lower slopes and in folds in the landscape where they will be less visible. • Avoid locating PV development within the more tranquil parts of the valley system where freedom from human activity and sense of naturalness are higher. • Use existing landscape features, such as dense Cornish hedges, mature trees, conifer plantations and woodland to screen development wherever possible, ensuring that any additional screening provided is in character with the

	landscape. • Prevent damage to the landscape's small-scale road network during the installation phase (including through road widening and the removal / cutting back of overhanging vegetation). • Avoid siting PV development within the HLC Zones of 'Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and Saints' Way) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect Restormel Castle; Golitha Falls; Cardinham Woods and Glynn Valley; the wide stretch of open water with trees down to waters edge; prominent streams and wooded valleys; Clay wharves at Golant; Porphyry Hall; parkland around Lanhydrock (NT) and Glynn House as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the spectacular and well wooded Menabilly Valley, the medieval field patterns, the vineyards visible amongst the more traditional agricultural uses, and the exposed rugged character of the coast and Gribben Head) - ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Cornwall AONB, the Boconnoc AGLV and the Mid Fowey AGLV (including the historic feature of Restormel Castle, large blocks of woodland parklands of Lanhydrock and Glynn House, valley woodland and water meadows) – ensure choice of site and scale of development does not detract from these.

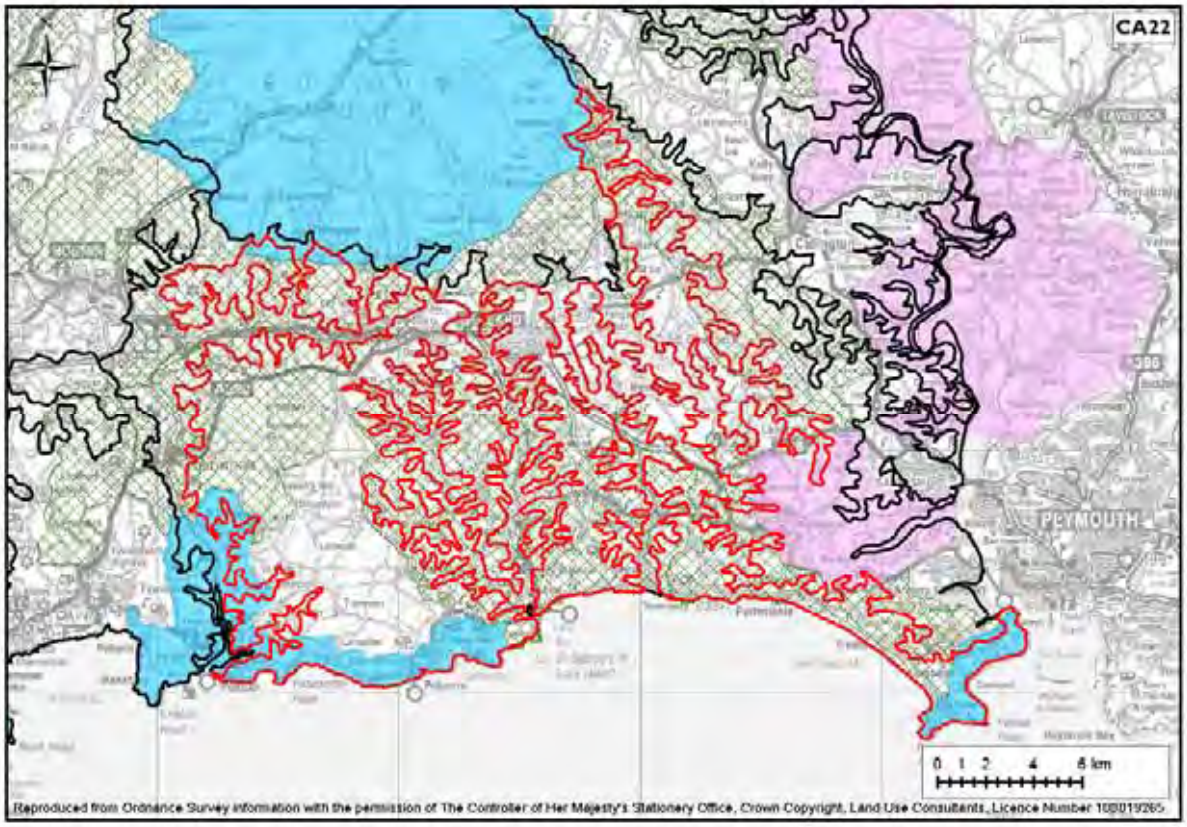
CA22: South East Cornwall Plateau

Key Landscape Characteristics[1]

- *Open, medium to large scale gently rolling plateau with pattern of low irregular Cornish hedges with hedgerows and sparse tree cover.*
- *Mix of improved pasture on plateau with some arable, with Cornish hedges or post and rail fencing.*
- *Trees occasional, on boundaries, around farmyards and farm entrances, generally only on lower land.*
- *Gently sloping and undulating stream valleys with very small patches of woodland in lower-lying areas.*
- *Large area of woodland in small valleys around Boconnoc with Deer Park and extensive designed landscape, also at Mount Edgcumbe.*
- *Spectacular coastline with steeply sloping coast zone ending at incised low cliffs with reefs and small sandy coves. Unenclosed sandy beach punctuated by rocky outcrops.*
- *Scrub and bracken on lower coastal slopes and pasture and unimproved or neutral grassland on upper slopes, divided by straight boundaries in large pattern.*
- *Small peninsula at south-eastern end, forming narrow open farmed ridge with regular field pattern of low hedges, lightly settled.*
- *Heavy recent settlement along transport corridors.*
- *Isolated farms and large modern houses scattered throughout.*
- *History and evidence of fortifications along the south coast.*
- *Main settlement of Liskeard.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]


CA22
PLYMOUTH
0 1 2 4 6 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright, Land Use Consultants, Licence Number 100019265

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A medium to large scale gently rolling plateau incised by small steep-sided valleys and extending from the southern edge of Bodmin Moor to the south coast. With the exception of a larger area in the west and separate northern part to the north of the Glynn Valley (LCA 21) the area is predominantly formed into smaller long narrow strips running north-south intersected by some large river valley systems in adjacent LCAs. The inland areas extend to a steeply sloping coast of varying scale including incised low cliffs (in the west and in the east around Rame Head), small sandy coves, rocky outcrops and the sweeping beach at Whitsands bay, extending east across the bay rising to 120m AOD at the prominent headland of Rame Head.		
Land cover pattern and presence of human scale features	A field pattern dominated by medium-sized fields (of medieval origin with predominantly sinuous Cornish hedge boundaries), interspersed with smaller areas of larger strongly rectilinear fields of post medieval origin and larger more recent fields (where there is significant evidence of 20th century hedge removal). There is an almost continuous area of rough ground running in a narrow strip along the coast, large areas of woodland around Brannoc (north-west), a small stretch of coastal woods around Cawsand Bay and parkland woodland at Mount Edgcumbe in the south-east which add to variety. Human scale features include Cornish hedges, farmsteads and occasional trees on boundaries and around farmsteads (usually only on lower land).		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A390 and A38, as well as some more minor lanes bordered by Cornish hedges.		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the lighthouse and Iron Age cliff castle at Rame Head, numerous defensive sites along the coast (including the prominent series of Victorian forts and batteries above Whitsand Bay to defend Plymouth), Iron Age hillforts (Bury Down, Lanreath, Hall Rings, Bake Rings and St Nun's Camp, Blacketon Rings, Menheniot, and Padderbury), and Liskeard castle site. Some ridgetops are crossed by pylon lines (south of Couches Mill and across the north of the LCA).		
Perceptual qualities	This is a rural man-made landscape with some development and human activity – the dispersed nature of settlement in much of the inland areas, in particular the west, means this is generally a tranquil, rural landscape. Less tranquil areas are associated with the more developed areas of Liskeard and the A390 transport route in the north of the area, while there is a sense of relative remoteness along the coastline at the southern end of this LCA.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses 'Ornamental' land (associated with the estates at Mount Edgcumbe, Port Eliot, Catchfrench and Boconnoc) as well as stretches of 'Coastal Rough Ground' as of high vulnerability to development. Large areas of 'Medieval Farmland' which make up the majority of the LCA, are assessed as of 'moderate-high' vulnerability. Areas of lower sensitivity are associated with the smaller areas of 'Post Medieval Farmland' (Intakes and Re-organised AEL) mainly on higher ground, assessed as of moderate vulnerability. '20th Century Farmland' (amalgamations of anciently enclosed land) and 20th Century Settlement are assessed as of low-moderate vulnerability.		

Criteria	Lower sensitivity	⟷	Higher sensitivity
Distinctive landscape features	The LCA describes the Cornish hedges, Bodmin Moor (a looming presence in the northern half of this area), Freathy (an unusual 20th C development of wooden chalets on the cliff face), peninsula with long shallow bay with rocky outcrops, the Chapel on Rame Head, the fishing village of Polperro, and the Obelisk at Boconnoc as distinctive features of this landscape. Some of these could be affected by wind energy development.		
Scenic quality	A small part of the south west border and coastal strip fall within the 'South Coast Eastern' part of the Cornwall AONB; a small area in the south east (Rame Head to Cremyll) falls within 'Rame Head' part of the Cornwall AONB; and a the very northern tips of the LCA fall within the 'Bodmin Moor' part of the Cornwall AONB (a total of 11% of the area is designated as AONB). Qualities of the 'South Coast Eastern' part of the Cornwall AONB that may particularly be affected by wind energy development are the small enclosed lanes form a winding network. Qualities of the 'Rame Head' part of the Cornwall AONB that may particularly be affected by wind energy development are the prominent landmark and distinctive silhouette of the medieval chapel on Rame Head, the rugged and wild coast, the prominence of the visible military fortifications in particular from the 18th, 19th and 20th centuries, and the small winding rural roads. Qualities of the 'Bodmin Moor' part of the Cornwall AONB that may particularly be affected by wind energy development are the imposing nature of the summit of Brown Willy (the highest point of land in Cornwall), the distinctive ragged horizon recognisable from afar, the prominence of the tors, the prominence of the engine houses and mining structures, the sense of remoteness and lack of tracks across the open moor, and the small winding lanes on the edges of the moor. A small area around St Germans falls into the Tamar Valley AONB (0.65% of the LCA). Qualities of the Tamar Valley AONB that may particularly be affected by wind energy development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. In addition, extensive stretches of the coastline are defined as Heritage Coast (from Fowey to Hore Stone in the west and around Rame Head in the east). Large parts of the remainder of the LCA fall within six AGLVs: Boconnoc AGLV (west). Special qualities include Restormel Castle as a prominent feature, the ornamental parkland character of the Boconnoc Estate. Mid-Fowey AGLV (north-west). Special qualities include the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock. Looe and Seton Valleys AGLV(central and south central). Special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland. Caradon Hill AGLV (north central). Special qualities include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys. Lynher Valley AGLV (north-west). Special qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands. South-east Caradon AGLV (included in the Looe and Seaton Valleys AGLV on paper mapping). Special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.		
Overall sensitivity assessment	Although the gently rolling plateau landform, relatively large landscape scale, simple		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	agricultural landcover of much of the LCA, and presence of human influence could indicate a lower sensitivity to wind energy development, the varied field pattern of medieval fields bounded by sinuous Cornish hedges, the naturalistic coastline with prominent headlands (and skyline features) and moderate scenic quality increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development and **moderate-high** within the AONB. The undeveloped and naturalistic coastal edge and its immediate hinterland would be particularly sensitive to wind energy development.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large in the Cornwall context, the typical scale of the hills (just over 100m) and relatively smaller scale landcover patterns means this LCA would be particularly sensitive to turbines at the higher end of the 'large' category. The undeveloped and naturalistic coastal edge would be sensitive to any turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the landform is relatively large in the Cornwall context, the strongly undulating nature of the landform and relatively smaller scale landcover patterns means that the LCA would be particularly sensitive to 'large' or 'very large' clusters of turbines. The undeveloped and naturalistic coastal edge would be sensitive to any groups of turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small or medium clusters of turbines**, or single turbines, comprising turbines that may be up to and including sizes at the lower end of the 'large' category (turbine size and cluster size should relate to landscape scale which varies within the LCA) and **no turbines** along the undeveloped and naturalistic coastal edge. Elsewhere in the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA : • Avoid siting turbines along the prominent and naturalistic coastal edge, including its prominent headlands and cliff tops (Rame Head, Penlee Point, Hannafore Point, Hore Stone and Pencarrow Head). • In valleys, single turbines may be most appropriate, sited adjacent to existing buildings or clusters of buildings. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including, Iron Age hillforts (Blacketon Rings, Padderbury and Bury Down, Hall Rings and

	Bake Rings near Pelynt), the Iron Age cliff castles at Tregantel Fort and on Rame Head, Rame Head lighthouse as well as the prominent Victorian forts and batteries above Whitsand Bay. • Avoid siting wind turbines within the HLC Types of 'Ornamental' land and 'Coastal Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect Cornish hedges, the looming presence of Bodmin Moor, the distinctive character of Freathy, the rocky outcrops along the coast, the Chapel on Rame Head, the fishing village of Polperro, or the distinctive Obelisk at Boconnoc as distinctive features of the LCA. • Protect the factors which contribute to the scenic quality of the 'South Coast Eastern' part of the Cornwall AONB (particularly the small enclosed lanes which form a winding network) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the 'Rame Head' part of the Cornwall AONB (particularly the prominent landmark and distinctive silhouette of the medieval chapel on Rame Head, the rugged and wild coast, the prominence of the visible military fortifications in particular from the 18th, 19th and 20th centuries, and the small winding rural roads) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the 'Bodmin Moor' part of the Cornwall AONB (particularly the imposing nature of the summit of Brown Willy -the highest point of land in Cornwall, the distinctive ragged horizon recognisable from afar, the prominence of the tors, the prominence of the engine houses and mining structures, the sense of remoteness and lack of tracks across the open moor, and the small winding lanes on the edges of the moor) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB (particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Boconnoc AGLV (particularly the Restormel Castle as a prominent feature, the ornamental parkland character of the Boconnoc Estate) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Mid-Fowey AGLV (particularly the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Looe and Seton Valleys AGLV (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Caradon Hill AGLV (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with

	thick oak woodland.) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Lynher Valley AGLV (particularly the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A gently rolling plateau incised by small steep-sided valleys with many prominent visible slopes. The inland areas extend to a steeply sloping coast of varying scale including incised low cliffs (in the west and in the east around Rame Head), small sandy coves, rocky outcrops and the sweeping beach at Whitsands bay, extending east across the bay rising to 120m AOD at the prominent headland of Rame Head.
Sense of openness / enclosure	A relatively open landscape – particularly on hill sides and in extensive open coastal areas compared. There are also some more sheltered, small wooded valleys and some woodland area around Boconnoc.
Field pattern and scale	The varied field pattern is dominated by medium-sized fields (of medieval origin) with predominantly sinuous Cornish hedge boundaries interspersed with smaller areas of larger strongly rectilinear fields of post medieval origin and larger more recent fields (where there is significant evidence of 20th century hedge removal).
Landcover	Predominantly agricultural land with a mixture of arable and pasture. In addition there is an almost continuous area of rough ground running in a narrow strip along the coast, large areas of woodland around Brannoc (north-west), a small stretch of coastal woods around Cawsand Bay and parkland woodland at Mount Edgcumbe in the south-east.
Perceptual qualities	There is a sense of relative remoteness along the coastline at the southern end of this LCA. The dispersed nature of settlement in much of the inland areas, in particular the west, means this is generally a tranquil, rural landscape. Less tranquil areas are associated with the more developed areas of Liskeard and the A390 transport route crossing through the north of the area. There are also some small reservoirs sited within the landscape.
Historic Landscape Character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses 'Ornamental' land (associated with the estates at Mount Edgcumbe, Port Eliot, Catchfrench and Boconnoc) as well as stretches of 'Coastal Rough Ground' as of high vulnerability to development. Large areas of 'Medieval Farmland' which make up the majority of the LCA, are assessed as of 'moderate-high' vulnerability. Areas of lower sensitivity are associated with the smaller areas of 'Post Medieval Farmland' (Intakes and Re-organised AEL) mainly on higher ground, assessed as of 'moderate' vulnerability. Patches of '20th Century Farmland' (Amalgamations of AEL) are assessed as of low-moderate vulnerability to solar PV development.
Distinctive landscape features	The LCA describes the Cornish hedges, Bodmin Moor (a looming presence in the northern half of this area), Freathy (an unusual 20th C development of wooden chalets on the cliff face), peninsula with long shallow bay with rocky outcrops, the Chapel on Rame Head, the fishing village of Polperro, and the Obelisk at Boconnoc as distinctive features of this landscape. Some of these could be affected by solar PV development.
Scenic quality	A small part of the south west border and coastal strip fall within the 'South Coast Eastern' part of the Cornwall AONB; a small area in the south east (Rame Head to Cremyll) falls within 'Rame Head' part of the Cornwall AONB; and a the very northern tips of the LCA fall within the 'Bodmin Moor' part of the Cornwall AONB

Criteria	Lower sensitivity	⟷	Higher sensitivity
	(a total of 11% of the area is designated as AONB). Qualities of the 'South Coast Eastern' part of the Cornwall AONB that may particularly be affected by solar PV development are the medieval field patterns, the rough ground and patches of mixed deciduous woodland on the slopes of the valley stretching around and inland from Polperro, and the exposed character. Qualities of the 'Rame Head' part of the Cornwall AONB that may particularly be affected by solar PV development are the sense of exposure, the small irregular field pattern, the variation in colour and texture of the farmland, and the rugged and wild coast. Qualities of the 'Bodmin Moor' part of the Cornwall AONB that may particularly be affected by solar PV development are the distinctive ragged horizon recognisable from afar, the distinctive openness and endless empty vastness, the sense of remoteness and lack of tracks across the open moor, the pattern of ancient fields with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams. A small area around St Germans falls into the Tamar Valley AONB (0.65% of the LCA). Qualities of the Tamar Valley AONB that may particularly be affected by solar PV development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry. In addition, extensive stretches of the coastline are defined as Heritage Coast (from Fowey to Hore Stone in the west and around Rame Head in the east). Large parts of the remainder of the LCA fall within six AGLVs: Boconnoc AGLV (west). Special qualities include Restormel Castle as a prominent feature, the ornamental parkland character of the Boconnoc Estate. Mid-Fowey AGLV (north-west). Special qualities include the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock. Looe and Seton Valleys AGLV(central and south central). Special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland. Caradon Hill AGLV (north central). Special qualities include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys. Lynher Valley AGLV (north-west). Special qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands. South-east Caradon AGLV (included in the Looe and Seaton Valleys AGLV on paper mapping). Special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.		
Overall sensitivity assessment			
	Although the presence of man's influence on the landscape and presence of arable land could indicate lower sensitivity to solar PV development, the many prominent slopes, sense of openness and high scenic quality along the coast increase sensitivity to solar PV development. Overall, the LCA is judged to be of **moderate-high** sensitivity to solar PV development. The naturalistic coastal edge and its immediate hinterland, and upper slopes would be particularly sensitive to solar PV development.		
Sensitivities to different sizes of solar PV development	In more open areas or areas with smaller scale field patterns, the LCA is likely to be particularly sensitive to 'large' scale solar PV development. The naturalistic coastal edge and upper slopes would be sensitive to any scale of		

Criteria	Lower sensitivity	⟷	Higher sensitivity
Very small: < 1 ha ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	solar PV development.		

Landscape strategy and Guidance for Solar PV Development

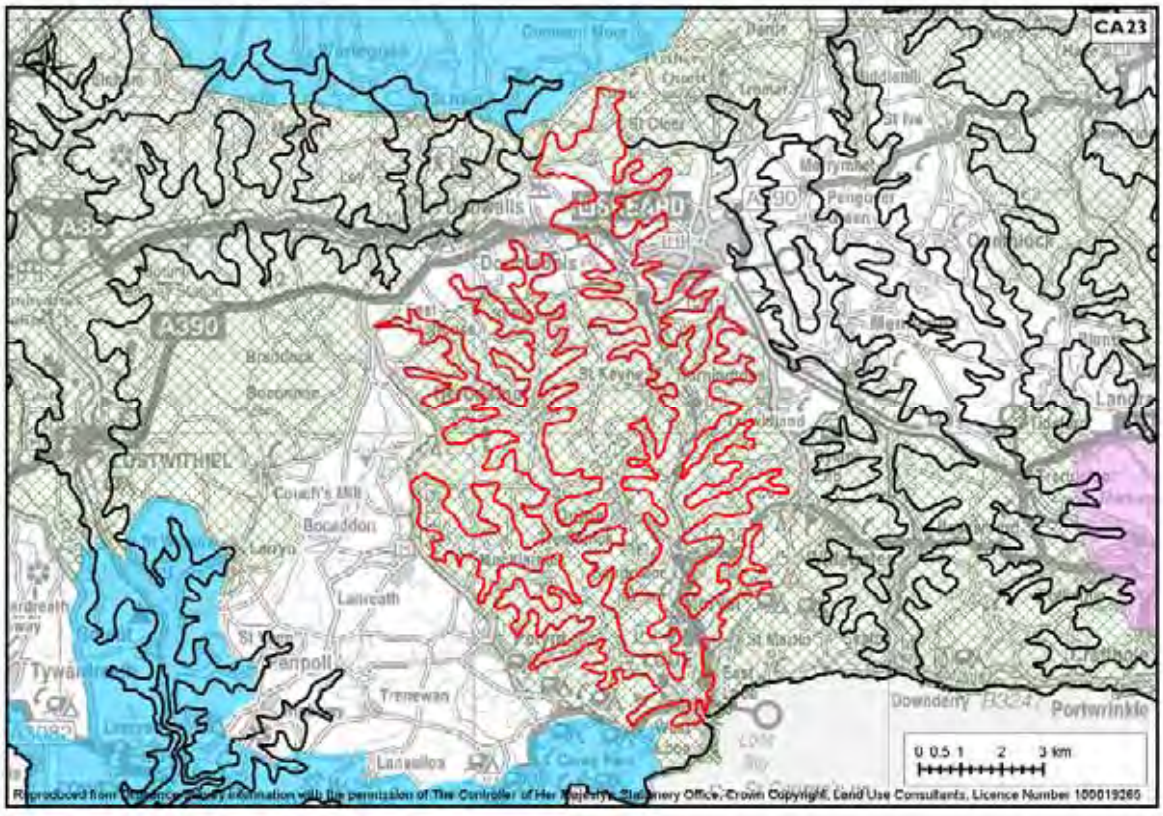
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (up to and including large scale - size of development should relate to landscape scale which varies within the LCA) and **no PV development** along the undeveloped coastal edge or on upper slopes. Elsewhere in the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape
Siting Guidance	See Annex 3 for generic siting and design guidance for solar PV development. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development along the naturalistic coastal edge, or on upper open and visible slopes. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields (e.g. north of Liskeard and around Pensilva, Mount, Couch's Mill and Milcomb), by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as Cornish hedges, hedgerows, woodland and buildings to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV development within the HLC Types of 'Ornamental' land (associated with the Mount Edgcumbe, Port Eliot, Catchfrench and Boconnoc estates) and 'Coastal Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the looming presence of Bodmin Moor, the character of Freathy, the character of the coastline and its long shallow bay with rocky outcrops, the character of Polperro or the distinctive obelisk at Boconnocas as features of this landscape. • Protect the factors which contribute to the scenic quality of the South Coast part of the Eastern Cornwall AONB (particularly the medieval field patterns, the rough ground and patches of mixed deciduous woodland on the slopes of the valley stretching around and inland from Polperro, and the exposed character) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Rame Head part of the Cornwall AONB (particularly the sense of exposure, the small irregular field pattern, the variation in colour and texture of the farmland, and the rugged and wild coast) – ensure choice of site and scale of development does not detract from these.

	• Protect the factors which contribute to the scenic quality of the Bodmin Moor part of the Cornwall AONB (particularly the distinctive ragged horizon recognisable from afar, the distinctive openness and endless empty vastness, the sense of remoteness and lack of tracks across the open moor, the pattern of ancient fields with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB (particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Boconnoc AGLV (particularly the Restormel Castle as a prominent feature, the ornamental parkland character of the Boconnoc Estate) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Mid-Fowey AGLV (particularly the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Looe and Seton Valleys AGLV (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Caradon Hill AGLV (included in the Looe and Seaton Valleys AGLV) (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Lynher Valley AGLV (particularly the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands) – ensure choice of site and scale of development does not detract from these.

CA23: Looe Valley Rivers

Key Landscape Characteristics[1]

- *Deep narrow twin valley systems running north-south to the coast.*
- *Densely wooded, especially on the side of West Looe valley and in the small ria system near the coast, and with mainly pastoral farmland in pockets throughout.*
- *Woodland and landform create a sheltered enclosed environment in the valleys.*
- *Steep narrow winding lanes enclosed by high Cornish hedges, built of slate and densely covered in flowering and woody vegetation.*
- *Tourist settlements, formerly fishing villages, at East and West Looe, face each other across the river mouth.*
- *Hamlets at bridging points on valley floors.*
- *Intertidal Mudflats of the Looe ria.*
- *Small sandy beach at coast.*
- *This LCA is within the Looe and Seaton River Valleys AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	A dramatic landscape of steep-sided wooded valleys and meandering rivers. The area has an intimate scale due to the landform, which is enhanced by the wooded nature of many valley slopes. The scale is slightly larger at the northern end, where the valleys are less steep and the hills roll more gently. There is dramatic landform of steep-sided cliffs in the south/near the coast.		
Land cover pattern and presence of human scale features	A complex and varied landscape of wooded valley slopes, pastoral fields, hamlets and the meandering river. Human-scale features include the high Cornish hedges, winding lanes, hamlets and fishing villages. Many of the fields in this LCA have medieval origins, of a small to medium scale and the field pattern is strongly defined by the presence of high Cornish hedgerows and blocks of deciduous woodland.		
Tracks/transport pattern	There are few roads within the LCA, due in part to the steep-sided valley which is the defining feature of much of the area. The existing roads are all minor, the most prominent of which runs along the river in the eastern valley, between Looe and Liskeard. There is limited transport access to the upper slopes across much of the LCA.		
Skylines	Although the LCA description does not specifically refer to 'skyline', it notes that the Great Western Railway viaduct dominates the skyline of the Moorswater area, and that Looe Bridge is a prominent feature of the skyline in the south of the LCA. This LCA is characterised by narrow steep-sided valleys, which are the dominant feature of the landscape - the top of the valleys form a prominent skyline. These form a backdrop to many views within the area. There are also a number of historic features visible on the skyline, including a medieval linear earthwork 'the Giant's Hedge', which follows the valley south side of the West Looe River.		
Perceptual qualities	The central area of the LCA is a tranquil landscape which is relatively free from human activity, whilst the northern and southern parts experience higher levels of visual and noise intrusion from the nearby settlements and associated road network. The western valley is a more tranquil landscape than the east, with the area around Herodsfoot and Churchbridge being particularly tranquil and undeveloped. The area around the port and town of Looe contrasts strongly with this general tranquillity, and is much more bustling and lively.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind energy development assesses the HLC types of 'Medieval Farmland' which covers over half of the LCA, as of moderate-high vulnerability to wind turbines. There is also extensive cover of 'Deciduous Woodland', which is also moderately/highly vulnerable to wind development. The remaining tracts of land are either 'Coniferous Plantation' or '20th Century Farmland', both of which have low vulnerability to wind development.		
Distinctive landscape features	The LCA describes the Moorswater viaduct, the road bridge at Looe, relics of the lead mines, the well wooded valleys, and the railway alongside the East Looe River as 'distinctive features' of this landscape. Some of these could be affected by wind energy development.		
Scenic quality	Much of the LCA is designated as part of the Looe and Seaton Valleys AGLV. The scenic qualities of this AGLV include the strong field pattern provided by thick		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.		
Overall sensitivity assessment	The dramatic landform, intimate scale, relative inaccessibility, tranquil and undeveloped nature, presence of the Great Western Railway viaduct and Looe Bridge as features, relics of the lead mines, and large areas of deciduous woodland mean that this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The upper open rolling slopes of the northern tip are less sensitive than the dramatic valleys in the south.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The dramatic, complex nature of the landscape means that this LCA is likely to be particularly sensitive to any turbines greater than 'very small' in scale. The less steep valleys north of Looe Mills may be slightly less sensitive to 'small' wind turbines, due to their larger scale and more open character.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The dramatic and intimate landform means that the majority of this LCA is likely to be particularly sensitive to any clusters of turbines (only single turbines are likely to be suitable).		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines** associated with existing buildings – comprising very small scale turbines in most of the LCA (possibly small scale in the less steep valleys north of Looe Mills). There may be several individual very small wind turbines in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks such as the Giant's Hedge, historic bridges and the Railway Viaduct. • Utilise the landscape's large areas of woodland, plantations, trees and thick Cornish hedges to filter views of turbines and screen ground-level features of developments wherever possible. • Consider views from local viewpoints and popular routes when considering the siting and design of wind energy development in the landscape – ensure development doesn't detract from the tranquil experience on these routes. • Ensure wind energy development does not adversely affect the Moorswater viaduct, the road bridge at Looe, relics of the lead mines, the well wooded valleys, and the railway alongside the East Looe River as 'distinctive features' of this landscape. • Protect the features which contribute to the scenic quality of the Looe and Seaton River Valley AGLV, particularly the strong field pattern provided by thick

	hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A dramatic landscape of steep-sided wooded valleys and meandering rivers. The area has an intimate scale due to the landform, and this intimate scale is enhanced by the wooded nature of many valley slopes.
Sense of openness / enclosure	The river valleys create an intimate, enclosed landscape, and this is complemented by the extensive woodland coverage. High Cornish hedges define the pastoral landscape, adding to this sense of enclosure. The hills to the north are more open.
Field pattern and scale	Many of the fields in this LCA have medieval origins, of a small to medium scale and the field pattern is strongly defined by the presence of high Cornish hedgerows and blocks of deciduous woodland. This strong field pattern is mentioned as one of the key features of the Looe and Seaton Valleys AGLV.
Landcover	The LCA has significant areas of well-wooded valleys with broadleaved woodland and coniferous plantation, with farmed land mostly improved grassland with very little arable, and estuary of the East and West Looe rivers at Looe.
Perceptual qualities	The central area of the LCA is tranquil and relatively free from human activity, whilst the northern and southern are more affected by nearby settlements and associated road networks. The western valley is a more tranquil landscape than the east, with the area around Herodsfoot and Churchbridge being particularly tranquil and undeveloped. The area around the port and town of Looe is bustling and lively.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which covers over half of the LCA, as of moderate-high vulnerability to solar PV. There is also extensive cover of 'Deciduous Woodland', which was not assessed through the Cornwall HLC study, as it is considered inappropriate for solar PV development. The remaining tracts of land are either 'Coniferous Plantation' which was not assessed through the Cornwall HLC study and '20th Century Farmland', which has low vulnerability to solar PV development.
Distinctive landscape features	The LCA describes the Moorswater viaduct, the road bridge at Looe, relics of the lead mines, the well wooded valleys, and the railway alongside the East Looe River as 'distinctive features' of this landscape. Some of these (particularly the well wooded valleys) could be affected by solar PV development.
Scenic quality	Much of the LCA is designated for its scenic value, as part of the Looe and Seaton Valleys AGLV. The scenic qualities of this part of the landscape include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland.
Overall sensitivity assessment	Although this is a largely enclosed landscape due to the large areas of woodland (which could indicate lower sensitivity to solar PV development), the steep valley sides, large areas of undisturbed deciduous woodland, presence of strong field patterns, and tranquil character increase sensitivity. Overall, the landscape is judged to be of **moderate - high** sensitivity to solar PV development. Visible slopes would be particularly sensitive – especially the steep slopes to the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	south of Looe Mills.		
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Due to the high sensitivity and intimate scale of the landscape, this LCA is likely to be highly sensitive to any solar PV development greater than the 'small' scale.		

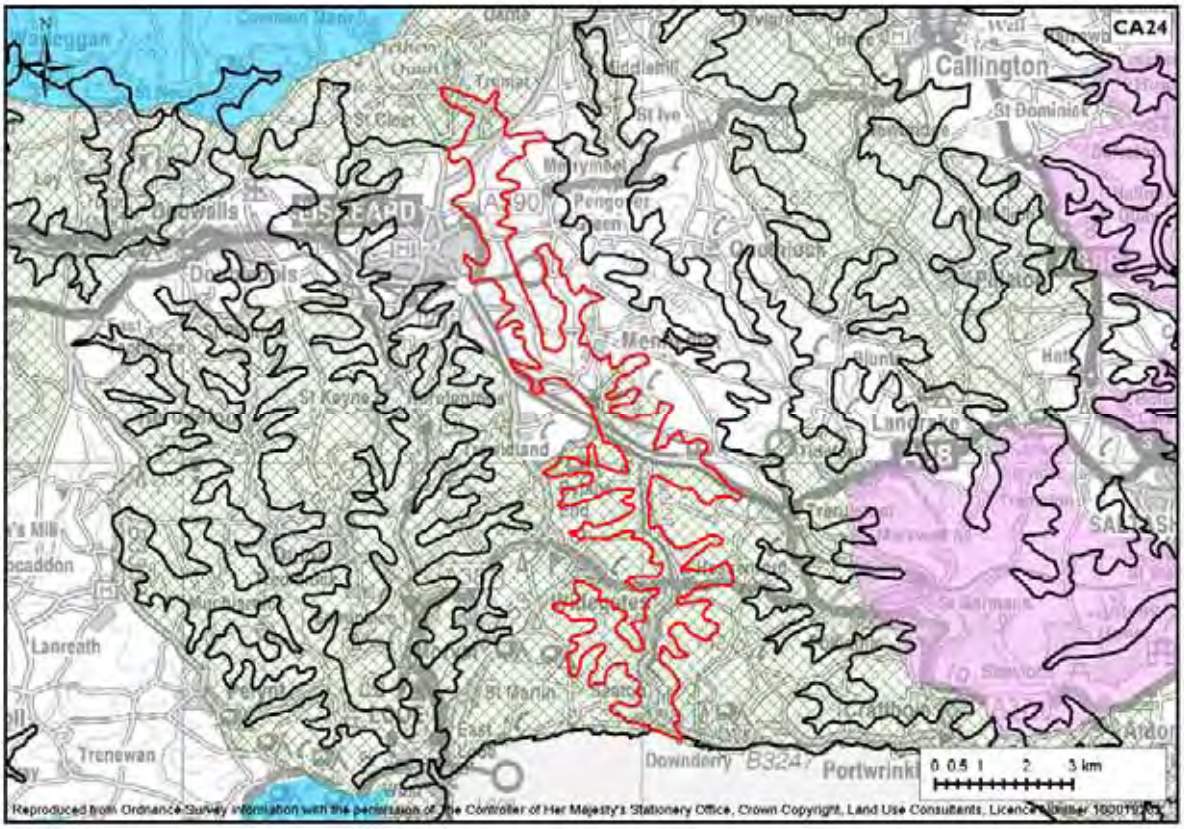
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small scale solar PV developments** north of Looe Mills (size of development should relate to landscape scale) and a landscape **without solar PV development** south of Looe Mills (this may include very occasional very small PV developments associated with buildings/settlement). There may be more than one well sited solar PV development to the north of Looe Mills, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid siting solar development on steep visible slopes south of Looe Mills. • North of Loe Mills, aim to locate development on lower slopes and in folds in the landscape where it will be less visible. • Use existing landscape features, such as high hedgerows and woodland blocks to screen development wherever possible ensuring that any additional screening provided is in character with the landscape. • Avoid siting PV development within the HLC Zones of 'Deciduous Woodland', – considered assessed by Cornwall Council as being inappropriate for solar PV development. • Ensure solar PV development does not adversely affect relics of the lead mines or the well wooded valleys as distinctive features of the landscape. • Consider views from local viewpoints and popular routes (including Rights of Way) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Protect the factors which contribute to the scenic quality of the Looe and Seaton River Valley AGLV, particularly the high Cornish hedgerows, strong pattern of fields and the 'soft' appearance of the hills.

CA24: Seaton River Valley

Key Landscape Characteristics[1]

- *Steep sided tight valley system, well wooded throughout with more extensive woodland to south and some pasture farmland.*
- *Ancient Woodland with Upland Oakwood, Upland Mixed Ashwoods and Lowland Mixed Deciduous on the valley slopes.*
- *Intimate, remote, small scale and secret.*
- *Small lanes enclosed by tall Cornish hedges, dense with flowering vegetation.*
- *Seaton village is small tourist centre at southern end of river.*
- *Small sandy beach at the coast.*
- *The southern half of this LCA is within the Looe and Seaton River Valleys AGLV.*
- *The northern tip of the LCA is within the Caradon Hill AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A dramatic landscape of steep-sided wooded valleys and meandering rivers. The area has an intimate scale due to the landform, which is enhanced by the wooded nature of many valley slopes, particularly in the south. The northern section is a more open pastoral landscape, where the valleys are less steep and the hills roll more gently.
Land cover pattern and presence of human scale features	A complex landscape with extensive mixed woodland coverage in the southern parts, and pastoral fields further north, with the meandering river and scattered settlements throughout. Human-scale features include the high Cornish hedges, particularly in the north, narrow winding overhung lanes, hamlets, historic mill sites, railway and road bridges.
Tracks/transport pattern	The valley is crossed by the A38 trunk road, the A390 in the northern part and the A387 at Hessenford. The B3247 runs along valley floor between Hessenford and Seaton. Elsewhere a series of narrow winding, overhung lanes plunge steeply off the plateau towards the valley floor. There are tracks through some woodlands but few official footpaths especially in the lower section north of Seaton.
Skylines	Whilst the LCA does not refer specifically to 'skyline', it notes old mills, viaducts and bridges as distinctive features. The top of the valleys form a skyline.
Perceptual qualities	This is an intimate, remote, small-scale landscape, which is moderately tranquil and relatively free from recent human influence – particularly in the south. The exceptions to this are the areas in proximity to the A38 and A390, and the areas around Liskeard.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind energy development assesses the HLC types of 'Medieval Farmland' which covers over half of the LCA, as of moderate-high vulnerability to wind turbines. There is also extensive cover of 'Coniferous Plantation', which has low vulnerability to wind development. The remaining tracts of land are either 'Deciduous Woodland', which is moderately/highly vulnerable, or '20th Century Farmland', which has low vulnerability to wind development.
Distinctive landscape features	The LCA description notes the extensive woodland within steep narrow valleys, old mills, viaducts (including the girder viaduct at Menheniot, 1933) and bridges as distinctive features of the landscape. Wind energy development could affect some of these.
Scenic quality	Much of the LCA is designated for its scenic value, as part of the Looe and Seaton Valleys AGLV. The scenic qualities of this part of the landscape include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias lined with thick oak woodland. The northern tip of the LCA is also part of the Caradon Hill AGLV. The scenic qualities of this part of the landscape include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.
Overall sensitivity assessment	The dramatic landform, intimate scale, relative inaccessibility, undeveloped nature, extensive woodland and presence of old mills, viaducts and bridges as features of the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	landscape indicate that overall this LCA has a **moderate-high** sensitivity to wind energy development. The upper open rolling slopes of the northern tip are less sensitive than the dramatic valleys in the south.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The dramatic, complex nature of the landscape means that this LCA is likely to be particularly sensitive to any turbines greater than 'very small' in scale. The less steep valleys in the north of the LCA may be slightly less sensitive to 'small' wind turbines, due to their larger scale and more open character.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The dramatic and intimate landform means that the majority of this LCA is likely to be particularly sensitive to any clusters of turbines (only single turbines are likely to be suitable).		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines** associated with existing buildings – comprising very small scale turbines in most of the LCA (possibly small scale in the less steep valleys to the north of the LCA). There may be several individual very small wind turbines in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating larger turbines in the most remote and tranquil locations of the landscape, particularly the steep-sided valleys in the southern parts of the LCA - link small turbines to existing buildings or settlements. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks such as the historic bridges, mill sites and relicts of the mining industry in the Caradon Hill AGLV. • Utilise the landscape's large areas of woodland, plantations, trees and thick Cornish hedges to filter views of turbines and screen ground-level features of developments wherever possible. • Consider views from local viewpoints and popular routes when considering the siting and design of wind energy development in the landscape – ensure development doesn't detract from the tranquil experience on these routes. • Ensure wind energy development does not adversely affect the extensive woodland within steep narrow valleys, old mills, viaducts or bridges as 'distinctive features' of this landscape. • Protect the features which contribute to the scenic quality of the Looe and Seaton River Valley AGLV, particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias lined with thick oak woodland. • Protect the features which contribute to the scenic quality of the Caradon Hill AGLV, particularly the dominance of Caradon Hill, relicts of the mining industry,

	and the wooded valleys.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A dramatic landscape of steep-sided wooded valleys and meandering rivers. The area has an intimate scale due to the landform, which is enhanced by the wooded nature of many valley slopes, particularly in the south. The northern section is a more open pastoral landscape, where the valleys are less steep and the hills roll more gently.
Sense of openness / enclosure	The river valleys create an intimate, enclosed landscape, and this is complemented by the extensive woodland coverage. There are also high hedges in the pastoral areas of the LCA. The northern part of the LCA is generally a more open pastoral landscape.
Field pattern and scale	The fields in this LCA tend to have medieval origins, and the medium-scale field pattern is strongly defined by the presence of high Cornish hedgerows and blocks of deciduous woodland. This strong field pattern is mentioned as one of the key features of the Looe and Seaton Valleys AGLV.
Landcover	Mostly mixed woodland, much of it Ancient Woodland with large areas of conifer plantations and farmland with trees. Landcover south of Coldrenick is dominated by woodland, while to the north it is more pastoral with some small farms and linear woodlands along the streams.
Perceptual qualities	This is an intimate, remote, small-scale landscape, which is moderately tranquil and relatively free from recent human influence – particularly in the south. The exceptions to this are the areas in proximity to the A38 and A390, and the areas around Liskeard.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which covers over half of the LCA, as of moderate-high vulnerability to solar PV development. There is also extensive cover of 'Coniferous Plantation', which has low vulnerability to solar PV development. The remaining tracts of land are either 'Deciduous Woodland', which is moderately/highly vulnerable, or '20th Century Farmland', which has low vulnerability to solar PV development.
Distinctive landscape features	The LCA description notes the extensive woodland within steep narrow valleys, old mills, viaducts (including the girder viaduct at Menheniot, 1933) and bridges as distinctive features of the landscape. Some of these (particularly the extensively wooded character) could be affected by solar PV development.
Scenic quality	Much of the LCA is designated for its scenic value, as part of the Looe and Seaton Valleys AGLV. The scenic qualities of this part of the landscape include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland. The northern tip of the LCA is also part of the Caradon Hill AGLV. The scenic qualities of this part of the landscape include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.
Overall sensitivity assessment	Although there are high levels of enclosure in the valleys (which could indicate lower sensitivity to solar PV development), the steep valley sides, large areas of undisturbed

Criteria	Lower sensitivity	⟷	Higher sensitivity
	deciduous woodland, presence of strong field patterns, low levels of human activity and tranquil character increase sensitivity. Overall, this landscape is judged to have a **moderate-high** sensitivity to solar PV development. The steep valley sides to the south of the A38 would be particularly sensitive.		
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Due to the intimate scale and form of the landscape this LCA is likely to be highly sensitive to PV development of any greater scale than the 'small' scale.		

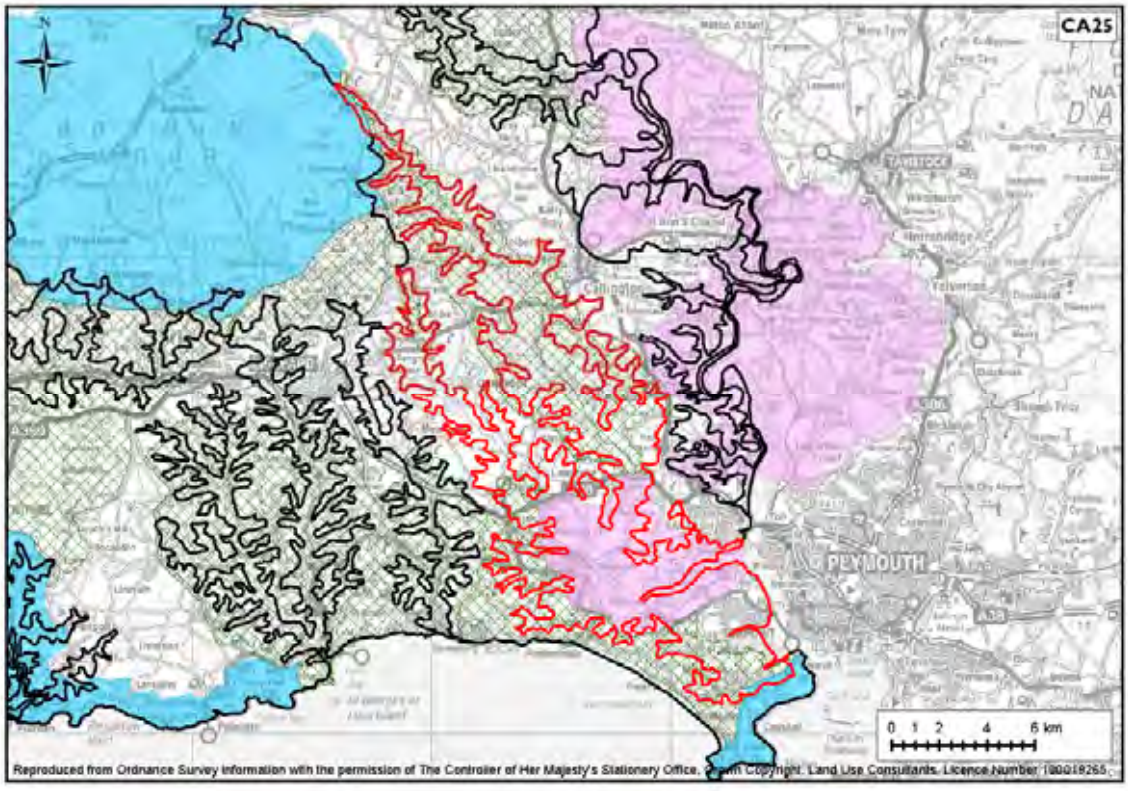
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small scale solar PV developments** north of the A38 (in farmed areas) and **very occasional** very small PV developments associated with buildings/settlement south of the A38. There may be more than one well sited solar PV development, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid siting solar development on steep valley slopes south of the A38. • North of the A38, aim to locate development on lower slopes and in folds in the landscape where it will be less visible. • Use existing landscape features, such as high hedgerows and woodland blocks to screen development wherever possible ensuring that any additional screening provided is in character with the landscape. • Consider views from local viewpoints and popular routes when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Protect the features which contribute to the scenic quality of the Looe and Seaton River Valley AGLV, particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias lined with thick oak woodland. • Protect the features which contribute to the scenic quality of the Caradon Hill AGLV, particularly the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.

CA25: Lynher and Tiddy River Valleys

Key Landscape Characteristics[1]

- *Estuarine landscape of winding inlets, extensive interidal zones, with interidal Mudflats, large areas of Coastal Saltmarsh and a Saline Lagoon; very well used by watersport enthusiasts.*
- *Tidal river valleys with Coastal Saltmarsh and wetlands, grading to mixed farming; many hedgerow trees and tree lines along watercourse.*
- *Parkland at Mt Edgcumbe, Antony and Port Eliot.*
- *Small steep - sided upper river valleys inland with mix of farmland and woodland, with mature trees on network of Cornish hedges adding to wooded feel.*
- *Farmland is a mix of pasture, arable, fruit and flower growing, with estate land with deer park and much beech.*
- *Maze of narrow enclosed winding lanes throughout, with many trees on boundaries.*
- *Visual prominence of Torpoint and major conurbations in neighbouring LCAs: Plymouth and Saltash.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	This area is characterised by two extensive but narrow river valleys (Tiddy and Lynher) which drain the south-east corner of Bodmin Moor and widen where they meet the St Germans River (which empties into the lower part of the Tamar estuary). Within the LCA the scale varies from the smaller scale feeder stream valleys which create strongly undulating valley sides to the larger scale flat and wide intertidal land and inlets of St John's Lake and St Germans River, which are themselves surrounded by larger scale undulating valley sides.		
Land cover pattern and presence of human scale features	A varied field pattern dominated by small-medium sized fields (of medieval origin) with smaller fields generally lower in the valleys and some larger fields on the fringes of the St Germans estuary. Fields are bounded by tall hedges forming sinuous boundaries predominantly in the north with lower lying estuary fields bounded by ditches within wetlands. In the north (around Pensilva/ Middlehill) there are some very small fields - former 'miners' smallholdings' (post-medieval origin). Landcover varies including mixed farmland (including pasture, arable, fruit and flower growing), large areas of woodland (broadleaved and conifer plantations) particularly along the valley sides and associated with estate land in the south (at Mount Edgcumbe, Antony and Port Eliot) and the open water of the rivers and estuary. Human scale features include Cornish hedges, mature trees, boats and narrow enclosed winding lanes.		
Tracks/transport pattern	This landscape contains some existing roads and vehicular tracks including the A390, A38 and A374, in addition there is a network of minor roads and farm tracks, including some restrictions in terms of steeply sloping narrow winding leafy lanes enclosed by dense hedges and overhanging trees.		
Skylines	The LCA description refers to the Mt Edgcumbe woodland on the prominent coastal ridge to the south of St Johns Lake forming a distinctive skyline. The LCA description also highlights the historic landmark features sited on higher ground including Cadson Bury Iron Age hillfort on top of the steep hill overlooking Lynher River.		
Perceptual qualities	These small scale steep and narrow wooded river valleys offer the most tranquil areas in this LCA, in particular areas around Rilla Mill in the north, east of Pillaton in the centre, and along the Lynher Valley east of Trevollard. The urban sprawl, port and military establishments of Torpoint provide a strong contrast to the more rural tranquil areas.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Ornamental' (associated with parkland estates at Mount Edgcumbe, Port Eliot and Antony) as of 'high' vulnerability to development. Large areas of 'Medieval Farmland', which make up the majority of the LCA, and considerable areas of 'Ancient Woodland' and 'Natural water' (associated with intertidal areas in the south) are assessed as of moderate-high vulnerability to wind turbines. Areas of lower sensitivity are associated with the smaller areas of the HLC type 'Modern Enclosures (Amalgamation of AEL)' - assessed as low-moderate vulnerability - and 'Modern Enclosures (Intakes)' and 'Plantations and Scrub' - assessed as of low vulnerability.		
Distinctive landscape features	The LCA describes the contrast between wide flat estuary and steep narrow wooded valleys; relic mining waste tips, quarries and mining smallholdings; working		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	boatyards, quays and jetties around the estuary; wrecks below HWM; landscaped parkland at Mt Edgcumbe, Port Eliot and Antony; viaducts (St Germans); fishing dams etc in the estuary; contrast between traditional farms and modern bungalows; Cremyll Ferry and quay; Mt. Edgcumbe country park; and the Mt Edgcumbe woodland on the prominent coastal ridge to the south of St Johns Lake as distinctive features of the landscape. Wind energy development could affect the perception of some of these features.		
Scenic quality			
	The southern part of the LCA falls within the Tamar Valley AONB (25% of the LCA is designated as part of this AONB). Qualities of the Tamar Valley AONB that may particularly be affected by wind energy development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. In addition, large parts of the remainder of the LCA falls within three AGLVs: Lynher Valley AGLV - special qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands. South-East Caradon AGLV (part of Looe and Seaton Valleys and South East Cornwall AGLV on paper mapping) – special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland. Caradon Hill AGLV – special qualities include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.		
Overall sensitivity assessment			
	Although this landscape is relatively large scale in places (the hills between the valleys) and is actively farmed, the presence of many human scale features (including working boatyards, quays and jetties around the estuary), the tranqjil river valleys, and the high scenic quality heighten levels of sensitivity to the extent that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's undeveloped estuary edges and their immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The strongly undulating landform and scale of the hills (mostly under 100m) means that it would be particularly sensitive to 'large' scale turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The strongly undulating landform and relatively small scale fields means that this LCA would be particularly sensitive to 'medium', 'large' and 'very large' clusters of turbines.		

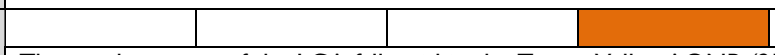
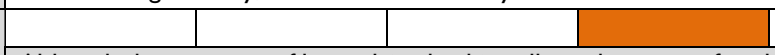
Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or**

	small clusters of turbines, comprising turbines that may be up to and including a 'medium' scale (turbine size should relate to landscape scale which varies within the LCA) and **no turbines** along the undeveloped estuary edge. There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid siting turbines within the more tranquil and intimate landscapes of the feeder valleys and along the undeveloped estuary edge. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including Cadson Bury Iron Age hillfort overlooking the Lynher River and Scraesdon Fort near Anthony. • Avoid siting wind turbines within the HLC Type 'Ornamental' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and traffic on the river) when considering the siting and design of wind energy development in the landscape – if development will be visible, ensure it does not dominate the experience of travelling these routes, and aim for a balanced composition of turbines as viewed from these sensitive locations. • Ensure wind energy development does not dominate or adversely affect the industrial relics, working boatyards, quays and jetties around estuary, wrecks below the HWM, the landscaped parkland at Mt Edgcumbe, viaducts (St Germans), fishing dams, or Cremyll Ferry and quay as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB (particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains.) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Lynher Valley AGLV (particularly the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the South-East Caradon AGLV (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Caradon Hill AGLV (particularly the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	This area is characterised by two extensive but narrow river valleys (Tiddy and Lynher) which drain the south-east corner of Bodmin Moor and widen where they meet the St Germans River (which empties into the lower part of the Tamar estuary). This includes strongly undulating valley sides, flat and wide intertidal land and inlets of St John's Lake and St Germans River, which are themselves surrounded by larger scale undulating valley sides. There are also some prominent hills within the LCA.
Sense of openness / enclosure	This LCA offers contrasting levels of enclosure ranging from the more open flat wide intertidal land and inlets of St John's Lake and St Germans River to the more enclosed smaller inland wooded stream valleys feeding the Tiddy and Lynher Rivers. There are additional areas of woodland associated with estate landscapes and inland fields in the north are enclosed by tall hedges with some mature trees.
Field pattern and scale	The LCA has a varied field pattern dominated by small-medium-sized fields (of medieval origin) bounded by tall hedges with smaller fields generally lower in the valleys and some larger fields in the south around the St Germans estuary. Lower lying fields alongside the estuary are bounded by ditches. In the north (around Pensilva/ Middlehill) there are some very small, rectangular fields of former miners' smallholdings.
Landcover	Predominantly agricultural land - a mixture of mainly pasture with some arable, fruit and flower growing. There are large areas of woodland (broadleaved and conifer plantations) particularly along the valley sides and associated with estate land in the south (at Mount Edgcumbe, Antony and Port Eliot). Open water of the rivers and estuary form a significant part of the lower-lying areas of this LCA.
Perceptual qualities	These small scale steep and narrow wooded river valleys offer the most tranquil areas in the LCA, in particular areas around Rilla Mill in the north, east of Pillaton in the centre, along the Lynher Valley east of Trevollard. The urban sprawl, port and military establishments of Torpoint provide a strong contrast to the more rural tranquil areas.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Ornamental' (associated with parkland estates at Mount Edgcumbe, Port Eliot and Antony) as of 'high' vulnerability to development. Large areas of 'Medieval Farmland', which make up two-thirds of the LCA, are assessed as of moderate-high vulnerability to solar PV development. Areas of lower sensitivity are associated with the smaller areas of the HLC type 'Modern Enclosures (Amalgamation of AEL)' - assessed as 'moderate' vulnerability - and 'Modern Enclosures (Intakes)' assessed as of 'low-moderate' vulnerability. The LCA's areas of 'Intertidal and Inshore Water', 'Plantation and Scrub' and 'Ancient Woodland' were not assessed as part of this study.
Distinctive landscape features	The LCA describes the contrast between wide flat estuary and steep narrow wooded valleys; relic mining waste tips, quarries and mining smallholdings; working boatyards, quays and jetties around the estuary; wrecks below HWM; landscaped parkland at Mt Edgcumbe, Port Eliot and Antony; viaducts (St Germans); fishing dams etc in the estuary; contrast between traditional farms and modern bungalows;

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Cremyll Ferry and quay; Mt. Edgcumbe country park; and the Mt Edgcumbe woodland on the prominent coastal ridge to the south of St Johns Lake as distinctive features of the landscape. Solar PV development could affect the perception of some of these features.		
Scenic quality	 The southern part of the LCA falls within the Tamar Valley AONB (25% of the LCA is designated as part of this AONB). Qualities of the Tamar Valley AONB that may particularly be affected by solar PV development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry. In addition, large parts of the remainder of the LCA falls within three AGLVs: Lynher Valley AGLV - special qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands. South-East Caradon AGLV (part of Looe and Seaton Valleys and South East Cornwall AGLV on paper mapping) – special qualities include the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland. Caradon Hill AGLV – special qualities include the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.		
Overall sensitivity assessment	 Although the presence of lower lying land in valleys, the sense of enclosure provided by tracts of woodland and presence of human influence (particularly around Torpoint) could indicate a lower sensitivity to solar PV development, the exposed slopes, steep valley sides, predominance of pastoral and semi-natural landcover, high scenic quality increase levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV development. The steep valley slopes and undeveloped estuary edges and their immediate hinterland would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The relatively high sensitivity of this landscape, combined with its field pattern of small-medium sized fields (of medieval origin), means that this LCA would be particularly sensitive to solar PV developments within the 'medium' and 'large' size ranges.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is **for a landscape with occasional very small or small scale solar PV developments** and **no solar PV development** on the steepest valley slopes and undeveloped estuary edges. There may be more than one well site solar PV development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within

	this LCA • Avoid locating development on the steep visible valley slopes and undeveloped estuary edges. • Locate PV development on lower slopes and in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Use existing landscape features, such as Cornish hedges, hedgerows, woodland and buildings to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV development within the HLC Type of 'Ornamental' land (associated with the estates at Mount Edgcumbe, Port Eliot and Antony) - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and traffic on the river) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters and ensure it does not dominate the experience of travelling these routes. • Ensure solar PV development does not adversely affect the wide flat estuary and steep narrow wooded valleys; relic mining waste tips, quarries and mining smallholdings; working boatyards, quays and jetties around the estuary; landscaped parkland at Mt Edgcumbe, Port Eliot and Antony; Mt. Edgcumbe country park or the Mt Edgcumbe woodland as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB (particularly the 'unspoiled' nature and visual quality of this classic English lowland river system the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside and the legacy of a once thriving market gardening industry) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Lynher Valley AGLV (particularly the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the South-East Caradon AGLV (particularly the strong field pattern provided by thick hedges, the native woods within valleys, the coastal ridge and rocky cliffs, and the rias line with thick oak woodland) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Caradon Hill AGLV (particularly the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys.) – ensure choice of site and scale of development does not detract from these.

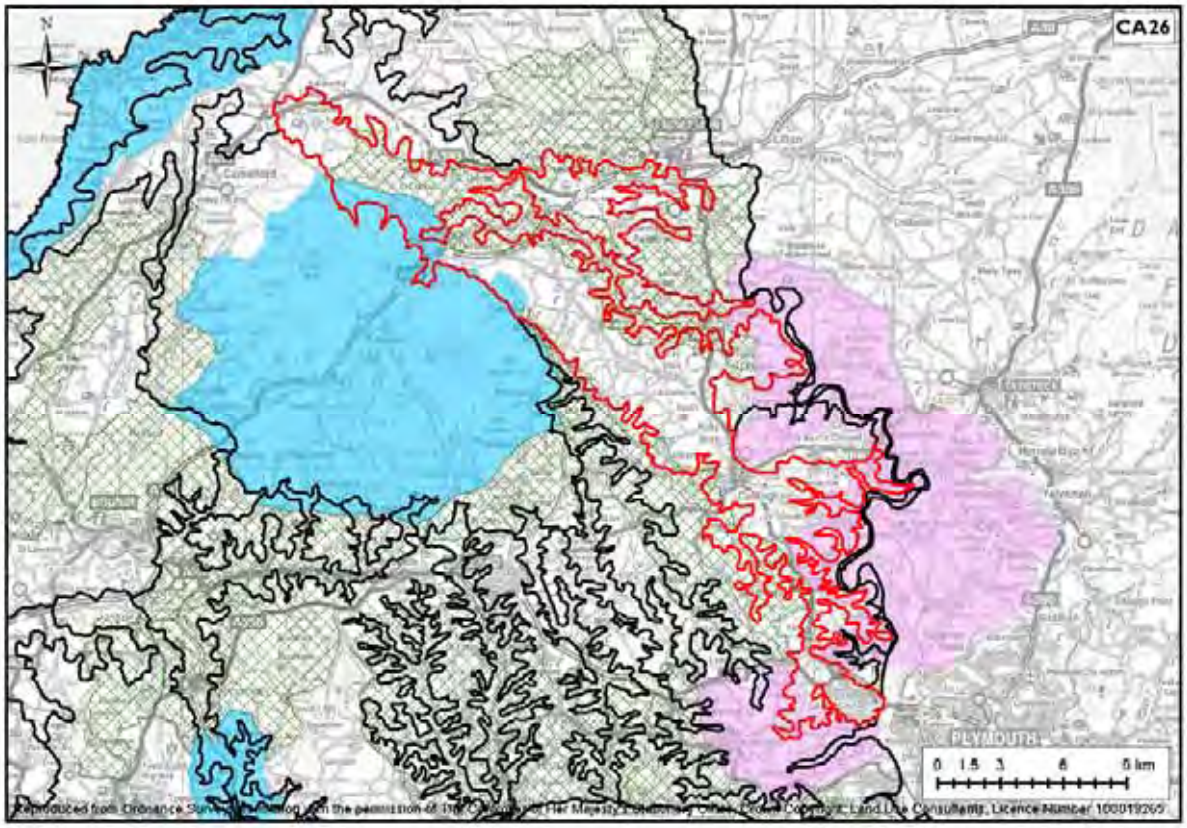
CA26: East Cornwall and Tamar Moorland Fringe

Key Landscape Characteristics[1]

- *Undulating plateau incised by tributary valleys.*
- *Open medium-scale mixed farmland, predominantly improved pasture of mainly medieval enclosure, retaining much of its original pattern.*
- *Prominent valley of River Inny with moorland fringe feel; with wetlands, neutral grassland and broadleaved woodland in valley bottom, and church-based hamlets on slopes.*
- *Different land uses linked by strong pattern of Cornish hedges with trees in sheltered parts throughout and dominance of older vernacular villages.*
- *Small field pattern generally, but with patches of rough ground and large areas of recently enclosed land with a rectilinear pattern on summits.*
- *Narrow winding sunken lanes overhung with tall, tree-lined hedges linking dispersed farms and hamlets.*
- *Mix of large settlements with 20th century edge development, medieval churchtowns and hamlets with good vernacular architecture and some modern infill.*
- *Small developed ridge covered with extensive modern housing development close to Launceston.*
- *Visual influence at northern end of Davidstow airfield and conifer plantations in adjoining Landscape*
- *Character Area, plus visual influence of Plymouth in southern part.*
- *Contrast of bustling major roads and towns with intimacy and tranquillity of rural villages and river landscapes.*
- *A small strip on the western edge of the LCA is within the Cornwall AONB (Bodmin Moor section).*
- *A small area on the south-eastern side of the LCA is within the Tamar Valley AONB.*
- *Parts of the LCA to the west of Launceston are within the North Petherwin AGLV.*
- *Parts of the LCA south of Launceston are within the Inny Valley and Lawhitton AGLV.*
- *A small strip on the south-western side of the LCA (around Golberdon and Pillaton) is within the Lynher Valley AGLV.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)


CA26
N
0 1.5 3 6 9 km
PLYMOUTH

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	The landform undulates gently, creating an intimate scale in parts, although there is higher land in the north toward St Clether and Bodmin Moor, which is more open. Valleys are generally shallow, including the Inny Valley, although there are some deeper valleys in the north.		
Land cover pattern and presence of human scale features	Mostly simple land cover pattern of medium-scale agricultural land, largely pastoral. The area is a moorland edge, and there are some patches of rough ground. Small-scale medieval field patterns dominate in low-lying areas whilst there are larger rectilinear fields and more open areas on higher slopes. Cornish hedgerows are common in the landscape, as are blocks of woodland and coniferous plantation, particularly in the valleys. Settlements of varying sizes are scattered throughout.		
Tracks/transport pattern	Straight roads (A30) and more winding (A388) roads are mixed with winding narrow lanes (narrow winding sunken lanes overhung with tall, tree-lined hedges linking dispersed farms and hamlets are noted as a key characteristic). Some boundary banks have beech hedging especially in the north.		
Skylines	Although the LCA description does not specifically refer to 'skylines', it does refer to Greenhill arsenic works chimney stack as a 'major landmark'. The skyline is already quite developed in the southern parts of the LCA. In addition, a small section of Cold Northcott Windfarm lies within the LCA, just north of St Clether.		
Perceptual qualities	The north and south of the landscape are contrasting, the south has considerable human influence, much of it recent. This includes an extensive road network, large settlements, particularly in the south and a wind farm. The northern areas are much more rural and tranquil, although the A30 runs through the LCA here, and there is a small section of a wind farm near St Clether. In addition, there is the visual influence of Davidstow airfield and conifer plantations at northern end, and of Plymouth in south.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind energy development assesses the HLC types of 'Medieval Farmland' which makes up over half of the LCA, as being of moderate to high vulnerability to wind development. Other HLC types which cover large tracts of the LCA are 'Post-Medieval Farmland', which is moderately vulnerable to wind development, and 20th Century Farmland, which has low vulnerability to wind development. There are also small areas of 'Upland Rough Ground' in the valleys around St Clether and Polyphant, and these have moderate/high vulnerability to wind development.		
Distinctive landscape features	The LCA description notes the contrast between the moorland edge feel of the northern section and the Inny Valley and the more intimate landscapes of the middle Tamar Valley with its anciently enclosed field pattern and lush hedge growth, the contrast between the remoter small settlements of the northern section and the more developed southern area especially around Callington and Saltash, and relics of mining history in the middle Tamar (especially around Callington/Kelly Bray and Gunnislake) as distinctive features of the landscape. Some of these could be affected by wind turbine development.		
Scenic quality	A small part of the LCA at the edge of Bodmin Moor (around Fivelanes and St		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Clether) is part of the Bodmin Moor part of the Cornwall AONB (6% of the LCA is part of this AONB). The scenic qualities of the Bodmin Moor part of the AONB tend to relate to the moor itself (the imposing nature of the summit of Brown Willy, the distinctive ragged horizon recognisable from afar, the prominence of the tors, the prominence of the engine houses and mining structures, and the sense of remoteness and lack of tracks across the open moor) although the small winding lanes on the edges of the moor relate to this area. The area to the east of Stoke Climsland and south of St Ann's Chapel, as well as the fringes of the LCA to the south and east of St Dominick and along the Tamar Valley form part of the Tamar Valley AONB (12% of the LCA is designated as this AONB). The scenic qualities of these parts of the AONB, which could be affected by wind energy development, include the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. The area north of the A30 around Polyphant and east of St Clether are part of the North Petherwin AGLV - scenic qualities include the heavily wooded and enclosed character of the valleys. Some of the north eastern fringes of the LCA from the A30 south to Stoke Climsland are part of the Inny Valley and Lawhitton AGLV - scenic qualities include the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features. The south east fringes of the LCA between Golberton and Pillaton are part of the Lynher Valley AGLV - scenic qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands.		
Overall sensitivity assessment			Although the landscape's gently undulating landform, generally simple land cover pattern, agricultural land use and relative absence of skyline features may indicate lower sensitivity to wind energy development, the presence of narrow winding lanes, presence of human scale features, the rural and tranquil character (particularly in the north) and relics of mining history in the middle Tamar (especially around Callington/Kelly Bray and Gunnislake) increase sensitivity. Overall, this LCA is considered to have **moderate** sensitivity to wind development and a **moderate-high** sensitivity within the AONBs.
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***			The scale of undulations and presence of frequent human-scale features means that this landscape would be particularly sensitive to turbines at the higher end of the 'large' category.
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***			The scale of undulations and size of fields means that this LCA would be particularly sensitive to 'medium', 'large' and 'very large' groups of turbines.

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small clusters of turbines** comprising turbines that may be up to and including the lower end of the

	'large' scale outside the AONB. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA outside the AONBs, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in the most remote and tranquil locations of the landscape, particularly the steep-sided wooded valleys. • Ensure developments are sited and designed so that they avoid visual clutter on skylines, particularly in proximity to prominent skyline features such as Greenhill arsenic works chimney stack. • Consider views from local viewpoints and popular routes (e.g. Tamar Valley Discovery Trail) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Protect the many factors which contribute to the scenic quality of the Cornwall AONB, particularly the mall winding lanes on the edges of the moor. • Protect the many factors which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. • Protect the heavily wooded and enclosed character of the valleys associated with the North Petherwin AGLV. • Protect the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features associated with the Inny and Lawhitton AGLV. • Protect the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands associated with the Lynher Valley AGLV.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	An elevated undulating landscape with mainly shallow valleys although some are deeper in the north of this extensive LCA.
Sense of openness / enclosure	This is a fairly open moorland edge landscape, although hedgerows and wooded valleys provide a sense of enclosure on slopes.
Field pattern and scale	The field pattern varies across this extensive LCA, although on the whole this medium –scale agricultural landscape has small-scale field pattern in low-lying areas, and larger fields on higher ground, which tend to be bounded by hedges. Human scale features include numerous settlements (both modern and historic), winding lanes and hedgerows.
Landcover	Much of the LCA is pastoral farmland (improved grassland) with some arable, and scattered trees and settlement. Small areas of linear woodland exist along the stream valleys, and there are small fragments of wetland and rough ground, more so in the north-western part in the upper parts of the Inny valley.
Perceptual qualities	The north and south of the landscape are contrasting, the south has considerable human influence, much of it recent. This includes an extensive road network, large settlements, particularly in the south and a wind farm. The northern areas are much more rural and tranquil, although the A30 runs through the LCA here, and there is a small section of a wind farm near St Clether. In addition, there is the visual influence of Davidstow airfield and conifer plantations at northern end, and of Plymouth in south.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which makes up over half of the LCA, as being of moderate to high vulnerability to solar PV development. Other HLC types which cover large tracts of the LCA are 'Post-Medieval Farmland', and 20th Century Farmland, which are both moderately vulnerable to solar PV development. There are also small areas of 'Upland Rough Ground' in the valleys around St Clether and Polyphant, and these have moderate/high vulnerability to solar PV development.
Distinctive landscape features	The LCA description notes the contrast between the moorland edge feel of the northern section and the Inny Valley and the more intimate landscapes of the middle Tamar Valley with its anciently enclosed field pattern and lush hedge growth, the contrast between the remoter small settlements of the northern section and the more developed southern area especially around Callington and Saltash, and relics of mining history in the middle Tamar (especially around Callington/Kelly Bray and Gunnislake) as distinctive features of the landscape. Some of these could be affected by solar PV development.
Scenic quality	A small part of the LCA at the edge of Bodmin Moor (around Fivelanes and St Clether) is part of the Bodmin Moor part of the Cornwall AONB (6% of the LCA is part of this AONB). The scenic qualities of this part of the AONB, which could be affected by solar PV development, include the distinctive ragged horizon recognisable from afar, the distinctive openness and endless empty vastness, the sense of remoteness and lack of tracks across the open moor, the pattern of ancient fields

Criteria	Lower sensitivity	⟷	Higher sensitivity
	with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams. The area to the east of Stoke Climsland and south of St Ann's Chapel, as well as the fringes of the LCA to the south and east of St Dominick and along the Tamar Valley form part of the Tamar Valley AONB (12% of the LCA is designated as this AONB). The scenic qualities of this AONB, which could be affected by solar PV development, include the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry. The area north of the A30 around Polyphant and east of St Clether are part of the North Petherwin AGLV - scenic qualities include the heavily wooded and enclosed character of the valleys. Some of the north eastern fringes of the LCA from the A30 south to Stoke Climsland are part of the Inny Valley and Lawhitton AGLV - scenic qualities include the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features. The south east fringes of the LCA between Golberton and Pillaton are part of the Lynher Valley AGLV - scenic qualities include the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands.		
Overall sensitivity assessment			
	Although there the presence of some enclosure (on lower slopes), predominantly agricultural character and presence of human influence may indicate a lower sensitivity to solar PV development, the open character of the moorland edge, predominantly pastoral land use of the area, and presence of medieval field patterns increase sensitivity. Overall this LCA is considered to have **moderate** sensitivity to solar PV development and a **moderate-high** sensitivity within the AONBs.		
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The generally small medieval field pattern of the more enclosed areas means that this LCA would be particularly sensitive to 'large' scale solar PV development.		

Landscape strategy and Guidance for Solar PV Development

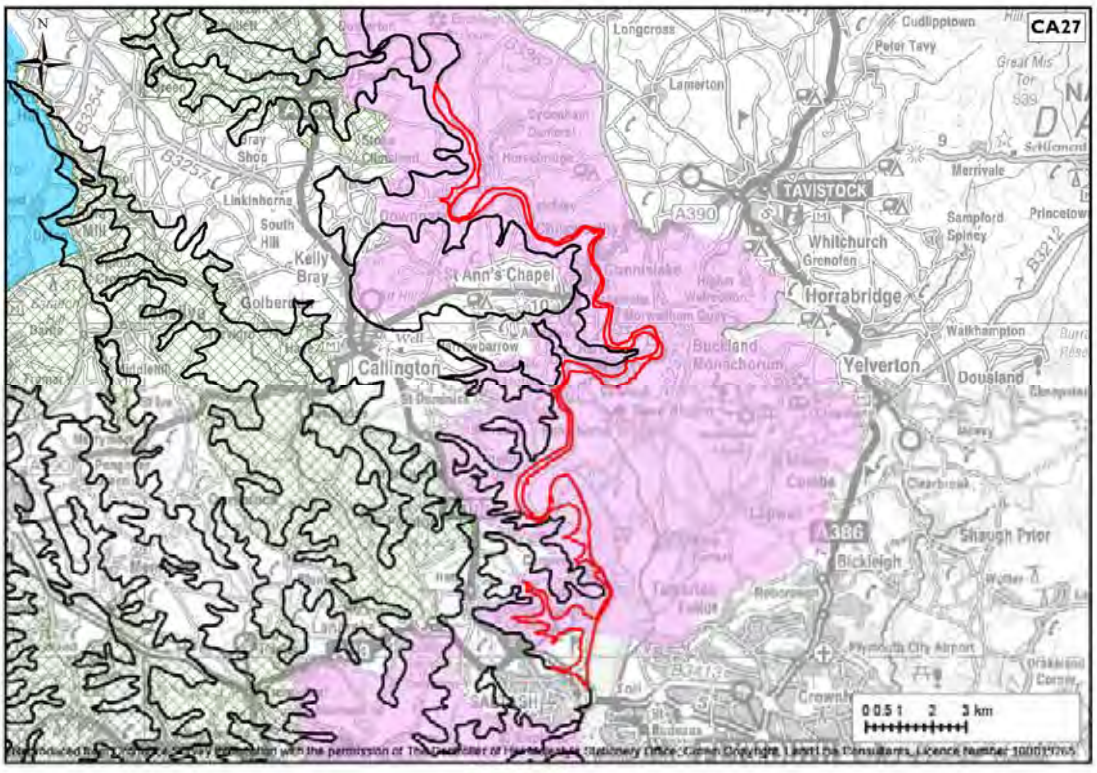
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (up to and including medium scale) located on lower more enclosed slopes. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be several solar PV developments in the LCA outside the AONBs, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any solar PV developments within this LCA: • Avoid siting solar PV development on open upper slopes – locate in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to medieval fields, by

	minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Consider views from local viewpoints and popular routes (e.g. Tamar Valley Discovery Trail) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Protect the factors which contribute to the scenic quality of the Bodmin Moor part of the Cornwall AONB, particularly the pattern of ancient fields with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry. • Protect the heavily wooded and enclosed character of the valleys associated with the North Petherwin AGLV. • Protect the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features associated with the Inny and Lawhitton AGLV. • Protect the 'quiet' and 'unspoilt' nature of the valley, and the valley side woodlands associated with the Lynher Valley AGLV.

CA27: Lower Tamar and Tavy Rivers

Key Landscape Characteristics[1]

- *Large-scale open inter-tidal estuary landscape.*
- *Valley floor landscape - River Tamar is a major feature.*
- *Diverse mix of wetland habitats including intertidal mudflats, saltmarsh, reedbeds, fens, coastal and grazing marsh.*
- *Some pastoral farmland and rough grazing on the outer valley floor.*
- *Unspoilt and remote upper reaches of the river.*
- *Few buildings limited to isolated farms and those associated with active and disused old quays, historic industrial remnants along river.*
- *This LCA is within the Tamar Valley AONB.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study: http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	An open, flat estuarine landscape and river floodplain including the Tamar estuary in the south and narrow floodplain in the north. The scale of the landscape varies and the upper reaches of the river feel more intimate scale than the open estuary at the south of the LCA.		
Land cover pattern and presence of human scale features	The LCA is mostly the estuary of the river Tamar with its associated intertidal habitats and associated wetland. The farmed areas are pastoral with irregular small-scale fields. Human-scale features include medieval bridges at Gunnislake and Horsebridge, an historic fording point near Latchley, river ferries and quays (at Cotehele and Calstock, Kingsmill Lake - Moditonham Quay).		
Tracks/transport pattern	Transport access is restricted - there is little transport access within the valley, with the exception of footpaths. However, the river is crossed by A390 at Gunnislake.		
Skylines	Although the LCA does not refer specifically to skylines, it notes that electricity pylons dominate the view across the Tamar south of Cargreen. In general, skylines are not prominent due to the lowland nature of this LCA. However, there are a few notable landmarks including the medieval bridges at Gunnislake and Horsebridge.		
Perceptual qualities	The LCA is a moderately tranquil landscape which is largely free from recent human influence. The exceptions to this are the areas in proximity to the A390 at Gunnislake, the area south of Cargreen, towards Saltash, and the areas around the pylons at Weir Quay. The area is generally tranquil, and feels remote in many parts, although the far southern tip near Saltash, and the stretch near Gunnislake are exceptions to this, due to the influence of the nearby settlement and associated road network.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines has not assessed the HLC type 'Intertidal and Onshore Water', which covers the greatest land area within this LCA is, as it is not considered to be suitable for wind development. The narrow strip of land on the west side of the river is mainly 'Medieval Farmland' which is considered to have moderate/high vulnerability to wind development, and some patches of 'Coastal Rough Ground' and 'Upland Rough Ground' along the southern stretches of the river/estuary, both of which are highly vulnerable to wind development. There are small areas of 'Post-Medieval Enclosed Land' on the valley floor, to the north and south of Gunnislake, which has moderate vulnerability to wind development.		
Distinctive landscape features	The LCA description notes the winding ribbon of river with wetland habitats alongside, the well managed farmland on the valley slopes, the intimate confined routes approaching the estuary, the wide open expanses of mud and water at the waters edge, and the rural remoteness (which contrasts with views over the water towards Plymouth) as distinctive features of the landscape. These cover large parts of the LCA and could be affected by wind energy development.		
Scenic quality	Almost all (93%) of the LCA is designated for its scenic quality, as part of the Tamar Valley AONB. Qualities of the Tamar Valley AONB that may particularly be affected by wind energy		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains.		
Overall sensitivity assessment			
	Although this LCA has a simple flat landform and no prominent skylines, its sense of remoteness, vast expanses of mud and water, wetland habitats, intimate confined routes approaching the estuary, and high scenic quality all increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The winding ribbon of river with wetland habitats would be particularly sensitive to wind turbines.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Due to the narrow nature of the floodplain, presence of human-scale features and size of the valley sides, this LCA is likely to be particularly sensitive to 'small', 'medium' and 'large' wind turbines.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Due to the narrow nature of the floodplain and limited land suitable for wind development, the landscape would be particularly sensitive to any turbines clusters (single turbines are only likely to be accommodated).		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings, located in farmed areas).. There may be a few of these small turbines, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in unenclosed areas of wetland habitat in the south of the LCA. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks such as the medieval bridges at Gunnislake and Horsebridge. • Avoid, wherever possible, siting turbines within the HLC Types of 'Rough Ground'(Coastal and Upland) – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the Tamar Valley Discovery Trail) when considering the siting and design of wind energy development in the landscape – ensure turbines do not detract from the experience of walking this trail, and if development will be visible from the trail aim for a balanced composition. • Ensure wind energy development does not affect the winding ribbon of river with wetland habitats alongside, the intimate confined routes approaching the estuary,

	the wide open expanses of mud and water at the waters edge, or the rural remoteness as distinctive features of the landscape. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB, particularly the unspoiled nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A flat landscape (related to the river floodplain and estuary of the Tamar). This LCA is unusual as it encompasses the river and floodplain only, but not the surrounding slopes.
Sense of openness / enclosure	This is mostly a large-scale, open, unenclosed landscape (although there are some small pastoral areas with hedgerows and occasional trees further upstream).
Field pattern and scale	There are few agricultural areas in the LCA, but where they exist the field pattern is medieval in origin and small-scale. The patchwork of small-scale fields and hedgerows is one of the features for which the Tamar Valley AONB is designated.
Land cover	The LCA is mostly the estuary of the Tamar with its associated intertidal habitats and associated wetland. The farmed areas are pastoral with improved and unimproved grassland or arable with horticultural use, with small areas of broadleaved woodland, scrub or scattered trees.
Perceptual qualities	The LCA is an unspoiled valley and water landscape, which is moderately tranquil and largely free from recent human influence. The exceptions to this are the areas in proximity to the A390 at Gunnislake, the area south of Cargreen, towards Saltash, and the areas around the pylons at Weir Quay. The area is generally tranquil, and feels remote in many parts, although the far southern tip near Saltash, and the stretch near Gunnislake are exceptions to this due to the influence of the nearby settlement and associated road network.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development has not assessed the HLC type 'Intertidal and Onshore Water' (which covers the greatest land area within this LCA) since it is not considered to be suitable for solar PV development. The narrow strip of land on the west side of the river is mainly 'Medieval Farmland' which is considered to have moderate/high vulnerability to solar PV development, and some patches of 'Coastal Rough Ground' and 'Upland Rough Ground' along the southern stretches of the river/estuary, both of which are highly vulnerable to solar PV development. There are small areas of 'Post-Medieval Enclosed Land' on the valley floor, to the north and south of Gunnislake, which has moderate vulnerability to solar PV development.
Distinctive landscape features	The LCA description notes the winding ribbon of river with wetland habitats alongside, the well managed farmland on the valley slopes, the intimate confined routes approaching the estuary, the wide open expanses of mud and water at the waters edge, and the rural remoteness (which contrasts with views over the water towards Plymouth) as distinctive features of the landscape. These cover large parts of the LCA and could be affected by solar PV development.
Scenic quality	Most of the LCA (93%) is designated for its scenic value, as part of the Tamar Valley AONB. Qualities of the Tamar Valley AONB that may particularly be affected by solar PV development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry.

Criteria	Lower sensitivity ⟷ Higher sensitivity
Overall sensitivity assessment	Although this LCA has a flat, low-lying landform and some small areas of farmland, the LCA is dominated by an open landscape of vast expanses of mud, water wetland habitats – this character, combined with its sense of remoteness and high scenic quality increase sensitivity so that overall this LCA is considered to have a **high** sensitivity to solar PV energy development.
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	This LCA would be highly sensitive to all scales of solar PV development.

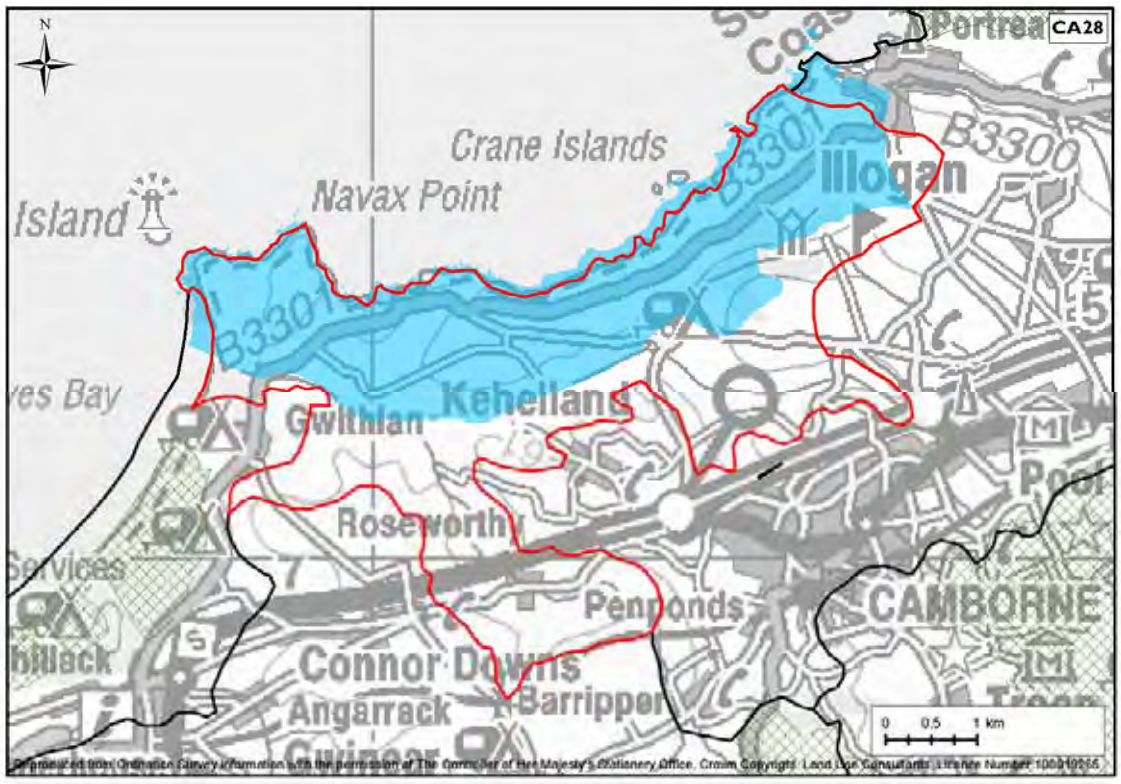
Siting Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape without solar PV developments**.
Siting and Design Guidance	Since the landscape strategy for this LCA is for a landscape without solar PV development no guidance has been provided for siting of this type of renewable energy.

CA28: North Coast – Reskeage Downs

Key Landscape Characteristics[1]

- *High north facing soft slate cliffs culminating in Navax Point.*
- *Inland valley running parallel to the coast formed by the Red River and its tributaries which run to St Ives Bay.*
- *Coastal Lowland Heathland strip.*
- *Recently enclosed land predominates especially on the coast but there is ancient enclosed land with Cornish hedges to the west and inland.*
- *Vegetated Coastal Sand Dunes by Godrevy.*
- *Unspoilt landscape with limited and sparse settlement pattern.*
- *Significant visitor pressure along cliff tops and in car parks.*
- *Historic features including barrows and other prehistoric monuments, the ornamental landscape around Tehidy and historic mansion, and important industrial remains in the Red River valley.*
- *Country Park and wind sculpted Ancient Woodland at Tehidy.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	An exposed and dramatic coastline of high, north-facing cliffs, backed by a large-scale gently undulating coastal plateau and the catchment of the Red River – some which runs parallel to the coast. The sheltered, incised valleys of the Red River provide a contrasting sense of enclosure and intimacy to the open landscape. Dunes ('towans') lie to the west at Godrevy. This LCA includes the prominent coastal headlands of Godrevy and Navax Points.
Land cover pattern and presence of human scale features	A landscape with a mixture of large rectangular fields of post-medieval enclosure (taken in from former rough ground in the eighteenth and nineteenth centuries) along the coast and smaller-scale medieval enclosures inland and to the west. There is some variation in land cover (mixed arable and pastoral farmland is interspersed with horticulture, coastal rough ground, sand dunes, parkland, and woodland and scrub along the Red River). Human scale features include isolated farmsteads, low stone hedges and occasional wind-pruned trees.
Tracks/transport pattern	Although this LCA contains the A30, it is a landscape crossed by narrow hedged lanes.
Skylines	The LCA description notes the cliff scenery (high north facing soft slate cliffs culminating in Navax Point), historic features including barrows and other prehistoric monuments, and wind sculpted Ancient Woodland at Tehidy as notable features. These form features on the skyline. In addition, the OS map reveals Godrevy Island with its 19th century lighthouse, which forms a skyline feature.
Perceptual qualities	The LCA description records this as an 'unspoilt landscape with limited and sparse settlement pattern'. Isolated farmsteads occur on small lanes and tracks and there are clusters of housing in the valley. Tehidy House is now a substantial complex of new housing adjoining Tehidy Country Park. The generally remote and exposed character of the coastal landscape is affected locally by modern development spreading from Camborne and South Tehidy, a golf course at Tehidy Country Park along with a prominent pylon line in the south. The area is distinguished by the lack of disturbance from mining which has so strongly influenced the landscape character of the adjacent areas although there is an active sand and gravel operation in the Red River valley.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Rough Ground' ('Coastal' and 'Upland' – the latter found alongside the Red River Valley) as of 'high' vulnerability to development. Areas of 'Medieval' land, mainly found inland and in the west, is assessed as of 'moderate-high' vulnerability, as are small areas of 'Ancient Woodland'. Areas of 'Recreational' land associated with Tehidy Country Park are assessed as of 'moderate' vulnerability to wind energy development. The LCA's large areas of 'Post-Medieval (Intakes)'and 'Modern Enclosures (Intakes)'are assessed as of 'moderate-low' and 'low' vulnerability respectively. The study did not assess the vulnerability of the 'Dunes' HLC Type to wind turbines.
Distinctive landscape features	The LCA describes the wide views of sea and coast; the dunes by Godrevy; the nearby medieval field pattern; and the salt-pruned woodland at Tehidy as distinctive features.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Scenic quality	Half of this LCA (the coastal edge) is recognised for its scenic quality through designation as part of the 'Godrevy to Portreath' section of the Cornwall AONB. Qualities that may particularly be affected by wind energy development are the scale of the cliffs, views along the coast, the prominence of the Godrevy lighthouse as a landmark, the wildness of the cliff edge, and the small quiet lanes and tracks. This part of the coastline is also defined as Heritage Coast.		
Overall sensitivity assessment	Although the large, broad scale of the coastal plateau, along with its generally consistent and regular land cover patterns, could indicate a lower sensitivity to wind turbine development, the LCA's highly prominent, rugged coastline, 'unspoilt' perceptual character, and high scenic quality (particularly along the coastal edge) heighten levels of sensitivity to turbines to the extent that, overall, this LCA is considered to have a **moderate-high** sensitivity to wind energy development. The landscape's rugged, naturalistic and prominent cliffed coastline and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Due to the scale of the landscape (88m AOD at Reskeage Downs), this landscape would be particularly sensitive to 'large' turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Due to the scale of the landscape and overlying field patterns, this landscape would be particularly sensitive to 'medium', 'large' and 'very large' clusters of wind turbines.		

Landscape strategy and Guidance

Landscape strategy	The landscape strategy is for **a landscape with occasional single or small clusters of turbines**, comprising turbines that may be up to and including medium in size (turbine size and cluster size should relate to landscape scale which varies within the LCA) with **no turbines** on the rough ground along the coastal edge or its immediate hinterland. Elsewhere in the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. Any wind energy developments should be clearly separated so that, although each wind energy development may influence the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the rugged and highly visible coastline, particularly the prominent headlands of Godrevy and Navax Points. • Consider linking wind turbines to areas of existing buildings such as farms and

	businesses. • Avoid damage and alterations to the small road network and enclosing hedges. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the lighthouse off Godrevy Point, Bronze Age barrows along the clifftops, ancient rounds (around Gwithian), the Iron Age Crane Castle and the Roman villa at Magor. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Avoid, wherever possible, siting turbines within the HLC Types of 'Rough Ground'(Coastal and Upland) and 'Ancient Woodland' – assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Ensure wind energy development does adversely affect the wide views of sea and coast; the dunes by Godrevy; the nearby medieval field pattern; or the salt-pruned woodland at Tehidy as distinctive features of the LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the scale of the cliffs, views along the coast, the prominence of the Godrevy lighthouse as a landmark, the wildness of the cliff edge, and the small quiet lanes and tracks) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	An exposed and dramatic coastline of high, north-facing cliffs, backed by a large-scale gently undulating coastal plateau and the catchment of the Red River – some which runs parallel to the coast. The sheltered, incised valleys of the Red River provide a contrasting sense of enclosure and intimacy to the open landscape. Dunes ('towans') lie to the west at Godrevy. This LCA includes the prominent coastal headlands of Godrevy and Navax Points.		
Sense of openness / enclosure	This is an open and windswept landscape, with patchy tree cover largely limited to stream valleys, apart from the occasional wind-sculpted hawthorn tree and salt-pruned woodland at Tehidy. Fields are bounded by low stone-faced hedges giving little additional shelter to the area. The coastal edge is particularly open and exposed affording expansive views.		
Field pattern and scale	The majority of the landscape is defined by a pattern of large rectangular fields of post-medieval enclosure, whilst smaller-scale medieval enclosures are found inland and to the west. The rough ground of the coastal strip and sand dunes at Godrevy are unenclosed.		
Landcover	Most of the area is mixed improved ley/pasture and arable, permanent pasture and horticulture to the west. Along the coast is a narrow strip of coastal rough ground, once much broader but now diminished by enclosure and coastal erosion. Dunes lie to the far west by Godrevy. Woodland and tree cover is mostly at Tehidy and along the Red River valley and its tributaries.		
Perceptual qualities	The LCA description records this as an 'unspoilt landscape with limited and sparse settlement pattern'. Isolated farmsteads occur on small lanes and tracks and there are clusters of housing in the valley. Tehidy House is now a substantial complex of new housing adjoining Tehidy Country Park. The generally remote and exposed character of the coastal landscape is affected locally by modern development spreading from Camborne and South Tehidy, a golf course at Tehidy Country Park along with a prominent pylon line in the south. The area is distinguished by the lack of disturbance from mining which has so strongly influenced the landscape character of the adjacent areas although there is an active sand and gravel operation in the Red River valley.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC Zone of 'Rough Ground', found along the coast and inland valleys, to be highly vulnerable to solar PV development. Significant areas of 'Medieval' land, particularly in the west, are assessed as moderate-high vulnerability. The tracts of 'Post-Medieval (Intakes)' and 'Modern Enclosures (Intakes)', comprising much of the farmed landscape, are assessed as of 'moderate' vulnerability to solar PV development, as is the area of 'Recreational' land comprising Tehidy Country Park. The study did not assess the vulnerability of the 'Dunes' or 'Ancient Woodland' HLC Types to solar PV installations.		
Distinctive landscape features	The LCA describes the wide views of sea and coast; the dunes by Godrevy; the nearby medieval field pattern; and the salt-pruned woodland at Tehidy as distinctive features.		
Scenic quality			

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Half of this LCA (the coastal edge) is recognised for its scenic quality through designation as part of the 'Godrevy to Portreath' section of the Cornwall AONB. Qualities that may particularly be affected by solar PV development are the panoramic views along the coast, the expansive openness close to the cliff tops, and the wildness of the cliff edge. This part of the coastline is also defined as Heritage Coast.		
Overall sensitivity assessment	Although the LCA's gently undulating landform, areas of large regular fields and presence of arable land uses could indicate a lower sensitivity to solar PV development, the area's sense of openness, 'unspoilt' character, high scenic quality and areas of coastal rough ground heighten levels of sensitivity to solar PV development to the extent that, overall, this landscape is therefore assessed as having a **moderate-high** sensitivity to solar PV development. The prominent, naturalistic coastal edge and its immediate hinterland would be particularly sensitive to development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Although there are some large, regular fields these are found in exposed locations. In other areas the scale of field pattern indicates that this landscape would be particularly sensitive to 'medium' and 'large' solar PV developments. The naturalistic coastal edge would be sensitive to any solar PV development.		

Landscape strategy and Guidance

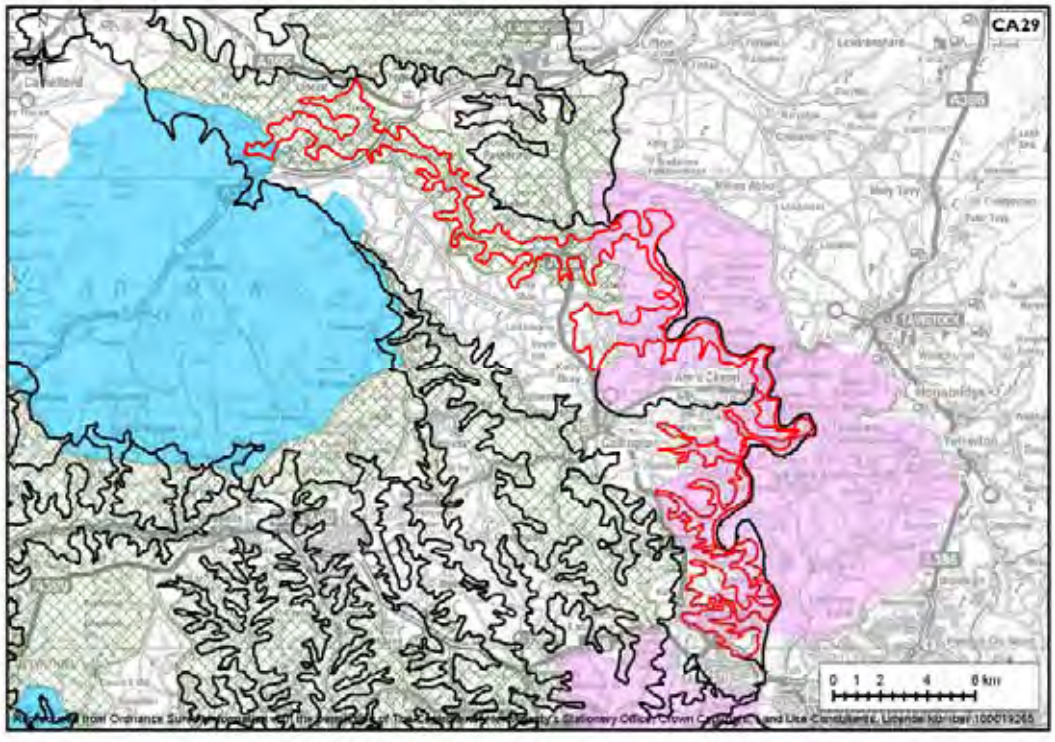
Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** located on lower slopes, within folds in the landscape and with **no solar PV development** on the rough ground along the coastal edge or its immediate hinterland. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). Any solar PV developments should be clearly separated so that, although each development may influence the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid the location of solar PV developments along the remote and naturalistic coastal edge, including its prominent headlands at Godrevy and Navax Points. • Aim to locate solar PV developments on lower slopes and in folds in the landscape where they will be less visible. • Preserve the strong field patterns, particularly relating to medieval fields by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as hedges and woodland to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV development within the HLC Zone of 'Rough Ground' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West

	Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure PV development does adversely affect the wide views of sea and coast; the dunes by Godrevy; the nearby medieval field pattern; or the salt-pruned woodland at Tehidy as distinctive features of the LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the panoramic views along the coast, the expansive openness close to the cliff tops, and the wildness of the cliff edge) – ensure choice of site and scale of development does not detract from these.

CA29: Middle Tamar Valleys

KEY LANDSCAPE CHARACTERISTICS[1]

- *River valley, narrow in parts, meanders in tight loops between steep wooded slopes, with dramatic gorge through granite ridge.*
- *Inner meanders support wider floodplains with improved farmland behind earth dykes and outer fringe of Coastal Saltmarsh and Reedbeds.*
- *Extensive mixed broadleaved and coniferous woodland on valley sides, with improved grassland and pasture on lower lying areas and pockets of arable or horticultural land on higher valley edge.*
- *Medieval quaysides and 19th mining settlements.*
- *Core of Tamar WHS area with mine spoil, engine houses and chimneys dominant features in the landscape.*
- *Winding narrow sunken lanes and 'packhorse' paths give access to former quays.*
- *Lower Inny Valley, a shallow meandering tributary valley with broadleaved woodland, wetlands and fens and wet woodland and slopes of bracken, scrub and neutral grassland above.*
- *Most of the southern half of the LCA is within the Tamar Valley AONB.*
- *Parts of the LCA to the west of Launceston are within the North Petherwin AGLV.*
- *Parts of the LCA south of Launceston are within the Inny Valley and Lawhitton AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study: http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A river valley which is narrow in parts and small, intimate scale. The prominent landform is valley slopes, which are gentle in the north, and steeper in the south, and a gorge-like river system, with incised tributaries.
Land cover pattern and presence of human scale features	A landscape with medium sized fields, bounded with hedges. The land downstream of Calstock includes remains of medieval strip field systems and market gardens. Woodland adds to the complexity of landcover. Human scale features include hedges, as well as small settlements and mills along the river.
Tracks/transport pattern	There is road access throughout the LCA, although this tends to be via narrow windings country lanes. However, the LCA is crossed by the A30 at Polyphant, and by the railway at Calstock. The Tamar Valley Discovery Trail runs through part of the LCA.
Skylines	Although the LCA does not refer specifically to skylines, it does refer to the dramatic gorge landscape with steep-sided valleys (although the hedgerows and trees limit views). In addition, the OS maps indicate that there are several notable historic landmarks on the skyline, including Gunnislake Mine and Okeltor Arsenic Mine. A number of chimneys which are remnants of the mining industry are visible along the river valley between Bitthams and Gunnislake, as well as south of Luckett, west of Calstock and at Lower Trebullett.
Perceptual qualities	This is a tranquil area confined by woodland. It is also a dramatic and atmospheric landscape created by its strong landform and land use, focused on the river. There are some areas of human influence proximity to the A30 at Polyphant, the railway at Calstock, and the settlements at Calstock, Gunnislake and Cargreen.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Medieval Farmland' which covers the majority of the LCA, to have 'moderate/high' vulnerability to wind development. There are also patches of 'Deciduous Woodland', which has 'high' vulnerability, and Modern Enclosed Land and Plantation/Scrub, both of which have 'low' vulnerability.
Distinctive landscape features	The LCA description lists the river landscape, granite gorge and strong contrast with open heath of Kit Hill to the west, as distinctive landscape features.
Scenic quality	Some parts of the LCA are designated for their scenic value, as part of the Cornwall AONB and various AGLVs. A very small area just west of Polyphant (1.3%) is within the Bodmin Moor section of Cornwall AONB. The southern half of the LCA (48%) is within the Tamar Valley AONB. Qualities of the Tamar Valley AONB that may particularly be affected by wind energy development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. The northern parts of the LCA between St Clether and Polyphant are within the North Petherwin AGLV. Scenic qualities include the heavily wooded and enclosed character of the valleys. The stretch from the A30, south to Treburley is within the Inny Valley and Lawhitton AGLV. Scenic qualities include the high hedges, the oak woodland in the valley

Criteria	Lower sensitivity	⟷	Higher sensitivity
	bottoms and clumps of trees as hilltop features.		
Overall sensitivity assessment	Although some parts of the LCA comprise less steep farmland, the narrow gorge-like landform of the southern stretches of the valley, the tranquil, unspoilt character of the river landscape, the large areas of wood, tranquil character and relatively high scenic quality (particularly in the southern part of the LCA) means that overall this LCA is considered to have a **moderate-high** sensitivity to wind energy development.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	The enclosed and intimate nature of much of this landscape, and the scale of the valley sides (rarely more than 100m) means this LCA would be particularly sensitive to 'medium' and 'large' wind turbines.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The physical extent of this LCA, the dramatic nature of the landform and overlying field pattern means this landscape would be particularly sensitive to any clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single very small or small turbines**. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings). There may be more than wind energy development in the LCA, but these should be clearly separated so that, although each turbine influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines in the most remote and tranquil locations, particularly around Bohetherick, and the area around Higher Larrick, Lower Trebullett and Wareham Wood. • Protect distinctive features including the river landscape and granite gorge and strong contrast with open heath of Kit Hill to the west, as highlighted in the LCA. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks such as the internationally important historic mills, mines and quays. • Consider views from local viewpoints and popular routes such as the Tamar Valley Trail when considering the siting and design of wind energy development in the landscape – ensure it does not affect the tranquil experience along this route. • Protect the features which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the

	prominence of the 19th century mining remains – ensure choice of site and scale of development does not detract from these. • Protect heavily wooded and enclosed character of the valleys within the North Petherwin AGLV. • Protect the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features within the Inny and Lawhitton AGLV.

Landscape Sensitivity Assessment for Solar PV Development

CA29	Lower sensitivity ⟷ Higher sensitivity
Landform	A river valley which is narrow in parts and small, intimate scale, with steep and prominent valley slopes, which are gentle in the north and steeper in the south.
Sense of openness / enclosure	This is an enclosed landscape, which is mainly pastoral with hedgerows, and some of the steeper valleys are wooded. The sense of openness varies along the valley and increases with height from the valley floor – there are any intimate spots within narrow valleys, as well as some impressive panoramic views.
Field pattern and scale	The landscape is unenclosed or small fields with curving sinuous boundaries, mainly post-Medieval in origin. The land downstream of Calstock includes remains of medieval strip field systems and market gardens. The patchwork of small-scale fields and hedgerows is one of the features for which the Tamar Valley AONB is designated.
Landcover	Mainly pastoral farmland with improved grassland, limited horticultural and little arable use. There is extensive mixed broadleaved and coniferous woodland, with scrub and bracken in the Inny Valley, and over relic mine sites. Towards the lower part of the Tamar valley are estuarine habitats of Reedbeds and Coastal Saltmarsh[2].
Perceptual qualities	This is a tranquil area confined by woodland. It is also a dramatic and atmospheric landscape created by its strong landform and land use, focused on the river. There are some areas of human influence proximity to the A30 at Polyphant, the railway at Calstock, and the settlements at Calstock, Gunnislake and Cargreen.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which covers the majority of the LCA, to have moderate/high vulnerability to solar PV development. There are also patches of Modern Enclosed Land, which is moderately sensitive to solar PV development, and Deciduous Woodland and Plantation/Scrub, neither of which were assessed due to the unsuitability of this land cover for solar PV.
Distinctive landscape features	The LCA description lists the river landscape and granite gorge and strong contrast with open heath of Kit Hill to the west, as distinctive landscape features.
Scenic quality	Some parts of the LCA are designated for their scenic value, as part of the Cornwall AONB and various AGLVs. A very small area just west of Polyphant (1.3%) is within the Bodmin Moor section of Cornwall AONB. The southern half of the LCA (48%) is within the Tamar Valley AONB. Qualities of the Tamar Valley AONB that may particularly be affected by solar PV development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry. The northern parts of the LCA between St Clether and Polyphant are within the North Petherwin AGLV. Scenic qualities include the heavily wooded and enclosed

[2] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study: http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)

CA29	Lower sensitivity	⟷	Higher sensitivity
	character of the valleys. The stretch from the A30, south to Treburley is within the Inny Valley and Lawhitton AGLV. Scenic qualities include the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features.		
Overall sensitivity assessment	Although there is a sense of enclosure lower in the valleys, the steep valley slopes, predominantly pastoral character, sense of tranquillity and relatively high scenic quality (particularly in the south) increase sensitivity to solar PV development so that overall, the landscape is judged to be of **moderate-high** sensitivity to solar PV development. The steep-sided slopes in the southern stretches of the LCA and flood plains would be particularly sensitive to PV development.		
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	Due to the relatively high sensitivity of this area and the presence of steep slopes and small medieval fields with curving sinuous boundaries, this LCA is likely to be particularly sensitive to 'medium' and 'large' scale solar PV developments. The landscape's steep-sided slopes in the southern stretches of the LCA and flood plains would be sensitive to all scales of solar PV development.		

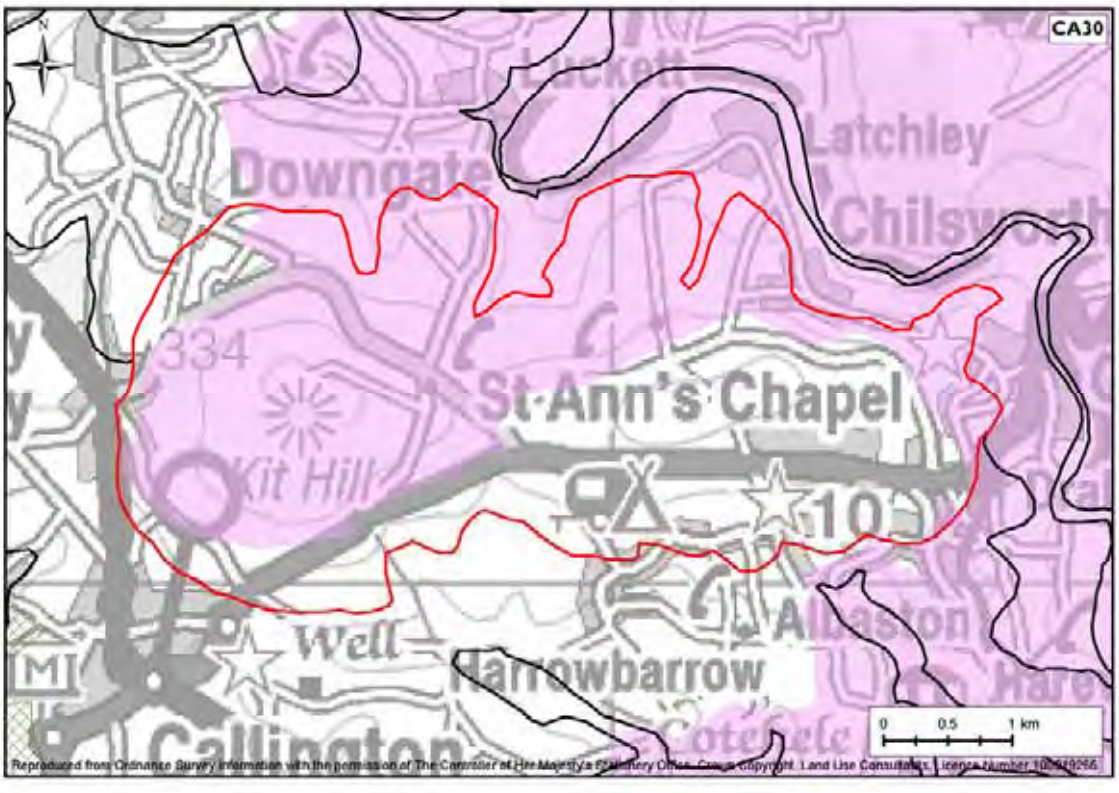
Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** outside the AONB and a **landscape without solar PV development** (except for very occasional very small scale well sited developments) within the AONB, with **no solar PV development** on steep-sided valleys in the southern stretches of the LCA or on flood plains. There may be more than one solar PV development in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid siting solar PV development on steep-sided slopes in the southern stretches of the LCA, flood plains, and tranquil areas including the meander south of Bohetherick, and the area around Higher Larrick, Lower Trebullett and Wareham Wood. • Consider views from local viewpoints and popular routes such as the Tamar Valley Trail when considering the siting and design of solar PV development in the landscape – ensure it does not affect the tranquil experience along this route. • Ensure the LCA retains a pastoral and wooded character and that cumulative development does not change this. • Protect the features which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains. • Protect heavily wooded and enclosed character of the valleys within the North Petherwin AGLV. • Protect the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features within the Inny and Lawhitton AGLV.

CA30: Kit Hill

Key Landscape Characteristics[1]

- *Dominant and impressive granite summit.*
- *Untamed landscape of lowland heath on hill, and neutral grassland at St Ann's Chapel, in contrast to surrounding agricultural landscape.*
- *Important archaeology, including prehistoric activity and visible mining heritage.*
- *Extensive panoramic views to Bodmin Moor and Dartmoor and Tamar Estuary.*
- *Parts of lower ridge affected by inappropriate development.*
- *The northern part of the LCA is within the Tamar Valley AONB.*
- *Most of this LCA is within the Tamar Valley section of the Cornwall Mining World Heritage Site.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A large-scale landform comprising a dominant granite ridge which runs just north of St Ann's Chapel, with the distinctive landform feature of Kit Hill. The hillside slopes steeply at the top, before evening out lower down at the boundary of the LCA.
Land cover pattern and presence of human scale features	This is a landscape dominated by a relatively simple pattern of recently enclosed uniform medium-sized strongly rectilinear fields. However variety is provided by the relict prehistoric field system lies on the east side of Kit Hill and the neutral grassland on upper slopes and summit. Human-scale features include gorse hedgerows, small farms and mining features.
Tracks/transport pattern	There is relatively good access to the area – including the A390 which runs east to west south of the main granite ridge and the B3257 which runs to the north of Kit Hill. There is a network of more local roads and lanes in the eastern half of the LCA. Areas of rough ground have more restrictions in terms of vehicular access.
Skylines	The LCA description notes that this LCA is a dominant, striking granite ridge. It also notes the ornate decorative chimney stack on top of Kit Hill as a major landmark over a wide area and the presence of mining remains along ridge and on the skyline. It also notes that the working quarry at Hingston is expanding and appearing over the skyline from many vantage points. These may be affected by wind energy development.
Perceptual qualities	The east and west of the LCA contrast somewhat, and the east has considerable human influence, much of it recent, and some of it visually unattractive. The influence of the A390 results in only the northern side of the granite ridge being free from noise and visual intrusion. Despite its untamed character, none of the LCA is particularly tranquil, due in part to Hingston Down quarry, in addition to the A390 and the surrounding settlements of Gunnislake and Callington.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Post-medieval Enclosed Land', which makes up over half of the LCA, as of moderate vulnerability to wind development. Other HLC types which cover large tracts of the LCA are 'Upland Rough Ground', which has high sensitivity to wind development, 'Medieval Farmland' which has moderate/high sensitivity to wind development and '20th Century Farmland' which has low sensitivity to wind development.
Distinctive landscape features	The LCA description notes the ornate decorative chimney stack on top of Kit Hill; mining remains along the ridge; open landscapes on the ridge with few trees and stunted hedges; and some notable mature beech tree-lined roads on the slopes of the hill as distinctive features of the landscape. The presence of mining remains means there are a large number of sensitive features that could be affected by wind energy development.
Scenic quality	The northern and western parts of the LCA are designated for their scenic value, as part of the Tamar Valley AONB (55% of the LCA is designated as AONB). Qualities of the Tamar Valley AONB that may particularly be affected by wind energy development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	prominence of the 19th century mining remains.		
Overall sensitivity assessment	Although this LCVA has a relatively large scale landform, simple landcover pattern across much of the area, relatively good access and presence of human influence; the distinctive skyline (particularly Kit Hill), presence of upland rough ground, density of mining remains along the ridge and high scenic quality (particularly in the north and west of the area) means that overall, this LCA is considered to have **moderate – high** sensitivity to wind development. The distinctive form of Kit Hill and areas of open heathland would be particularly sensitive to wind energy development.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large, the presence of mining heritage features on the skyline and other human scale features means that this landscape would be particularly sensitive to 'large' turbines. The distinctive form of Kit Hill and areas of open heathland would be particularly sensitive to any turbines.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the landform is relatively large, the scale of the overlying field patterns and the presence of mining heritage features on the skyline means that this LCA would be particularly sensitive to 'medium', 'large' and 'very large' groups of turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single or small groups of wind turbines** up to and including medium in size outside the AONB, a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings) within the AONB, and **no wind energy** development on the distinctive form of Kit Hill or on areas of open heathland. There may be more than one wind energy development in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines on the distinctive form of Kit Hill or on areas of open heathland. • No turbine should be any more prominent (or higher) than Kit Hill. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of historic landmarks on the skyline, including the chimney stack at Kit Hill and the mining remains (particularly engine houses and chimneys). • Avoid, wherever possible, siting turbines within the HLC Types of 'Upland Rough Ground'– assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Consider views of the skyline from the settlements such as Kelly Bray,

	Callington and Gunnislake, and from the surrounding AONB when siting and designing wind development – aim for a balanced composition of turbines in scale with the landscape. • Consider views from local viewpoints and popular routes (e.g. the top of Kit Hill) when considering the siting and design of wind energy development in the landscape – ensure it does not detract from the key characteristics of the view. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the network of ancient deeply incised lanes, and the prominence of the 19th century mining remains – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	This is an upland landscape (a dominant granite ridge, which runs just north of St Ann's Chapel, and summit which is Kit Hill) with prominent, visible slopes. The hillside slopes steeply at the top, becoming more even lower down at the boundary of the LCA.
Sense of openness / enclosure	This is a prominent and open landscape, with little sense of enclosure. The LCA comprises a granite ridge and hill summit, which are exposed and visible from the surrounding area. The lower slopes tend to be pastoral land with hedges and scattered woodland.
Field pattern and scale	The field pattern in most parts is medium-sized, with strongly rectilinear fields, although there is a relict prehistoric field system on the east side of Kit Hill. The upper slopes of Kit Hill are unenclosed lowland heath.
Landcover	The landcover is described in the LCA as '*pastoral farmland with scattered trees and open wildland*'.
Perceptual qualities	The east and west of the LCA contrast somewhat, and the east has considerable human influence, much of it recent, and some of it visually unattractive. The influence of the A390 results in only the northern side of the granite ridge being free from noise and visual intrusion. Despite its untamed character, none of the LCA is particularly tranquil, due in part to Hingston Down quarry, in addition to the A390 and the surrounding settlements of Gunnislake and Callington.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Post-medieval Enclosed Land', which makes up over half of the LCA, as of moderate vulnerability to solar PV development. Other HLC types which cover large tracts of the LCA are 'Upland Rough Ground', which has high vulnerability to solar PV development, 'Medieval Farmland' which has moderate/high vulnerability to solar PV development and '20th Century Farmland', which has moderate vulnerability to solar PV development.
Distinctive landscape features	The LCA description notes the ornate decorative chimney stack on top of Kit Hill; mining remains along the ridge; open landscapes on the ridge with few trees and stunted hedges; and some notable mature beech tree-lined roads on the slopes of the hill as distinctive features of the landscape. The open landscapes on the ridge, which occupy a relatively large part of the LCA could be affected by solar PV development.
Scenic quality	The northern and western parts of the LCA are designated for their scenic value, as part of the Tamar Valley AONB (55% of the LCA is designated as AONB). Qualities of the Tamar Valley AONB that may particularly be affected by solar PV development are the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry.
Overall sensitivity assessment	Although the presence of medium-scale rectilinear fields across much of the LCA and presence of human influence (particularly in the east) may indicate lower sensitivity

Criteria	Lower sensitivity	⟷	Higher sensitivity
	to solar PV development, the presence of prominent visible slopes, sense of openness, predominantly pastoral and heathland landcover, and relatively high scenic quality (particularly in the north and west of the LCA) increase sensitivity to solar PV development to the extent that overall, this LCA is considered to have **moderate - high** sensitivity to solar PV development. The steeper slopes and areas of open heathland would be particularly sensitive.		
Sensitivities to solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The relatively high sensitivity of the area and presence of many visible slopes means that it is likely to be particularly sensitive to 'small', 'medium' and 'large' scale solar PV development. The steeper slopes and areas of open heathland would be particularly sensitive to any solar PV development.		

Landscape strategy and Guidance for Solar PV Development

Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (very small scale) outside the AONB and a **landscape without solar PV development** (except for very occasional very small scale well sited developments) within the AONB and **no solar PV development** on the steeper slopes and areas of open heathland. There may be more than one solar PV development in the LCA, but these should be clearly separated so that, although each development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating solar PV development on the steeper slopes, in areas of open heathland or in the area of medieval stripfield systems on the east side of Kit Hill. • Well screened brownfield sites, or flattish sites enclosed by hedges and trees would be most suitable. • Avoid siting PV developments within the HLC type 'Upland Rough Ground' – assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability. • Consider views from local viewpoints and popular routes (e.g. the top of Kit Hill) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the open character of landscapes on the ridge or the notable mature beech tree-lined roads as distinctive features of the landscape as a distinctive feature of this landscape. • Protect the factors which contribute to the scenic quality of the Tamar Valley AONB, particularly the 'unspoiled' nature and visual quality of this classic English lowland river system, the green patchworks of fields and hedges seen from vantage points such as Kit Hill or Hingston Down, the medieval structure of the farmed countryside, and the legacy of a once thriving market gardening industry – ensure choice of site and scale of development does not detract from these.

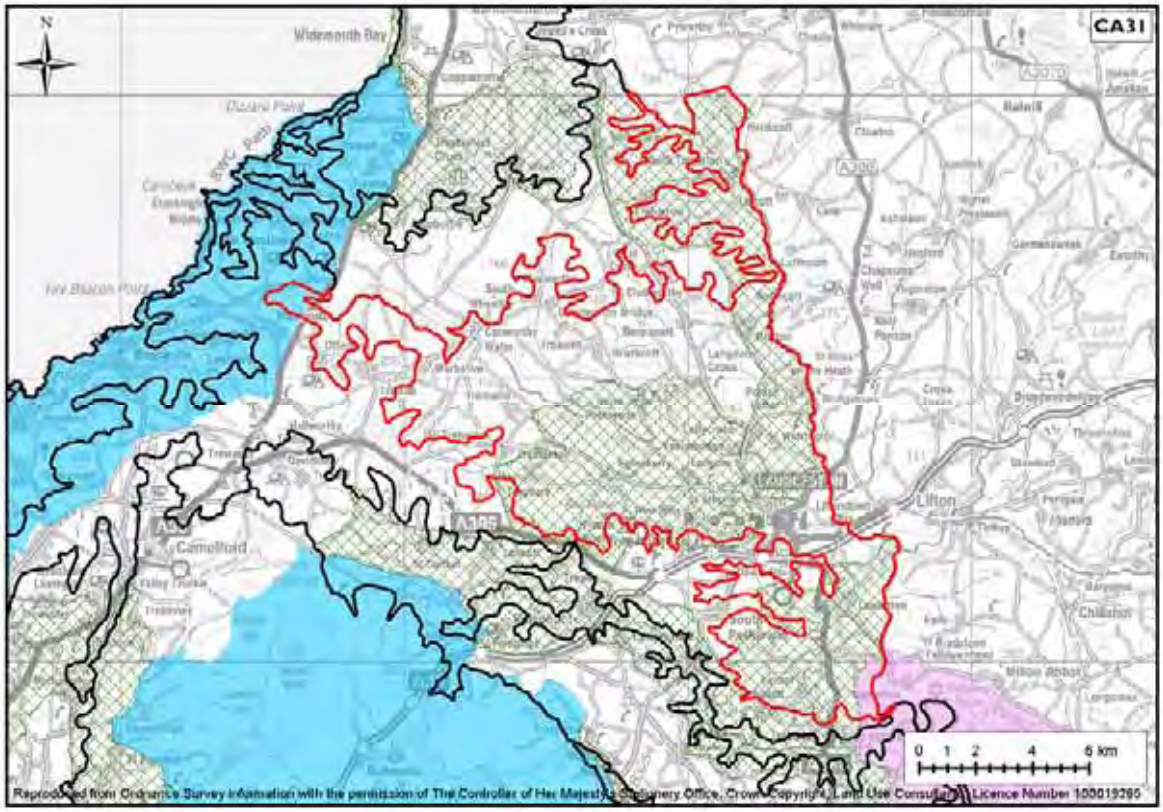
CA31: Upper Tamar and Ottery Valleys

Key Landscape Characteristics[1]

- *Gently rolling, inland hills and sheltered valley landscape.*
- *Larger rivers have distinctive floodplains with valley floor pasture, in particular the Tamar and Ottery.*
- *Small areas of "Culm grassland" (wetland on the Culm measures with Puple Moor Grass and Rush*
- *Pasture and Fens) along river valleys.*
- *Medium sized fields of improved grassland with some arable land and strong Cornish hedges and hedgerows with mature hedgerow trees.*
- *Broadleaved and coniferous woodland blocks on valley sides particularly to the east.*
- *Occasional free-standing, mature trees on floodplains or hedge banks providing parkland-like landscape character.*
- *Launceston Castle, village churches and stone bridges across rivers, forming features.*
- *Slate giving a dark appearance to river beds and as "shillet" used in vernacular architecture.*
- *A very small area (just west of the A39) is within the Cornwall AONB.*
- *A large strip in the north and eastern reaches of the LCA is within the Upper Tamar AGLV.*
- *A large area to the west of Launceston is within the North Petherwin AGLV.*
- *An area to the south of Launceston is within the Inny Valley and Lawhitton AGLV.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)


CA31
N
Widemouth Bay
Launceston
Lifton
Chillaton
0 1 2 4 6 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. Land Use Consultants Licence Number 100019285

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	This is a wide rolling landscape with gentle valleys and ridges around 140m AOD. Tributary valleys are scattered across the LCA. Valley floors are flat and fairly wide, with some hills forming distinctive ridges in the landscape, others roll more gently. The Tamar Valley is more intimate and small-scale than the Ottery Valley. The landform becomes steeper and higher in the south of the LCA.		
Land cover pattern and presence of human scale features	A landscape of medium-sized fields, mainly pastoral, with some areas of arable fields and broadleaved woodland, particularly in the valleys of the Tamar and the River Kensey. There are patches of wetland and rough ground in the river valleys and on steeper slopes around the Ottery Valley. Human-scale features include hedgerows, small farms, village churches and stone bridges. The more recently enclosed fields on the higher ground and particularly in the central and northern parts of the LCA tend to be medium-sized and broadly rectilinear, whilst those in the valleys and around settlements are often more uneven and sinuous.		
Tracks/transport pattern	The area is relatively poorly served by major roads with the A30 running south of Launceston and the A388 meeting it at the town. The B3254 runs north on the ridge line. The A39 lies to the far west. Between these roads there is a network of winding lanes often with strong high hedges.		
Skylines	Whilst the LCA does not specifically refer to 'skylines', the OS maps indicate that this is a gently rolling landscape. The historic features section of the LCA description notes an Iron Age hillfort at Castle Park Wood, Battle Ring defended farmstead near South Petherwin, and Launceston Castle – the description notes '*views of the castle at Launceston on approach from the north which considerably reinforce the historic quality of the surrounding landscape*'. .		
Perceptual qualities	The LCA is a moderately tranquil landscape which is largely free from recent human influence. The exceptions to this are the areas in proximity to the A30 and around Launceston. The landscape has a rolling, pastoral nature and an unspoilt, historic feel. The exception is around the town of Launceston, where some unsympathetic development and the traffic associated with the town has eroded this historic character. The northern half of the LCA is particularly tranquil. The existing wind farm at Cold Northcott is visible from the western edge of this LCA, in the Kensey valley around Badgall.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Medieval Farmland', which makes up over half of the LCA, to have moderate-high vulnerability to wind development. There are significant tracts of 'Post-medieval' land are assessed as of 'moderate' vulnerability, and also of 'Modern Enclosures, assessed as of 'low' vulnerability respectively. There are areas of 'Upland Rough Ground' in some of the valleys, which is highly vulnerable to wind development. The LCA's blocks of 'Plantations and Scrub', found mainly in the valleys, are assessed as of 'low' vulnerability to wind turbines. The Older Core Settlement (pre-1907) of Launceston has high vulnerability, whilst the surrounding modern development has low vulnerability.		
Distinctive landscape features	The LCA description notes the tranquil flat floodplain of the Tamar with strong tree cover and valleys sides with woodlands; and views of the castle at Launceston on		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	approach from the north as distinctive features of the landscape. These could be affected by turbine development.		
Scenic quality	Under 1% of this LCA is designated as AONB. However, a large strip in the north and eastern reaches of the LCA is within the Upper Tamar AGLV – scenic qualities of this part of the AGLV include the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, and the ancient woodland and hedges. A large area to the west of Launceston is within the North Petherwin AGLV - scenic qualities of this part of the AGLV include the heavily wooded and enclosed character of the valleys. An area to the south of Launceston is within the Inny Valley and Lawhitton AGLV - scenic qualities of this part of the AGLV include the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features.		
Overall sensitivity assessment	Although the relatively large scale rolling landform, relatively simple landcover patterns and relatively few important skyline features could indicate lower sensitivity to wind development, the presence of valleys (with tranquil floodplains) and steep landform in the south of the LCA, lanes with strong high hedges, the presence of an Iron Age hillfort at Castle Park Wood and Launceston Castle on the skyline, and the presence of scattered human-scale features increase the sensitivity of this landscape. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development (**moderate-high** within the small area of AONB). The tranquil floodplain of the Tamar would be particularly sensitive to wind turbines.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large in the Cornwall context, the typical scale of the hills (just over 100m) and presence of scattered human scale features means this LCA would be particularly sensitive to 'large'. The smaller-scale sheltered and unspoilt valleys would also be particularly sensitive to any 'medium' size turbines.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	The scales of hills and fields means this landscape would be particularly sensitive to 'medium', 'large' and 'very large' clusters of turbines. The smaller-scale sheltered and unspoilt valleys would also be particularly sensitive to any cluster sizes.		

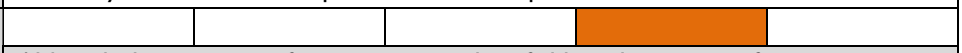
Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small or medium clusters of turbines, or single turbines**, comprising turbines that may be up to and including 'medium' scale (with smaller turbines in valleys). There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In

	addition, the following siting guidance should apply to any wind energy developments within this LCA: • Avoid locating larger turbines in the more tranquil locations within the valleys (particularly around the Tamar Valley, Caudworthy Water and Bolsbridge Water, or in the west, along the Ottery Valley). • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks such as the Iron Age hillfort at Castle Park Wood or Launceston Castle. • Avoid siting wind turbines within the HLC Types 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local settlements and popular routes when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does adversely affect the tranquil character of the floodplain of the Tamar or its strong tree cover, or the views of the castle at Launceston on approach from the north as distinctive features of the LCA. • Protect the factors which contribute to the scenic quality of the Upper Tamar AGLV (the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, and the ancient woodland and hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Petherwin AGLV (the heavily wooded and enclosed character of the valleys of the North) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Inny Valley and Lawhitton AGLV (the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features) - ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A gently undulating landscape of sheltered valleys and open rolling and prominent hills. Tributary valleys are scattered across the LCA. Valley floors are flat and fairly wide, with some hills forming distinctive ridges in the landscape, others roll more gently. The Tamar Valley is more intimate and small-scale than the Ottery Valley. There are a number of rivers and tributaries throughout the LCA. The landform becomes steeper and higher in the south of the LCA.
Sense of openness / enclosure	The LCA is an undulating valley landscape, and generally quite open, although some of the valleys have a greater feeling of enclosure, particularly in the south of the LCA, and along the Tamar Valley. The hedgerows and tree cover enhance this sense of enclosure.
Field pattern and scale	Fields are medium scale and are predominantly derived from medieval enclosure (Anciently Enclosed Land), although there are substantial areas of post-medieval enclosure of former rough ground (Recently Enclosed Land) in the northern part of the LCA.
Landcover	Landcover is dominated by farmed land of improved grassland/pasture with some arable. Woodland is prominent in places, particularly in and around the valleys, including along the River Tamar, and south of the River Kensey, and is a mixture of broadleaved, coniferous and mixed woodland. Small areas of wetland and rough ground occur along the valleys and on steeper slopes especially in the upper reaches of the River Ottery.
Perceptual qualities	The LCA is a moderately tranquil landscape which is largely free from recent human influence. The exceptions to this are the areas in proximity to the A30 and around Launceston. The landscape has a rolling, pastoral nature and an unspoilt, historic feel. The exception is around the town of Launceston, where some unsympathetic development and the traffic associated with the town has eroded this historic character. The northern half of the LCA is particularly tranquil.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC type of 'Medieval Farmland', which makes up over half of the LCA, to have moderate-high vulnerability to solar PV development. There are significant tracts of 'Post-medieval Farmland' land are assessed as of 'moderate' vulnerability, and also of 'Modern Enclosures, are also assessed as of 'moderate' vulnerability respectively. There are areas of 'Upland Rough Ground' in some of the valleys, which is highly vulnerable to solar PV development. The LCA's blocks of 'Plantations and Scrub', found mainly in the valleys, have not been assessed as this land use is unsuitable for solar PV development.
Distinctive landscape features	The LCA description notes the tranquil flat floodplain of the Tamar with strong tree cover and valleys sides with woodlands; and views of the castle at Launceston on approach from the north as distinctive features of the landscape. Some of these could be affected by solar PV development.
Scenic quality	Under 1% of this LCA is designated as AONB. However, a large strip in the north and eastern reaches of the LCA is within the Upper Tamar AGLV – scenic qualities of this part of the AGLV include the parkland character and mature trees on the

Criteria	Lower sensitivity	⟷	Higher sensitivity
	floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, and the ancient woodland and hedges. A large area to the west of Launceston is within the North Petherwin AGLV - scenic qualities of this part of the AGLV include the heavily wooded and enclosed character of the valleys. An area to the south of Launceston is within the Inny Valley and Lawhitton AGLV - scenic qualities of this part of the AGLV include the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features.		
Overall sensitivity assessment	 Although the presence of some more modern fields and presence of some more sheltered valleys with dense tree and woodland cover could indicate a lower sensitivity to solar PV development, the openness of the hills, presence of many visible slopes, dominance of grassland/pasture and presence of ancient fields increase levels of sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV development. The steep valley sides and upper visible slopes would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	In more open areas or areas with smaller scale field patterns, the LCA is likely to be particularly sensitive to 'large' scale solar PV development. The steep valley sides and upper slopes would be particularly sensitive to any development.		

Landscape strategy and Guidance for Solar PV Development

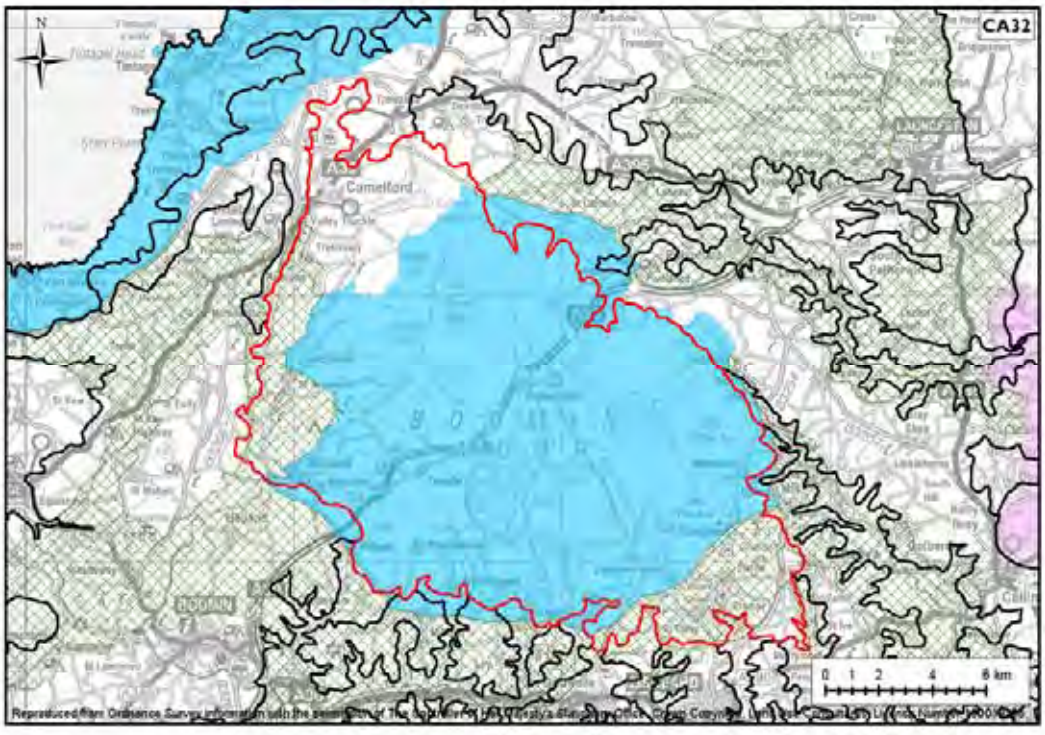
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (scale of development should relate to landscape scale) and **no solar PV development** on the steep valley sides or upper visible slopes. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be more than one solar PV development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the technical report for generic siting and design guidance. In addition, the following siting guidance should apply to any solar PV developments within this LCA: • Avoid locating development on the steep valley sides and upper visible slopes where solar PV panels would be particularly visible. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Avoid siting solar PV development within the HLC Types of 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Protect the pastoral character of the LCA –ensure cumulative development does not erode this. • Ensure solar PV development does adversely affect the tranquil character of the floodplain of the Tamar or its strong tree cover, or the views of the castle at Launceston on approach from the north as distinctive features of the LCA.

	• Protect the factors which contribute to the scenic quality of the Upper Tamar AGLV (the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, and the ancient woodland and hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Petherwin AGLV (the heavily wooded and enclosed character of the valleys of the North) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Inny Valley and Lawhitton AGLV (the high hedges, the oak woodland in the valley bottoms and clumps of trees as hilltop features) - ensure choice of site and scale of development does not detract from these.

CA32: Bodmin Moor

Key Landscape Characteristics[1]

- *Exposed large scale unenclosed moorland with gorse, bracken and heather.*
- *Several dominant tors and cairns visible over large areas - Roughtor and Brown Willy to the north with Stowes Hill and Caradon Hill to the south.*
- *Shallow narrow wooded stream valleys becoming more enclosed and incised around the edges of the massif.*
- *Isolated coniferous plantations.*
- *Villages and hamlets on sheltered valley sides (creases); mainly 19th C mining terraces using vernacular materials and of distinctive local style.*
- *Areas of recently enclosed moorland intake on moorland edge enclosed and subdivided, mainly with wire fencing and some drystone walls.*
- *Extensive wetland areas of marshland around streams, often with tin streaming evidence.*
- *Man-made reservoirs which are in scale but not in keeping with this wild landscape.*
- *Widespread evidence of prehistoric activity, such as relict field patterns and standing stones.*
- *Extensive upstanding industrial remains, with many chimneys and engine houses, tramways, dressing floors, spoil heaps and surface workings.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	Large scale open granite plateau with dramatic rugged landform which form distinct landform features (tors) on the skyline. The area has variably sloping sides, cut by shallow stream valleys in all directions. The landscape rises to 420m AOD at Brown Willy, and includes distinctive granite tors and scree-strewn slopes ('clitter'). Rivers and streams follow lines of weakness in the granite across the Moor, forming shallow valleys that deepen dramatically across the softer rocks around the edge of the core. These steeper sections include picturesque cascades and low waterfalls such as Golitha Falls; the valleys also providing a contrasting sense of intimacy to the landscape.
Land cover pattern and presence of human scale features	There is a variety in landcover pattern across this LCA – from the small sinuous medieval fields on the fringes of the Moor, the straighter and larger pattern of post-medieval fields on higher ground and open moor punctuated by granite boulders and scree as well as hidden bogs, mires and coniferous plantations. There are extensive prehistoric field systems on the Moor, together with important examples of abandoned medieval settlements and associated fields. The landscape has a fine and detailed grain of human detail that includes a rich, dense and finely detailed occurrence of visible historic and prehistoric remains and features of often millennia of continuous human occupation. Other human scale indicators include Cornish hedges, stone walls and isolated farm buildings.
Tracks/transport pattern	Although the A30 dual carriageway dissects the LCA, elsewhere are narrow winding lanes and vast expanses of open moorland inaccessible to road transport.
Skylines	Although there are no key skylines or skyline features specifically mentioned as such in the LCA, it is clear that this area forms a distinctive and prominent skyline for many miles around. The LCA description notes that this is some of the highest land in Cornwall with Rough Tor and Brown Willy being the two highest peaks. The LCA description refers to the extensive upstanding industrial remains, with many chimneys and engine houses, tramways, dressing floors, spoil heaps and surface workings; as well as cairns, tors, prehistoric monuments on moorland, Caradon Hill communication masts, China clay works and sand and gravel workings as distinctive features. Plantations at Smallacoombe, Bolventor and Halvana are also described as prominent.
Perceptual qualities	The granite tors and wild moorland have a genuine sense of 'wilderness' where, despite the unique remains of extensive relict landscapes and the influence of thousands of years of human manipulation of the landscape, the forces of nature are still dominant. The intimate wooded valleys with their clear running streams provide a complete contrast to the wide open moorland. Settlement on the high moor is limited to lonely farmsteads sheltering below hill tops, whilst clusters of farms and houses hug the slopes or shelter in hollows on the moorland fringe. Telecommunications masts, reservoirs, the main A30 road corridor and localised recreational pressure (e.g. around St Breward) dilute these qualities in some parts of the LCA.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Upland Rough Ground', which make up a significant proportion of the LCA, to be highly vulnerable to development. Significant tracts of 'Medieval' land, surrounding

Criteria	Lower sensitivity	⟷	Higher sensitivity
	the unenclosed moorland and within some valleys, are assessed as of 'moderate-high' vulnerability, whilst areas of lower sensitivity are associated with the smaller patches of 'Post-Medieval (Intakes)' – assessed as of 'low-moderate' vulnerability – and 'Modern Enclosures (Intakes)' and 'Modern Enclosures (Amalgamation of AEL)' – assessed as of 'low' and 'low-moderate' vulnerability respectively. Locations of 'Industrial: Relict', found scattered across the southern half of the moor, are assessed as of 'moderate' vulnerability, whilst active industrial areas are assessed as of 'moderate-low' vulnerability to wind turbines. The LCA's blocks of 'Plantations and Scrub' are assessed as of 'low' vulnerability to wind turbines. The landscape's reservoirs were not assessed as part of Cornwall Council's study.		
Distinctive landscape features			The LCA describes distinctive landscape features as cairns, tors, prehistoric monuments on moorland; clapper bridges; Dozmary Pool; three reservoirs; prominent plantations at Smallacoombe, Bolventor and Halvana; Caradon Hill communication masts; China clay works at Stannon, St Neots, Hawkstor, Temple and Durfold; and sand and gravel workings at Five Lanes. The cairns, tors, prehistoric monuments on moorland are frequent in the landscape and would be sensitive to the development of wind turbines.
Scenic quality			The majority of the LCA falls within the 'Bodmin Moor' part of the Cornwall AONB (approx. 75% of the LCA is designated as AONB). Qualities that may particularly be affected by wind energy development are the imposing nature of the summit of Brown Willy (the highest point of land in Cornwall), the distinctive ragged horizon recognisable from afar, the prominence of the tors, the prominence of the engine houses and mining structures, the sense of remoteness and lack of tracks across the open moor, and the small winding lanes on the edges of the moor. The western fringes of the LCA fall within the Camel & Allen Valleys AGLV (valued for the ancient woodland, small meadows and wetlands, and the parkland landscape around Pencarrow) and the south-eastern part of the LCA falls within the Caradon Hill AGLV (valued for the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys).
Overall sensitivity assessment			Although this moorland area has a relatively large scale landform, the presence of distinctive skylines, fine and detailed grain of human detail, relative inaccessibility, sense of 'wilderness', frequent distinctive landscape features (cairns, tors, prehistoric monuments) on the moorland and high scenic quality heighten sensitivity to wind energy development to the extent that overall this LCA is considered to have a **high** sensitivity to wind energy development.
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***			The landscape would be highly sensitive to all but the smallest scale of wind turbines in particular locations in the landscape (see landscape strategy below).
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)***			The landscape would be highly sensitive to all but the smallest single turbines in particular locations in the landscape (see landscape strategy below).

Criteria	Lower sensitivity	⟷	Higher sensitivity
Medium (6-10) ***Large (11-25)*** ***Very large (>25)***			

Landscape strategy and Guidance for Wind Energy Development

Landscape strategy	The landscape strategy is for **a landscape without wind farms** on the open moor (LDU 309), and a landscape with **occasional very small single wind turbines** associated with farm buildings/settlement on the settled commons (LDUs 074 and 308) and settled fringes of the moor (LDUs 356, 304, 242, 241, 075). Collectively these very small scale turbines should not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Ensure wind turbines do not affect the naturalistic skyline of distinctive rocky tors or affect the perception of wilderness associated with most parts of this landscape. • Avoid locating turbines (or tracks) in the most remote and inaccessible parts of the landscape, particularly the unbroken tracts of upland rough ground. • There may be some opportunity to site very small scale turbines adjacent to farm buildings on the more settled edged of the moor. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic industrial remains (including the chimneys and engine houses), cairns, tors and prehistoric monuments on moorland. • Avoid siting turbines within the HLC types of 'Upland Rough Ground' - assessed by Cornwall Council's HLC Sensitivity Study as of high vulnerability to development. • Consider views from local viewpoints and popular routes (e.g. from hilltop viewpoints) when considering the siting and design of wind energy development in the landscape – ensure turbines do not detract from the remote experience when within this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the imposing nature of the summit of Brown Willy, the distinctive ragged horizon recognisable from afar, the prominence of the tors, the prominence of the engine houses and mining structures, the sense of remoteness and lack of tracks across the open moor, and the small winding lanes on the edges of the moor) – ensure choice of site and scale of development does not detract from the special qualities of these landscapes. • Protect the factors which contribute to the scenic quality of the Camel & Allen Valleys AGLV and the Caradon Hill AGLV (particularly the ancient woodland, small meadows and wetlands, and the parkland landscape around Pencarrow within the Camel & Allen Valleys, and the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys in the Caradon Hill AGLV) – ensure choice of site and scale of development does not detract from the special qualities of these landscapes.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	An upland landscape with many prominent, visible slopes which rise to 420m AOD at Brown Willy, and includes distinctive granite tors and scree-strewn slopes ('clitter'). Rivers and streams follow lines of weakness in the granite across the Moor, forming shallow valleys that deepen dramatically across the softer rocks around the edge of the core. These steeper sections include picturesque cascades and low waterfalls such as Golitha Falls.		
Sense of openness / enclosure	The moorland plateau is characterised by its open and unenclosed character, with shelter only provided by occasional blocks of coniferous plantations. Enclosed land surrounding the moor is bounded by Cornish hedges – ranging from hedges of bare stone with a sparse turf topping / few wind sculpted hawthorns on higher ground, to those supporting dense walls of mature beech and native broadleaved trees in sheltered locations. Valleys have a greater sense of enclosure.		
Field pattern and scale	Much of the upland is unenclosed common land. Areas on the moorland fringes are dominated by a small scale sinuous medieval pattern. There are also extensive prehistoric field systems on the Moor, together with important examples of abandoned medieval settlements and associated fields.		
Landcover	The majority of the LCA is an open upland area of Lowland and Upland Heathland, Acid Grassland, with pastoral farmland of improved and semi-improved pasture, reservoirs and conifer plantations. Former areas of open workings or mines are found in places.		
Perceptual qualities	The granite tors and wild moorland have a genuine sense of 'wilderness' where, despite the unique remains of extensive relict landscapes and the influence of thousands of years of human manipulation of the landscape, the forces of nature are still dominant. The intimate wooded valleys with their clear running streams provide a complete contrast to the wide open moorland. Settlement on the high moor is limited to lonely farmsteads sheltering below hill tops, whilst clusters of farms and houses hug the slopes or shelter in hollows on the moorland fringe. Telecommunications masts, reservoirs, the main A30 road corridor and localised recreational pressure (e.g. around St Breward) dilute these qualities in parts of the LCA.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC type of 'Rough Ground', which makes up a significant proportion of landscape, to be highly vulnerable development. Large areas of 'Medieval' farmland, comprising much of the area surrounding the moor (including some valley slopes), are assessed as 'moderate-high' vulnerability. Areas of lower sensitivity are associated with the smaller patches of 'Post-Medieval (Intakes)' – assessed as of 'moderate' vulnerability – and 'Modern Enclosures (Intakes)' and 'Modern Enclosures (Amalgamation of AEL)' – assessed as of 'moderate' and 'moderate-low' vulnerability respectively. Locations of 'Industrial: Relict', found scattered across the southern half of the moor, are assessed as of 'moderate' vulnerability, whilst active industrial areas are assessed as of 'moderate-low' vulnerability to solar PV. The LCA's blocks of 'Plantations and Scrub' and reservoirs were not assessed as part of Cornwall Council's study.		
Distinctive landscape features	The LCA describes distinctive landscape features as cairns, tors, prehistoric		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	monuments on moorland; clapper bridges; Dozmary Pool; three reservoirs; prominent plantations at Smallacoombe, Bolventor and Halvana; Caradon Hill communication masts; China clay works at Stannon, St Neots, Hawkstor, Temple and Durfold; and sand and gravel workings at Five Lanes. The cairns, tors, prehistoric monuments on moorland are frequent in the landscape and would be sensitive to the development of PV development.		
Scenic quality	The majority of the LCA falls within the 'Bodmin Moor' part of the Cornwall AONB (approx. 75% of the LCA is designated as AONB). Qualities that may particularly be affected by solar PV development are the distinctive ragged horizon recognisable from afar, the distinctive openness and endless empty vastness, the sense of remoteness and lack of tracks across the open moor, the pattern of ancient fields with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams. The western fringes of the LCA fall within the Camel & Allen Valleys AGLV (valued for the ancient woodland, small meadows and wetlands, and the parkland landscape around Pencarrow) and the south-eastern part of the LCA falls within the Caradon Hill AGLV (valued for the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys).		
Overall sensitivity assessment	Although this landscape is affected by the presence of modern human influence in places, the landscape's high scenic quality, strong sense of openness, sense of 'wilderness' and relative remoteness, and prominent hill summits and slopes heighten levels of sensitivity to such a degree that overall this LCA is considered to have a **high** sensitivity to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The landscape would be highly sensitive to any size of PV development except for the very smallest sizes in certain locations (see landscape strategy).		

Landscape strategy and Guidance for Solar PV Development

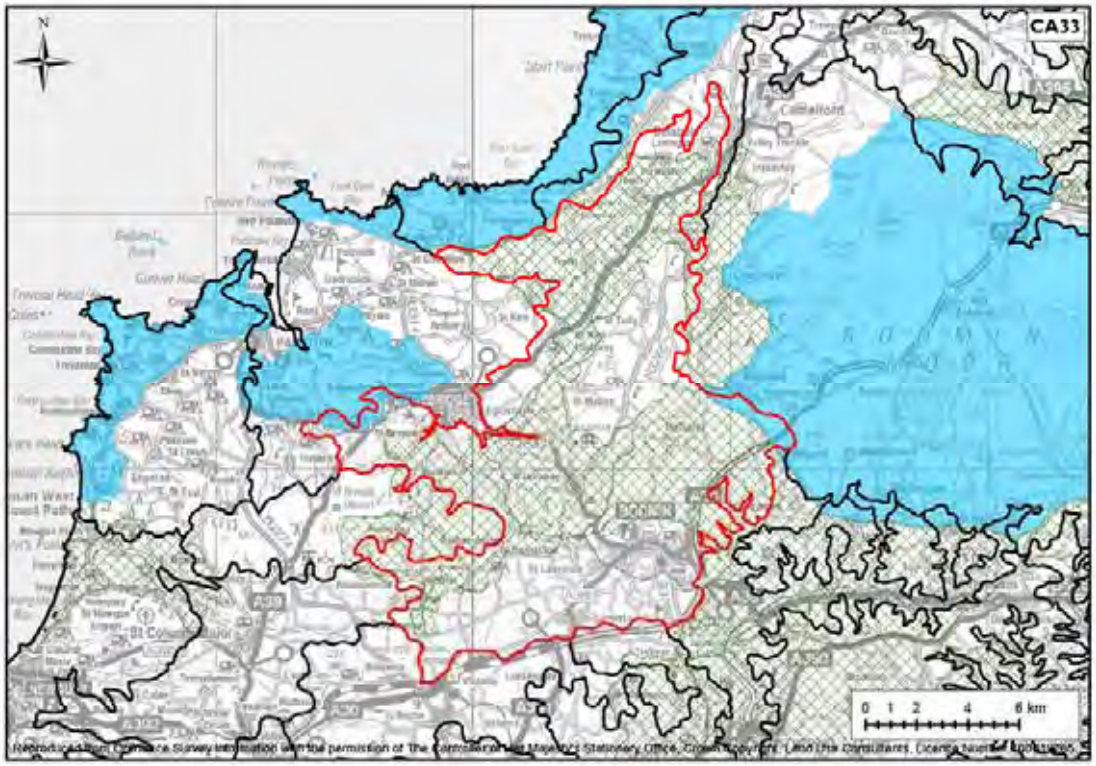
Landscape strategy	The landscape strategy is for **a landscape without solar PV development** on the open moor (LDU 309), and a landscape with **very occasional** very small PV developments in lower lying folds on the settled commons (LDUs 074 and 308) and settled fringes of the moor (LDUs 356, 304, 242, 241, 075) where they can be screened by existing hedges and trees. Collectively these very small scale PV developments should not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Site only on brownfield sites or in enclosed fields on the edges of the moor, in sheltered folds where they will not influence landscape character - avoid siting solar PV developments in areas of open, unenclosed moorland. • Ensure there is no damage to the small-scale winding road network of the moorland fringe during any installation. • Preserve the field patterns, particularly relating to medieval fields, by minimising

	the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as Cornish hedges, trees and woodland to screen development wherever possible, ensuring that any screening provided is in character with the landscape. • Ensure new buildings constructed as part of any solar PV development in this LCA match the local vernacular, in terms of colours used and scale - utilise existing farm buildings wherever possible. • Consider views from popular visitor locations to ensure they do not adversely impact on the enjoyment of the landscape. • Avoid siting solar PV development within the HLC Type of 'Upland Rough Ground'– assessed by Cornwall Council as being particularly vulnerable. • Consider views from local viewpoints and popular routes (e.g. from hill top locations) when considering the siting and design of solar PV development in the landscape – ensure development does not detract from the remote experience when within this landscape. • Ensure solar PV development does not adversely affect the distinctive features of the moorland landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the distinctive ragged horizon recognisable from afar, the distinctive openness and endless empty vastness, the sense of remoteness and lack of tracks across the open moor, the pattern of ancient fields with irregular boundaries around the moor (semi-improved pasture for livestock grazing), and the patchwork of fens, wetlands and blanket bogs at the heads of streams) – ensure choice of site and scale of development does not detract from the special qualities of these landscapes. • Protect the factors which contribute to the scenic quality of the Camel & Allen Valleys AGLV and the Caradon Hill AGLV (particularly the ancient woodland, small meadows and wetlands, and the parkland landscape around Pencarrow within the Camel & Allen Valleys, and the dominance of Caradon Hill, relicts of the mining industry, and the wooded valleys in the Caradon Hill AGLV) – ensure choice of site and scale of development does not detract from the special qualities of these landscapes.

CA33: Camel and Allen Valleys

Key Landscape Characteristics[1]

- *Undulating plateau with valleys, steeply incised in places such as the Camel valley.*
- *Valleys well wooded, especially the Camel, with estate plantations, coniferous in places and mixed woodlands.*
- *On the plateau, exposed higher land with medium scale fields and straight Cornish hedge boundaries with few trees.*
- *In the valleys, smaller scale fields with sinuous boundaries and wetlands in places. On sloping land to the south, medium scale fields with prominent Cornish hedges and hedgerow trees.*
- *Settlement is in dispersed clusters with estate farms on the plateau and small farms elsewhere. Some nucleated settlements focused on medieval churchtowns.*
- *Village churches are landmarks on the higher ground.*
- *Scatter of substantial later prehistoric hillforts and enclosures.*
- *Mills, weirs and other industrial archaeology in Camel valley.*
- *The main urban settlement of Bodmin.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	The landscape is defined by the River Camel and its tributaries, the largest being the River Allen to the north which together drain higher ground in the east (Bodmin Moor) and west (St Breock Downs). The LCA also include hills between the valleys - landform scale varies from the medium- large scale hills to the scale steep-sided river valleys and smaller feeder stream valleys. The landscape is particularly steeply incised along the Camel valley from Wadebridge to Nanstallon.		
Land cover pattern and presence of human scale features	There are small areas of particularly small scale field pattern in the north around Knightsmill and the south near Withelgoose. Scattered areas of more regular, medium scale fields are located on higher exposed ground and on sloping land to the south (north and west of Nanstallon), the east (at Cardinham Downs) and in the north (around St Trudy). This rectilinear pattern of fields has prominent Cornish hedges and hedgerow trees. The landcover is simple on the hills predominantly pasture and conifer plantations and more varied in the valleys, woodlands, river wetland and small scale fields of medieval origin, with sinuous boundaries. Human scale features include scattered farmsteads, old mill buildings, Cornish hedges as well as development associated with the main settlements.		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the busy A30, A39, A389 and the B3266. There are some restrictions in terms of smaller roads and lanes often enclosed by high and robust slate walls, and hedges. Lanes which descend steeply into the valley have necessitated cutting into the slate bedrock and are sometimes lined by over hanging trees.		
Skylines	Although the LCA description does not refer specifically to skylines, the LCA does include several hills and the LCA description notes the nineteenth century obelisk of the Bodmin Beacon which forms a visible landmark over a wide area. It also notes small villages on higher ground with distinctive churches (including St Mabyn) which are visible on the skyline.		
Perceptual qualities	This is a rural landscape with some human activity. The well wooded enclosed valley bottoms, particularly the Camel valley, are of very tranquil character (the valley at Heligan Wood being one of the most tranquil areas); least tranquil areas are associated with the largest settlement in the LCA, Bodmin, and areas following the main transport routes traversing the area. Additional human influence is evident in the powerlines crossing the landscape (from Camelford south through Wadebridge and south-east towards Victoria with a second branch from Camelford to Bodmin and continuing south).		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of' 'Medieval Farmland', which makes up a large proportion of the LCA and significant areas of 'Ancient Woodland' are assessed as of 'moderate-high' vulnerability to wind turbines. Areas of 'Post-medieval Enclosed Land' (Intakes) predominantly located in the south are assessed as of 'moderate' vulnerability. Areas of '20th Century Farmland' (Intakes) (scattered mainly throughout the north) are assessed as of 'low-moderate' vulnerability to wind energy development. Areas of 'low' vulnerability associated with the HLC Type 'Plantations and Scrub' located along some valley sides and in the south at Hustyn Downs and Great Grogley Downs.		
Distinctive			

Criteria	Lower sensitivity	⟷	Higher sensitivity
landscape features	The LCA describes the steep valleys and rivers of the Camel and Allen and their associated woodland, wetland and enclosed pastures (enjoyed by cyclists on the Camel Trail), the granite of the buildings and the distinctive character of Bodmin and Bodmin Beacon as distinctive features of this landscape. Some of these could be affected by wind energy development.		
Scenic quality	A very small part of the LCA is designated as part of the Cornwall AONB (around 2%). Large parts of the LCA (approximately 2/3 of the area) extending across the north and south and linking through the centre of the LCA fall within the Camel & Allen Valleys AGLV [NB paper mapping does not include the area between Rosenannon + Breock Downs and down to Hendra as part of the AGLV] - special qualities include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow. A small area in the east falls within the Mid-Fowey AGLV - special qualities include the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock.		
Overall sensitivity assessment	Although the presence of medium- large scale hills supporting larger fields and conifer plantations, and the presence of existing human influence could indicate lower levels of sensitivity to wind energy development, the presence of incised valleys supporting extensive broadleaved woodland (much ancient woodland), and the presence of some important skyline features increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development (**moderate-high** within small areas of AONB). The smaller scale valley systems would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the hills between the valleys is relatively large in the context of Cornwall, the height of the hills (a little over 100m AOD) mean they would be particularly sensitive to turbines at the upper end of the 'large' category. The smaller-scale stream valleys would be particularly sensitive to all but the smallest turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the hills between the valleys is relatively large in the context of Cornwall, the scale of the undulations means the landscape would be particularly sensitive to 'large' or 'very large' clusters of turbines. The smaller-scale stream valleys would be particularly sensitive to any clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small or medium clusters of turbines (or single turbines)** on the hills between the valleys (comprising turbines that may be up to the smaller end of the 'large' category) and only very small single turbines in the smaller/scale stream valleys. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the

	landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • The smaller/scale stream valleys will be particularly sensitive to larger turbines – only very small single turbines are likely to be accommodated in these areas. • Explore opportunities to integrate turbines within areas of existing commercial / industrial development, e.g. on the fringes of Bodmin. • Ensure tracks associated with development do not damage historic field patterns (particularly around Knightsmill and Withelgoose) and ensure minimum disturbance of traditional Cornish hedges, replacing any hedgebanks affected by development. • Consider views from local viewpoints and popular routes (e.g. the Camel Trail) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including prehistoric hillforts Castle Canyke (south-east of Bodmin), Castle Killibury (near Three Holes Cross), fort near Demelza, the nineteenth century obelisk of the Bodmin Beacon and church towers (e.g. St Mabyn). • Avoid, wherever possible, siting turbines within the HLC Types of 'Upland Rough Ground' and 'Ornamental' land – assessed by Cornwall Council as being particularly vulnerable to wind energy development. • Ensure wind energy development does not adversely affect the steep valleys and rivers of the Camel and Allen and their associated woodland, wetland and enclosed pastures (enjoyed by cyclists on the Camel Trail), the granite of the buildings and the distinctive character of Bodmin and Bodmin Beacon as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Camel & Allen Valleys AGLV (particularly the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Mid-Fowey AGLV (particularly the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock) – ensure choice of site and scale of development does not detract from these.

Criteria for Assessing Landscape Sensitivity to Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	This is a landscape with hidden areas (valleys) as well as some visible slopes (hills between the valleys). The valleys include the River Camel and its tributaries and the landscape is particularly steeply incised along the Camel valley from Wadebridge to Nanstallon.
Sense of openness / enclosure	This landscape offers contrasting levels of enclosure – with open hills and enclosed valleys (with broadleaved woodland).
Field pattern and scale	In the valleys fields are generally small scale, of medieval origin, with sinuous boundaries. There are small areas of particularly small scale field pattern in the north around Knightsmill and the south near Withelgoose. Scattered areas of more regular, medium scale fields are located on higher exposed ground and on sloping land to the south (north and west of Nanstallon) the east (at Cardinham Downs) and in the north (around St Trudy). This rectilinear pattern of fields has prominent Cornish hedges and hedgerow trees.
Landcover	Predominantly improved grassland/pasture and substantial tracts of coniferous and mixed woodland with some arable land, mainly on higher ground to the east and west of the Allen valley.
Perceptual qualities	This is a rural landscape with some human activity. The well wooded enclosed valley bottoms, particularly the Camel valley, are of very tranquil character (the valley at Heligan Wood being one of the most tranquil areas); least tranquil areas are associated with the largest settlement in the LCA, Bodmin, and areas following the main transport routes traversing the area. Additional human influence is evident in the powerlines crossing the landscape (from Camelford south through Wadebridge and south-east towards Victoria with a second branch from Camelford to Bodmin and continuing south).
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC type of 'Medieval Farmland', which makes up a large proportion of the LCA as of 'moderate-high' vulnerability to solar PV development. Areas of 'Post-medieval Enclosed Land' (Intakes) predominantly located in the south and areas of '20th Century Farmland' (Intakes) (scattered mainly throughout the north) are assessed as of 'moderate' vulnerability. The study did not assess the vulnerability of the 'Ancient Woodland' or 'Plantations and Scrub' HLC Types to solar PV installations.
Distinctive landscape features	The LCA describes the steep valleys and rivers of the Camel and Allen and their associated woodland, wetland and enclosed pastures (enjoyed by cyclists on the Camel Trail), the granite of the buildings and the distinctive character of Bodmin and Bodmin Beacon as distinctive features of this landscape. Some of these could be affected by PV development.
Scenic quality	A very small part of the LCA is designated as part of the Cornwall AONB (around 2%). Large parts of the LCA (approximately 2/3 of the area) extending across the north and south and linking through the centre of the LCA fall within the Camel & Allen Valleys AGLV [NB paper mapping does not include the area between Rosenannon +

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Breock Downs and down to Hendra as part of the AGLV] - special qualities include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow. A small area in the east falls within the Mid-Fowey AGLV - special qualities include the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock.		
Overall sensitivity assessment			
	Although the presence of enclosed valleys, screening provided on slower slopes, agricultural land use across much of the LCA, and human influence could indicate lower levels of sensitivity to solar PV development, the presence of open hills, predominantly pastoral character, significant tracts of semi-natural ancient woodland, medieval field patterns, and scenic quality increase levels of sensitivity so that overall, this landscape is assessed as having a **moderate-high** sensitivity to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The size and scale of enclosure of lower slopes indicates that it would be particularly sensitive to solar PV developments within the 'large' size range.		

Landscape strategy and Guidance for Solar PV Development

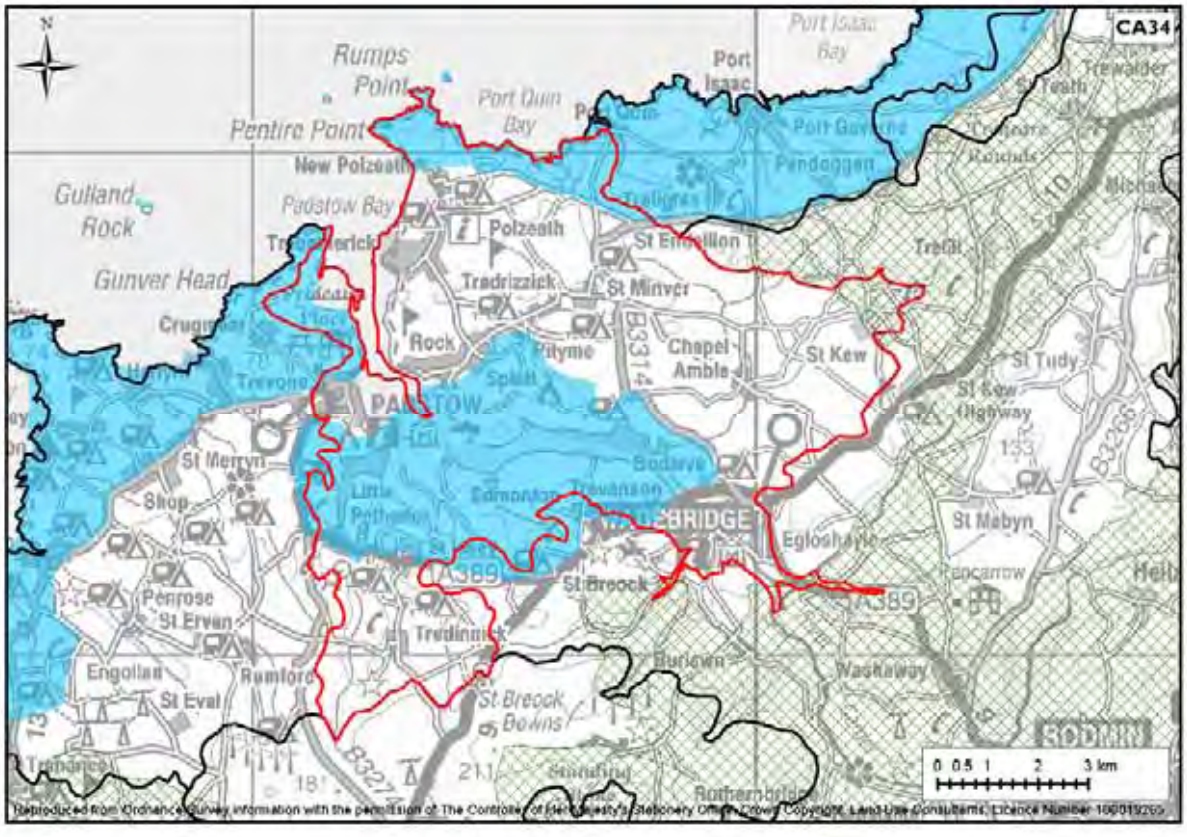
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (up to and including medium size) on lower slopes. There may be several solar PV developments in the north of the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on upper open and visible slopes - locate it on lower slopes and in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Avoid, wherever possible, siting turbines within the HLC Types of 'Upland Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. Camel Trail - popular recreational cyclepath running along the Camel river valley) when considering the siting and design of solar PV development in the landscape – avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the steep valleys and rivers of the Camel and Allen and their associated woodland, wetland and enclosed pastures (enjoyed by cyclists on the Camel Trail), the granite of the buildings and the distinctive character of Bodmin and Bodmin Beacon as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Camel & Allen

	Valleys AGLV (particularly the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Mid-Fowey AGLV (particularly the enclosed and wooded character of the Fowey Valley, the water meadows on the valley floor, the designed landscapes of Glynn House and Lanhydrock) – ensure choice of site and scale of development does not detract from these.

CA34: Camel Estuary

Key Landscape Characteristics[1]

- *Gently rolling, low lying, exposed open landscape around the Camel estuary.*
- *Strongly influenced by coastal climate to the north with softer, sheltered landscape inland.*
- *Important wetland habitats associated with estuary, streams and coast.*
- *Large areas of Coastal Sand Dunes.*
- *Trees in small tributary valleys to the estuary.*
- *Medium scale medieval field pattern with slate walls, often with exposed slate bedrock, Cornish hedges and few hedgerow trees.*
- *Clustered settlement pattern with small farms.*
- *Large tourist development close to the coast with dunes and beaches.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	The landscape is defined by the broad expanse of the mouth of the Camel and its short tributary streams draining from the surrounding higher ground. These form intimate, narrow tidal creeks where they meet the river. The landscape between the valleys is gently rolling with some areas of harder rock giving rise to the prominently rounded landform of Cant Hill (overlooking the Camel), as well as the offshore island of The Mouls. Sand dunes border the outer edges of the estuary at Daymer Bay and Harbour Cove, whilst the coastline is defined by low slate cliffs, with the headlands of Rumps Point, Steeper Point and Pentire Point jutting out into the sea.		
Land cover pattern and presence of human scale features	Land cover pattern varies between complex/ irregular land cover patterns along the estuaries/creeks and coastal edge – comprising mud flats along the creeks, sandy beaches, patches of rough grassland, heath and sand dunes – and the 'green, simple, rolling rural backcloth' between the estuaries/creeks. The coastal and more elevated parts of the LCA are open and exposed with little tree cover (fewer human scale features), whilst the more narrow stretches of the estuary and stream valleys are of a more intimate scale with human scale features including Cornish hedges, stands of mature Monterey Cypress and Monterey Pine, boats, quays, and buildings in small scale settlements.		
Tracks/transport pattern	The LCA contains the A39, the A389 and B3314 which provide access. Away from these lanes are sinuous and bounded by high hedges, providing some restrictions. There are some inaccessible areas along the estuary and the coast.		
Skylines	Although there are no key skylines or skyline features specifically mentioned as such in the LCA, the LCA refers to the prominently rounded landforms of Cant Hill, and the Rumps and The Mouls offshore. It also refers to Brea Hill (and its cluster of Bronze Age barrows) as a local landmark beside the outer estuary, The Rumps Iron Age cliff castle and the medieval churches at Padstow, St Issey, St Breock, Egloshayle, St Enodoc, St Minver and St Kew, some of which form local skyline features.		
Perceptual qualities	This is a rural man-made landscape with some development and human activity, particularly around the coastal settlements, and presence of caravan/camping sites and golf courses. Wadebridge is the largest settlement in the LCA, sitting at the head of the estuary. The popularity of the area for recreation and tourism (including users of the Camel Trail and the South West Coast Path, as well as water-based recreational users) means that significant parts of the landscape are perceived as 'busy'. This contrasts with the sheltered, tranquil and intimate creeks lying off the main estuary, as well as the more 'wild' coastline exposed to the full force of the Atlantic.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA, as of moderate-high vulnerability to wind turbines. Areas of 'Coastal Rough Ground' and 'Upland Rough Ground' (associated with inland valleys and higher ground) are assessed as of 'high' vulnerability to wind turbines, as is the small area of 'Ornamental' parkland found at Prideaux Place near Padstow. Small patches of 'Post-medieval Enclosed Land (Reorganisation of AEL)', scattered throughout the landscape, are assessed as of 'moderate' vulnerability, whilst areas of 'Modern' enclosures (Amalgamation of AEL)' and '(Intakes)' are assessed as of 'low-moderate' and 'low' vulnerability to wind energy development respectively.		

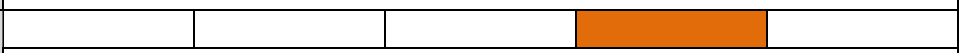
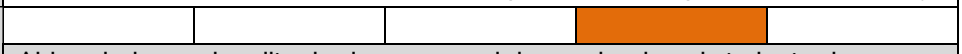
Criteria	Lower sensitivity	⟷	Higher sensitivity
	Areas of low vulnerability are also associated with the HLC Type 'Plantations and Scrub', found along some valley sides, as well as the modern development related to the main settlements in the landscape. The LCA's areas of 'Intertidal and Inshore Water' and 'Dunes' were not assessed as part of the study.		
Distinctive landscape features	The LCA records distinctive features as the wide open river estuary of the River Camel with its sandy beaches and mudflats; distinctive shaped Brea and Cant Hills and low slate cliffs alongside the estuary; Camel Trail; Prideaux Place; and A39 viaduct.		
Scenic quality	The coastal edge and much of the estuary falls within the 'Camel Estuary' part of the Cornwall AONB (35% of the LCA). Qualities that may particularly be affected by wind energy development are Cant hill as a landmark, the sheltered tranquil intimacy of the creeks and tributary valleys and the small lanes bounded by high hedges. The eastern coastline is also defined as Heritage Coast. Some small areas on the fringes of the LCA fall within the Camel & Allen Valleys AGLV (valued for the ancient woodland, small meadows and wetlands, and parkland landscape around Pencarrow).		
Overall sensitivity assessment	Although the relatively large scale and gently undulating nature of the landform, the relatively simple landcover patterns between the creeks, lack of skyline features noted in the LCA and presence of human influence could indicate lower levers of sensitivity to wind energy development, the dramatic landform of the coast, complex landcover along estuaries and creeks, narrow lanes, wild coastal edges and high scenic quality (particularly along the coast and estuary) heighten sensitivity. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development with a **moderate-high** sensitivity within the AONB. The landscape's undeveloped coastal edge, estuary/creek edges and their immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large away from the estuaries and creeks, the scale of the overlying landcover means the landscape would be particularly sensitive to 'large' turbines. The undeveloped coastal and estuary edges would be sensitive to the development of any turbines.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the scale of the landform is relatively large, the small scale of many human scale features and relatively small scale field pattern means this LCA would be particularly sensitive to 'medium', 'large' and 'very large' clusters of turbines. The undeveloped coastal and estuary edges would be sensitive to the development of any turbines		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines** comprising turbines up to and including 'medium' size located inland outside the AONB with no **wind energy development** on the undeveloped coastal/estuary edges and their immediate hinterland. Elsewhere in the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings). There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the undeveloped coastline, including the prominent headlands of Rumps Point, Steeper Point and Pentire Point. • Avoid locating turbines in the sheltered, tranquil and intimate creeks lying off the main estuary, as well as on Cant Hill which provides an important local landmark alongside the estuary, or the Rumps and The Mouls offshore. • In the context of this LCA, turbines would be most readily accommodated in the larger scale landscapes of modern or post-medieval fields on more elevated land. • Consider opportunities to integrate turbines within areas of existing commercial / industrial development, e.g. on the fringes of Wadebridge. • Avoid damage and alterations to the small-scale rural lane network (bounded by high hedges). • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the Bronze Age barrows on Brea Hill, the nationally important Rumps Iron Age cliff castle, the daymark at Stepper Point (within CA19), or medieval church towers. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground' 'Coastal Rough Ground' and 'Ornamental' parkland – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and Camel Trail) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does dominate or adversely affect the wide open character of the River Camel with its sandy beaches and mudflats; the distinctive shaped Brea and Cant Hills; the low slate cliffs alongside the estuary; the Camel Trail; Prideaux Place; or the A39 viaduct as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly Cant hill as a landmark, the sheltered tranquil intimacy of the creeks and tributary valleys and the small lanes bounded by high hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Camel & Allen Valleys AGLV (particularly the ancient woodland, small meadows and wetlands, and parkland landscape around Pencarrow) – ensure choice of site and scale of development does not detract from these.

Criteria for Assessing Landscape Sensitivity to Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	The landscape is defined by the broad expanse of the mouth of the Camel and its short tributary streams draining from the surrounding higher ground. These form intimate, narrow tidal creeks where they meet the river. The landscape around the estuary and creeks is gently rolling with some areas of harder rock giving rise to the prominently rounded landform of Cant Hill (overlooking the Camel Estuary), as well as the offshore island of The Mouls. Sand dunes border the outer edges of the estuary at Daymer Bay and Harbour Cove, whilst the coastline is defined by low slate cliffs, with the headland of Rumps Point, Steeper Point and Pentire Point jutting out into the sea.
Sense of openness / enclosure	This landscape has contrasting levels of enclosure – with the coastal margins being extremely open and exposed to the full blast of the Atlantic, with sparse tree cover and bare Cornish hedges or fences dividing fields. In contrast, the more narrow stretches of the estuary, creeks and stream valleys contain a greater the number of hedgerow trees and vegetation.
Field pattern and scale	Fields are generally small scale, of medieval origin, with sinuous boundaries – the pattern not particularly strong due to the shallow landform and replacement of hedges with fencing in parts. There are a few small patches of recently enclosed land, most notably north of Cant Hill, around Trewornan and the settlements of Padstow and Rock. The coastal edge and some valley slopes are unenclosed rough ground.
Landcover	The area is predominantly farmland – a mixture of pasture and arable, although some parts are more dominated by pasture. There are also patches of rough grassland and heath and sand dunes lie on the coast. The whole area is dominated by the wide river estuary with its mud flats and small side creeks.
Perceptual qualities	This is a rural man-made landscape with some development and human activity, particularly around the coastal settlements, and presence of caravan/camping sites and golf courses. Wadebridge is the largest settlement in the LCA, sitting at the head of the estuary. The popularity of the area for recreation and tourism (including users of the Camel Trail and the South West Coast Path, as well as water-based recreational users) means that significant parts of the landscape are perceived as 'busy'. This contrasts with the sheltered, tranquil and intimate creeks lying off the main estuary, as well as the more 'wild' coastline exposed to the full force of the Atlantic.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC Type 'Medieval Farmland', which makes up a significant proportion of the LCA, as of 'moderate-high' vulnerability to development. Areas of 'Upland Rough Ground' along valleys and on some hill slopes, 'Coastal Rough Ground' and 'Ornamental' ground associated with Prideaux Park near Padstow is assessed as of 'high' vulnerability. Small patches of 'Post-medieval Enclosed Land (Reorganisation of AEL)', scattered throughout the landscape, are assessed as of 'moderate' vulnerability, whilst areas of 'Modern' enclosures (Amalgamation of AEL)' and '(Intakes)' 'low' and 'low-moderate' vulnerability to solar PV development respectively. The LCA's areas of 'Intertidal and Inshore Water' and 'Dunes' were not assessed as

Criteria	Lower sensitivity	⟷	Higher sensitivity
	part of this study.		
Distinctive landscape features			
	The LCA records distinctive features as the wide open river estuary of the River Camel with its sandy beaches and mudflats; distinctive shaped Brea and Cant Hills and low slate cliffs alongside the estuary; Camel Trail; Prideaux Place; and A39 viaduct.		
Scenic quality			
	The coastal edge and much of the estuary falls within the 'Camel Estuary' part of the Cornwall AONB (35% of the LCA). Qualities that may particularly be affected by solar PV development are the vast openness, the sheltered tranquil intimacy of the creeks and tributary valleys, the primarily green pastoral nature of the landscape, and the field pattern. The eastern coastline is also defined as Heritage Coast. Some small areas on the fringes of the LCA fall within the Camel & Allen Valleys AGLV (valued for the ancient woodland, small meadows and wetlands, and parkland landscape around Pencarrow).		
Overall sensitivity assessment			
	Although the gently rolling landscape around the creeks, the relatively simple landcover patterns, sense of enclosure in the valleys, presence of arable land and human influence could indicate lower levers of sensitivity to solar PV development, the dramatic landform of the coast, sense of openness, complex landcover along estuaries and creeks, wild coastal edges and high scenic quality (particularly along the coast and estuary) heighten sensitivity to the extent that overall this landscape is considered to have a **moderate-high** sensitivity to solar PV. The landscape's undeveloped coastal edge and naturalistic estuarine edges and their immediate hinterland would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The landscape's predominantly small scale, irregular medieval field patterns mean that it would be particularly sensitive to solar PV developments within the 'large' size range. The undeveloped coastline would be sensitive to the development of any scale of solar PV development.		

Landscape strategy and Design Guidance for solar PV

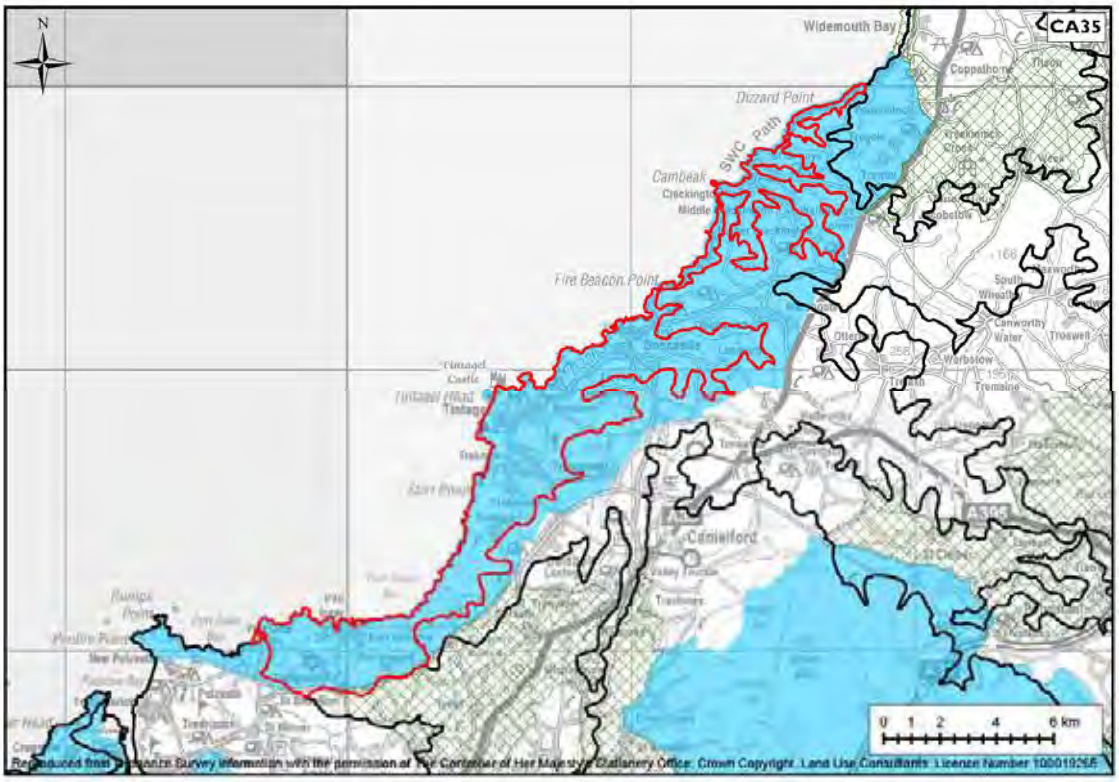
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (up to and including medium size) located on the lower slopes inland with no **solar PV development** on the undeveloped coastal/estuary edges and their immediate hinterland. Elsewhere in the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments).. There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid the location of solar PV developments along the remote and naturalistic coastal edge, including its prominent headlands at Stepper Point, Pentire Point and Rumps Point, or the naturalistic estuary edge.

	• Aim to locate solar PV developments on lower slopes and in folds in the landscape where they will have less of an influence on landscape character – avoid prominent slopes such as the hill slopes of Cant Hill. • Locate in areas containing arable fields, where the development is more likely to fit with the character of the landscape. • Preserve the field patterns, particularly relating to medieval fields, by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Use existing landscape features, such as Cornish hedges, trees and woodland to screen development wherever possible, ensuring that any screening provided is in character with the landscape. • Avoid, wherever possible, siting solar PV development within the HLC Zone of 'Rough Ground', and HLC Type of 'Ornamental' parkland associated with the Prideaux Place Estate – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and the Camel Trail) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure PV development does dominate or adversely affect the wide open river estuary of the River Camel with its sandy beaches and mudflats; distinctive shaped Brea and Cant Hills; low slate cliffs alongside the estuary; Camel Trail; Prideaux Place; and A39 viaduct as distinctive features of the LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the vast openness, the sheltered tranquil intimacy of the creeks and tributary valleys, the primarily green pastoral nature of the landscape, and the field pattern) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Camel & Allen Valleys AGLV (particularly the ancient woodland, small meadows and wetlands, and parkland landscape around Pencarrow) – ensure choice of site and scale of development does not detract from these.

CA35: Kellan Head to Millook Haven Coast

Key Landscape Characteristics[1]

- *Exposed coastline of complex slate and shales geology with rugged high cliffs with coves, promontories, stacks and small islands including the highest cliffs in Cornwall.*
- *Sloping landform from plateau to east with lower landform to the west.*
- *Strong influence of coastal winds, restricting tree growth with hedgerow trees adopting sculptured forms.*
- *Combination of medieval enclosed land, often around settlements to medium rectilinear enclosed land, some from coastal downland.*
- *Woodland occurring only in incised valleys.*
- *Coastal heath along cliffs and steep valley inlets.*
- *Distinctive small nucleated villages often associated with the coast as former ports.*
- *Slate mining remains on the coast.*
- *Tintagel castle, a major landmark.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	This dramatic coastline incorporates the highest cliffs in Cornwall at 240m AOD, as well as one of the most indented and complex sections of coast with promontories, inlets, coves, islands and stacks. The cliffs are highest in the north-eastern part of the LCA, where the coastline is deeply incised by valleys with large streams cascading meeting the sea at Boscastle, Crackington Haven and Millook Haven. The middle section of the coast is centred on Tintagel, displaying a more complex geology displayed in stacks, small islands and features such as Tintagel Island. To the southwest, the lower cliffs are vertical or chambered, crossed by small incised valleys running at right angles to the coast. Whilst the high cliffs of the LCA give a great sense of scale to the landscape, the steeply incised valleys provide a contrasting intimate character.		
Land cover pattern and presence of human scale features	Landcover pattern is simpler in elevated areas (comprising improved grassland/pasture with some arable) with greater complexity in the valleys where woodland, scrub, bracken and neutral grassland occur. Rough ground, coastal heath on the cliffs and dwarf oak woodland on the cliffs at Dizzard contribute to the variety. Field scale varies with small scale medieval fields in places and small patches of rectilinear medium grain enclosed coastal rough ground in others. Human scale features include the network of slate-faced Cornish hedges and stone walls, occasional wind-sculpted trees and sparse buildings mainly in the valleys.		
Tracks/transport pattern	B roads wind their way along part of the coast serving the main settlements. These run inland at points leaving sections of coastline poorly accessed – e.g. south of Tintagel. Narrow lanes, often on steep gradients and between high hedges, serve farmsteads and scattered dwellings. Some of the older lanes are sunken into the land with high banks on either side.		
Skylines	Tintagel castle is noted as a major landmark in the LCA. The LCA notes that where the Tresparrett Down borders the coast, the cliffs rise to up to 240m AOD, the highest in the county – this area therefore forms an important skyline when looking along the coast. The tumbled and slumped profiles are also if interest. Other features mentioned as being prominent in the 'historic' section of the LCA include the 'spectacular' Willapark headland Iron Age cliff castle; a late prehistoric earthwork in a commanding position at Castle Point, St Gennys; Tintagel, Trevalga and Forrabury churches on the coastal plateau; and the remains of the slate industry which form interesting coastal features.		
Perceptual qualities	This landscape is defined by its exposed and 'wild' coastline, which contrasts with its more sheltered and intimate valleys. Settlement comprises a few nucleated settlements, some of which focus on small harbours or landing places, as well as those that lie on the plateau behind the coastal cliffs with small historic havens at the foot of steep-sided stream valleys. Boscastle combines the two forms and has historic centres on the coastal slope and around its picturesque harbour. The highly remote and tranquil qualities of much of the LCA are eroded locally by 20th century housing and tourism-related development expanding the traditional medieval farm settlements (e.g. Treknow, Trewarmett) and relating to the popular tourism destinations of Tintagel and Boscastle. Caravan / camping sites also feature in the landscape. Although the Delabole wind farm features in some eastward views, it is clearly in a separate LCA.		
Historic landscape			

Criteria	Lower sensitivity	⟷	Higher sensitivity
character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Rough Ground' ('Coastal' and 'Upland' – the latter found alongside the steep valley slopes) as of 'high' vulnerability to development. Areas of 'Medieval' farmland, which cover much of the landscape, are assessed as of 'moderate-high' vulnerability. Small areas of 'Recreational' land around Tintagel are assessed as of 'moderate' vulnerability to wind energy development, as are locations of former slate mining ('Industrial: Relict') scattered throughout. The LCA's patches of 'Post-Medieval (Intakes)'and 'Modern Enclosures (Intakes)'are assessed as of 'moderate-low' and 'low' vulnerability respectively. The lowest vulnerability scores are associated with the landscape's areas of modern development.		
Distinctive landscape features			
	The LCA describes the castles, port villages and hamlets with remains of slate mining; strong Cornish hedges with slate detailing; the striking geology of the coast; Rocky Valley and St Nectans Glen; and the coastal woodland at Dizzard as distinctive features.		
Scenic quality			
	Apart from a tiny fraction of the land against the boundary with CA36 near Trelights, all of the LCA falls entirely within the 'Pentire Point to Widemouth' part of the Cornwall AONB. Qualities that may particularly be affected by wind energy development are the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges. Most of the LCA is also defined as Heritage Coast.		
Overall sensitivity assessment			
	Although the large scale of the landform and generally simple land cover patterns on the slopes could indicate a lower sensitivity to wind turbine development, the LCA's dramatic and wild coastline, important coastal silhouettes of natural cliff forms, notable skyline features and high scenic quality heighten levels of sensitivity to turbines to the extent that overall this LCA is considered to have a **high** sensitivity to wind energy development.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Due to the scale of the landscape and its proximity to the coastal edge, this LCA would be highly sensitivity to all but single very small turbines associated with farm buildings.		
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Due to the scale of the landscape and its proximity to the coastal edge, this LCA would be highly sensitivity to all but single very small turbines associated with farm buildings.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings). (i.e. no turbines on the rough ground along the coastal edge or its

	immediate hinterland).
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the rugged and highly visible coastline. • Avoid siting wind turbines within areas of historically important medieval field systems, particularly the Forrabury Stitches and locations with surviving strip fields. • Locate very small turbines next to existing buildings such as farms and businesses. • Avoid damage and alterations to the network of narrow lanes tightly enclosed by slate-faced Cornish hedges. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the nationally important Tintagel Castle complex, Iron Age cliff castle on the Willapark headland, late prehistoric earthworks at Castle Point and Scheduled Monument of Trevinnick Camp. • Avoid siting turbines within the HLC Zone of 'Rough Ground' (Coastal and Upland) – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does adversely affect Rocky Valley, St Nectans Glen or the coastal woodland at Dizzard which are recorded as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	This dramatic coastline incorporates the highest cliffs in Cornwall at 240m AOD and visually prominent coastal slopes. The deeply incised valleys provide further dramatic interest with large streams cascading meeting the sea at Boscastle, Crackington Haven and Millook Haven. The middle section of the coast is centred on Tintagel, displaying a complex geology displayed in stacks, small islands and features such as Tintagel Island.		
Sense of openness / enclosure	This is a highly exposed landscape strongly influenced by coastal winds, restricting tree growth with hedgerow trees adopting sculptured forms. Sparsely vegetated or bare slate-faced hedges and stone walls mark the field pattern, providing little shelter. The exposed coastline and plateau contrast greatly with the sheltered stream valleys, where woodland and vegetation cover combine with the topography to create a sense of enclosure.		
Field pattern and scale	To the north, a sinuous network of treeless hedges and stone walls enclose small-scale medieval fields and emphasises the rolling landform. The medieval open field system at Forrabury (the Forrabury Stitches), is a distinctive feature, and the landscape includes numerous examples of fossilised stripfield systems. Small patches of modern, rectilinear fields are found on areas of higher ground along the Delabole Ridge, forming a medium-scale landscape pattern.		
Landcover	The land cover is predominantly improved grassland/pasture with some arable mainly to the south. Woodland, scrub, bracken and neutral grassland is mainly confined to the steep valleys in the north of the area. Rough ground and coastal heath cover the cliffs.		
Perceptual qualities	This landscape is defined by its exposed and 'wild' coastline, which contrasts with its more sheltered and intimate valleys. The relatively remote and tranquil qualities of much of the LCA are eroded locally by 20th century housing and tourism-related development expanding the traditional medieval farm settlements (e.g. Treknow, Trewarmett) and relating to the popular tourism destinations of Tintagel and Boscastle. Caravan / camping sites also feature in the landscape. The intensively farmed character of many parts of the landscape also conveys a sense of human influence.		
Cultural heritage	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Rough Ground' ('Coastal' and 'Upland' – the latter found alongside the steep valley slopes) as of 'high' vulnerability to development. Areas of 'Medieval' farmland, which cover much of the landscape, are assessed as of 'moderate-high' vulnerability. Small areas of 'Recreational' land around Tintagel are assessed as of 'moderate' vulnerability to solar PV development, as are locations of former slate mining ('Industrial:Relict') scattered throughout. The LCA's patches of 'Post-Medieval (Intakes)'and 'Modern Enclosures (Intakes)'are both assessed as of 'moderate' vulnerability.		
Distinctive landscape features	The LCA describes the castles, port villages and hamlets with remains of slate mining; strong Cornish hedges with slate detailing; the striking geology of the coast; Rocky Valley and St Nectans Glen; and the coastal woodland at Dizzard as distinctive features.		

Criteria	Lower sensitivity	⟷	Higher sensitivity
Scenic quality	Apart from a tiny fraction of the land against the boundary with CA36 near Trelights, all of the LCA falls entirely within the 'Pentire Point to Widemouth' part of the Cornwall AONB. Qualities that may particularly be affected by solar PV development are the wooded valleys, coastal heath, green pastoral fields, and strong field pattern (including Medieval open strip fields). Most of the LCA is also defined as Heritage Coast.		
Overall sensitivity assessment	Although the LCA's gently undulating landform and farmed character could indicate a lower sensitivity to solar PV development, its open character, the visual prominence of the coastal slopes, medieval open field systems, exposed and 'wild' coastline and high scenic quality heighten levels of sensitivity to such a degree that the landscape is considered to have a **high** sensitivity to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	This LCA would be highly sensitive to any PV development, except for the smallest scale schemes linked to existing buildings and settlement.		

Landscape strategy and Guidance for Solar PV

Landscape strategy	The landscape strategy is for **a landscape without solar PV development** (except for very small very occasional developments associated with existing buildings and settlement in the settled farmed areas).
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development in sheltered folds in the landscape where it will be least visible and have least influence on landscape character – avoid prominent slopes or the rugged and wild coastal edge. • Preserve the strong field patterns, particularly relating to ancient fields by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields. • Avoid developing in Medieval open strip fields. • Prevent damage to the landscape's narrow rural roads during the installation phase. • Ensure new buildings constructed as part of a solar PV development match the local vernacular, in terms of colours used and scale. Utilise existing farm buildings to house inverters wherever possible. • Ensure the layout and design of schemes follows the contours and enclosure patterns of the landscape to reduce its visual impacts. • Avoid, wherever possible, siting solar PV development within the HLC Zone of 'Rough Ground' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape, and avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the spectacular rocky

	carns, the rounded outlines of the upland moors, numerous prehistoric structures, or landmark hilltop structures as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the the wooded valleys, coastal heath, green pastoral fields, and strong field pattern including Medieval open strip fields) – ensure choice of site and scale of development does not detract from these.

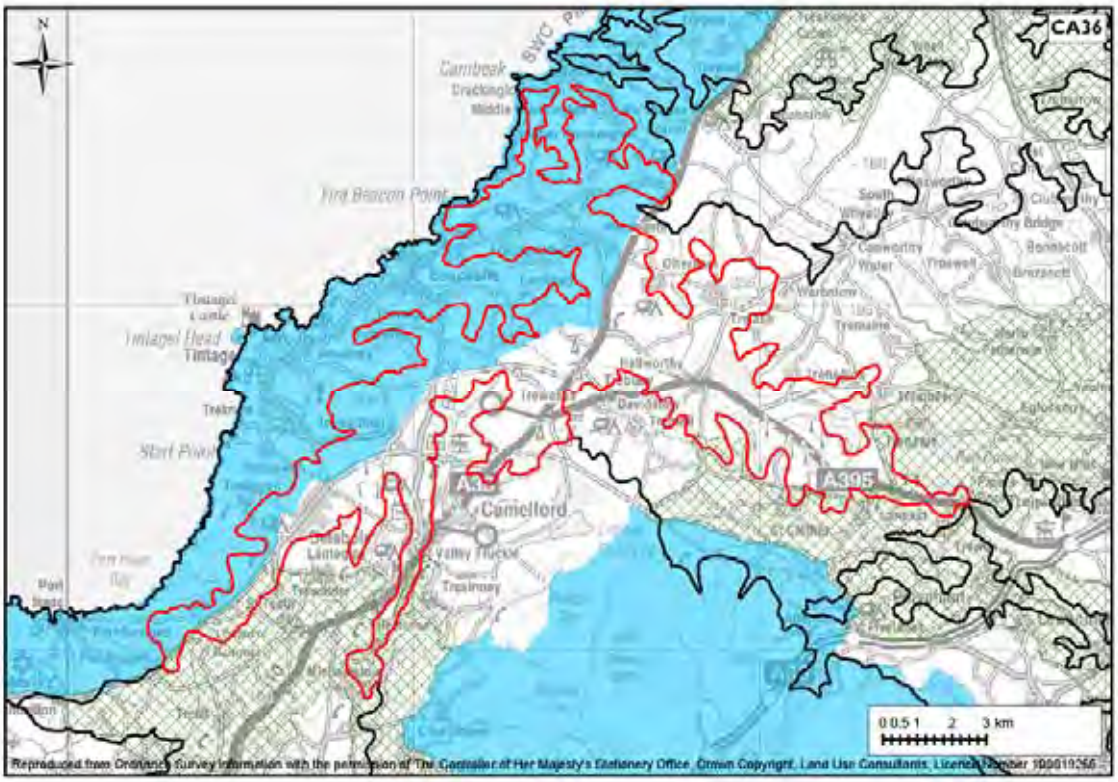
CA36: Delabole Plateau

Key Landscape Characteristics[1]

- *Elevated, gently undulating plateau underlain by slates, shales and limestone forming backcloth to the coast.*
- *Exposed and open landscape strongly influenced by coastal winds, restricting tree growth and making hedgerow trees adopt sculptured forms.*
- *Cornish hedges with local stone, turf banks and beech hedges.*
- *Pastoral landscape including predominantly improved grassland and limited arable with small areas of*
- *"Culm grassland" (wetland on the Culm measures with Purple Moor Grass and Rush Pasture and Fens)*
- *Areas of Lowland Heathland in the east part of the area.*
- *Settlement thinly dispersed with exception of some small clusters and larger linear settlements of*
- *Camelford and Delabole to the south.*
- *Proliferation of vertical elements in places including windfarms, pylons and masts.*
- *Concentration of commercial development on A39.The western edge of the LCA is with the Pentire Point to Widemouth section of the Cornwall AONB.*
- *The south-western is in the Camel and Allen Valleys AGLV.*
- *The south-eastern tip is within the North Petherwin AGLV.*

(see map overleaf)

[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study http://www.cornwall.gov.uk/default.aspx?page=20139 (accessed January 2011)


CA36
Camelford
A395
0 0.5 1 2 3 km
Reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty's Stationery Office. Crown Copyright. Land Use Consultants. Licence Number 100019260

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	An open, large-scale gently undulating plateau. Valleys are occasional and generally shallow, but narrow.
Land cover pattern and presence of human scale features	Mostly simple land cover pattern of large scale fields of improved grassland, pasture and arable land, coniferous plantations with some lowland heath. The field pattern varies across this LCA, with patches of more ancient long narrow fields with sinuous boundaries on lower ground, whilst the overall field pattern is more modern, large-scale rectilinear fields. Human scale features include hedgerows and settlements (including farmsteads and churches), and some larger settlements.
Tracks/transport pattern	There is a good transport network across this LCA, including a number of major roads, particularly in the north. Major routes include the A39, which runs from NE to SW and the A396, which runs through southern parts of the LCA. Other major roads include the B3266, B3314 and the B3263. There are also numerous smaller country roads and farm tracks, including on higher ground - broad verges with a variety of lush wild grasses and wildflowers are characteristic of this area.
Skylines	The LCA description indicates that this area forms an important back drop to the coast (it refers to '*sweeping skylines forming a backcloth to the coast)*'. However, skylines are generally large scale and simple – with some existing built features such as two wind farms, pylons and the factory at Davidstow/Starapark. Important landmark features include groups of Bronze Age barrows (crowning high ground at Starapark, on the south side of Hendraburnick Downs, Tichbarrow and Otterham Downs, and the ridge overlooking the coastal slope at Tresparrett Downs and Condolden Beacon) and Warbstow Bury Iron Age hillfort and, although not mentioned in the LCA description, Helsbury Castle.
Perceptual qualities	The LCA is a landscape with considerable human influence, much of it recent. This includes the farmed nature of the landscape, extensive road network, a factory, pylons and two wind farms. There is a general tendency for the western/northern stretches of the LCA (closer to the coast) to be more tranquil than the south-eastern stretches, where there are larger settlements and other associated development. Some parts of the LCA retain a historic rural character.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of moderate-high vulnerability to wind turbines. Other HLC types which cover large tracts of the LCA are 'Post-Medieval Farmland', which is moderately vulnerable to wind development, and '20th Century Farmland (Intakes)', which has low vulnerability to wind development. There are also some patches of 'Upland Rough Ground', which are assessed as having high vulnerability to wind development and small patches of 'Plantation and Scrub', which were considered unsuitable for wind energy development and therefore not assessed.
Distinctive landscape features	The LCA description notes the small to medium sized field pattern with Cornish hedges using local stone, wind turbines, barrows and tumuli, and sculpted beech hedging as distinctive features of the landscape. Most of these would not be affected be wind energy development.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Scenic quality	Part of the LCA (northwest edge) is designated as part of the 'Pentire Point to Widemouth' section of the Cornwall AONB (38% of the LCA). The scenic qualities of this part of the AONB, which may particularly be affected by wind energy development include the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges. Bodmin Moor is also located close by. The south-western tips of the LCA are within the Camel and Allen Valleys AGLV. The scenic qualities of this part of the landscape include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow. The south-eastern tip of the LCA is within the North Petherwin AGLV - scenic qualities include the heavily wooded and enclosed character of the valleys. Other parts of the plateau are not designated.		
Overall sensitivity assessment	Although the coastal part of the ridge forms an important setting to the coast and the LCA contains some historic skyline features (Bronze Age barrows, Warbstow Bury Iron Age hillfort and Helsbury Castle) which could indicate a higher sensitivity to wind energy development, the large scale plateau landform, simple skyline across much of the LCA, large scale simple land cover pattern and presence of human influence lower sensitivity to wind energy development to the extent that overall, this LCA is considered to have **low-moderate** sensitivity to wind development on the plateau (which generally lies outside the AONB) and **moderate-high** for areas of the plateau closer to the coast and within the AONB. An exception to this is the western branch of the plateau around Delabole which, although within the AONB, is of equivalent sensitivity to the area south-east of the road [NB this is not shown on the mapping because only LCA and AONB boundaries have been using for mapping purposes]. The north-western edge of the ridge directly above Beeny and Rusey Cliffs would be particularly sensitive to wind energy development.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landscape is relatively large, this LCA would be particularly sensitive to turbines at the larger end of the 'large' category.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the landform is relatively large scale, the scale of the undulations and extent of medieval farmland and associated field patterns and human scale features means that this LCA would be particularly sensitive to 'large' and 'very large' clusters of turbines.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with wind energy development** on the ridge comprising small or medium clusters of turbines up to the smaller end of the 'large' category (including the western branch of the plateau around Delabole within the AONB). Within the remainder of the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA and the ridge may be perceived as having wind farms visible in different directions that collectively have a strong influence on the character of the landscape.
Siting Guidance	See Annex 2 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines on the undeveloped cliff edge (around Beeny and Rusey Cliffs) and site development back from the plateau edge along the coast to minimise views of turbines from the coastal slopes (CA35). • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, visible historic landmarks on the skyline, such as Helsbury Castle and Warbstow Bury Camp. • Avoid siting wind turbines within the HLC Type 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and Bodmin Moor) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the medium sized field pattern, Cornish hedges using local stone, barrows and tumuli, or sculpted beech hedging as distinctive features of the landscape. • There is AONB on either side of this LCA – it will be particularly important to protect the factors which contribute to the scenic quality of these parts of the Cornwall AONB, particularly the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges on the coast and the sense of remoteness of Bodmin Moor – ensure choice of site and scale of development does not detract from these. • Protect the ancient woodland, small meadows, wetlands and parkland landscape around Pencarrow in the Camel and Allen Valleys AGLV. • Protect the heavily wooded and enclosed character of the valleys of the North Petherwin AGLV. • Considering the cumulative impact of further development will be a key issues in this LCA..

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform	A large-scale gently undulating plateau with many visible slopes, which affords long views. Valleys are occasional and generally shallow, but narrow.
Sense of openness / enclosure	This is an open landscape with little sense of enclosure – it is strongly influenced by its elevated position and the nearby coast. There are a few valleys which tend to be shallow, but quite narrow. The fields tend to be bounded by low hedges.
Field pattern and scale	There are substantial areas of Anciently Enclosed Land which are characterised by long and relatively narrow fields with sinuous boundaries fossilising parcels of medieval stripfields. On higher ground, the undulating landform is emphasised by the larger-scale rectilinear fields of Recently Enclosed Land.
Landcover	Large areas of former rough ground and heath are now enclosed and used for agriculture, mostly as improved grassland and pasture. Small areas of lowland heath and "Culm grassland" are present. Other areas of semi-natural habitats such as scrub and bracken are small, usually along streams and fragmented. There are few trees, though many present are mature, except for areas that have been taken in for conifer plantations.
Perceptual qualities	The LCA is a landscape with considerable human influence, much of it recent. This includes the farmed nature of the landscape, extensive road network, a factory, pylons and two wind farms. There is a general tendency for the western/northern stretches of the LCA (closer to the coast) to be more tranquil than the south-eastern stretches, where there are larger settlements and other associated development. Some parts of the LCA retain a historic rural character.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of 'moderate-high' vulnerability to solar PV development. Other HLC types which cover large tracts of the LCA are 'Post-Medieval Farmland', which is 'moderately' vulnerable to solar PV development, and '20th Century Farmland(Intakes)', which has 'moderate' vulnerability to solar PV development. There are small patches of 'Upland Rough Ground' assessed as having 'high' vulnerability to solar PV development, and small patches of 'Plantation and Scrub' which were considered unsuitable for solar PV development and therefore not assessed through the HLC.
Distinctive landscape features	The LCA description notes the small to medium sized field pattern with Cornish hedges using local stone, wind turbines, barrows and tumuli, and sculpted beech hedging as distinctive features of the landscape. Some of these could be affected be solar PV development.
Scenic quality	Part of the LCA (northwest edge) is designated as part of the 'Pentire Point to Widemouth' section of the Cornwall AONB (38% of the LCA). Qualities that may particularly be affected by solar PV development are the wooded valleys, coastal heath, green pastoral fields, and strong field pattern (including Medieval open strip fields. Bodmin Moor is also located close by. The south-western tips of the LCA are within the Camel and Allen Valleys AGLV. The scenic qualities of this part of the landscape include the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Pencarrow. The south-eastern tip of the LCA is within the North Petherwin AGLV - scenic qualities include the heavily wooded and enclosed character of the valleys. Other parts of the plateau are not designated.		
Overall sensitivity assessment	 Although the modern field pattern and human influence on the landscape could indicate a lower sensitivity to solar PV development, the extremely open character, presence of many visible slopes, dominance of pasture and high scenic quality along the coastal edge increases sensitivity to solar PV development to the extent that overall, this LCA is considered to have **moderate-high** sensitivity to solar PV development. The north-western facing slopes forming a backdrop to the coast would be particularly sensitive.		
Sensitivities to different scales of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	In more open areas or areas with smaller scale field patterns, the LCA is likely to be particularly sensitive to 'large' scale solar PV development.		

Landscape strategy and Guidance for Solar PV Development

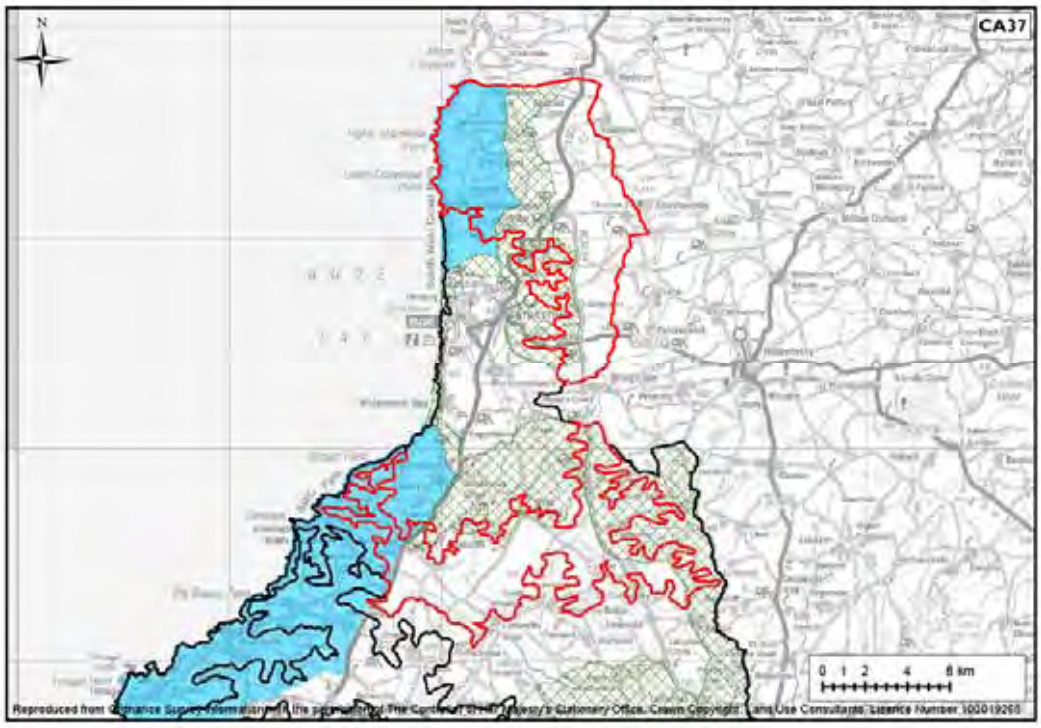
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (scale will relate to landscape scale which varies across the LCA) in more sheltered locations and **no solar PV development** on the north-western facing slopes forming a backdrop to the coast. Within the remainder of the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments). There may be more than one solar PV development in the LCA, but they should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the technical report for generic siting and design guidance. In addition, the following siting and design guidance should apply to any solar PV developments within this LCA: • Avoid locating on the north-western facing slopes forming a backdrop to the coast. • Locate PV development in sheltered folds in the plateau, or areas enclosed by vegetation, where it will be less visible and have less of an influence on landscape character. • Use existing landscape features, such as plantations or woodland, to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid siting solar PV development within the HLC Type 'Upland Rough Ground' - assessed by Cornwall Council as being highly vulnerable. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and from Bodmin Moor) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development

	where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the small to medium sized field pattern with Cornish hedges using local stone, barrows and tumuli, and sculpted beech hedging as distinctive features of this landscape. • There is AONB on either side of this LCA – it will be particularly important to protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the wooded valleys, coastal heath, green pastoral fields, and strong field pattern including Medieval open strip fields along the coast and the sense of remoteness within Bodmin Moor) – ensure choice of site and scale of development does not detract from these. • Protect the ancient woodland, small meadows and wetlands of the Camel and Allen Valleys, parkland landscape around Pencarrow in the Camel and Allen Valleys AGLV – ensure choice of site and scale of development does not detract from these. • Protect the heavily wooded and enclosed character of the valleys of the North Petherwin AGLV – ensure choice of site and scale of development does not detract from these.

CA37: Western Culm Plateau

Key Landscape Characteristics[1]

- *Exposed windswept gently undulating hard rock plateau, rising from cliffs at the coast inland.*
- *Plateau forms source of the Tamar and is dissected by steep sided valleys with small rivers forming small cliff waterfalls where they meet coast.*
- *Dark cliffs of folded, interbedded shales and mudstones form wavecut platforms and a dramatic coastline.*
- *Fields are small scale in parts with medium scale rectilinear more recent enclosure on the higher ground and larger to the south.*
- *Improved grassland and pasture dominates with some arable and strong hedgerow pattern of Cornish hedges and hedgerows.*
- *Woodland within tranquil sheltered valleys with some coastal Lowland Heathland on steep slopes.*
- *Wetland and grasslands forming "Culm grassland" in valleys are a nationally important habitat for the range of fauna and flora*
- *Forms extension of Culm from east.*
- *Small hamlets and farmsteads are linked by narrow lanes.*
- *Small stone bridges across numerous streams.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A high gently undulating plateau surrounding the Bude Basin (LCA 31) which rises from 130 AOD at the coast to 233 AOD inland in the north (Hedon Moor) and to 160 AOD in the south. In the north the rolling plateau is dissected by steep sided valleys (including the River Coombe and its tributaries), of varying scale, with small rivers forming cliff waterfalls along the coast. This high ground includes the source of the River Tamar near Crimp. In the south the medium-large scale rolling landform is drained by shallow stream valleys flowing to the River Ottery and Tamar.
Land cover pattern and presence of human scale features	The LCA description notes that the intimate steep wooded valleys, coastal heath and tall dramatic cliffs of the coastline contrast strongly with the '*open almost empty countryside elsewhere*'. Field pattern varies with smaller scale fields (of medieval origin), with sinuous boundaries, dominating the north and with larger more rectilinear modern fields. This is a predominantly pastoral landscape including improved grassland, pasture and patches of arable land. Areas of woodland and scrub are mostly found following the valleys. Human scale features are mostly in valleys and include Cornish hedges, small hamlets, isolated farmsteads, and numerous small stone bridges crossing streams.
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A39 and B3254. There are some restrictions in terms of small single track roads and farm tracks weaving up and down stream valleys connecting hamlets and isolated farms. The south of the LCA has a less dense network of small single track roads.
Skylines	Although the LCA description does not refer specifically to skylines, it notes Kilkhampton church which stands out as a landmark in the northern end of the LCA and the large white satellite dishes of the Signals Organisation Station on the coast, south of Morwenstow, which form prominent features on the skyline. The OS maps indicate powerlines which run north-east to south-west across the southern end of the LCA.
Perceptual qualities	This landscape is sparsely populated, particularly in the southern part, with scattered hamlets, isolated farmsteads and churchtowns such as Morwenstow, St Gennys and Whitstone. In places settlements and churches are hidden in steep valleys. High cliffs along the coastline have resulted in it remaining undeveloped along the coastal edge which adds to the perception of naturalness influenced by the wild untamed nature of the sea (with the exception of the areas near the signals station near the coast north of the Coombe valley). The open and exposed nature of the plateau in the south and east can be bleak, particularly in bad weather. Areas of least tranquillity are associated with the major transport route the A39 (running north-south through the centre of the north and the west of the southern part of the LCA), and the A3072 which runs east-west linking to Bude. The powerlines which run north-east to south-west across the southern end of the LCA also provide additional reminders of human intervention in the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA (predominantly in the north), as of 'moderate-high' vulnerability to wind turbines. Areas of 'Post-medieval Enclosed Land' (Reorganisation of AEL) and 'Post-medieval

Criteria	Lower sensitivity	⟷	Higher sensitivity
	Enclosed Land' (Intakes) scattered throughout the LCA, with larger patches of Intakes present in the south, are assessed as of 'moderate' vulnerability to wind turbines. Areas of '20th Century Farmland' (Amagamations of AEL) are assessed as of 'low moderate' vulnerability and areas of '20th Century Farmland' (Intakes) are assessed as of 'low' vulnerability to wind turbines.		
Distinctive landscape features	The LCA describes the intimate steep wooded valleys, coastal heath and tall dramatic cliffs of the coastline (contrasting strongly with the open almost empty countryside elsewhere), modest stone bridges (allowing access to farms are abundant inland). Local materials - slate and sandstone, cob, formerly limewashed or slate hung and now often rendered, some thatched buildings and slate hanging as distinctive features of this landscape. Some of these could be affected by wind energy development.		
Scenic quality	The coastal edge in the north and areas near the coast in the south fall within the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (19% of the LCA is AONB) and part is also defined as Heritage Coast. Qualities that may particularly be affected by wind energy development are the sense of grand scale, the skylines of Morwenstow Church and Hawker's Hut as distinctive features, and the narrow lanes that weave up and down the steep valley sides. A significant central strip of the north of the LCA falls within the Gooseham - Launcells AGLV - special qualities include the hedges and woodland within the valleys. The eastern fringes of the south of the LCA fall within the Upper Tamar AGLV. Special qualities include the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, the ancient woodland and hedges. Small areas of the south of the LCA fall within the Week St. Mary AGLV - special qualities include the sinuous hedges, 'lumpy' nature of the topography, and the native trees and woodlands in the valley bottom.		
Overall sensitivity assessment	Although the medium-large scale of the plateau, simple skylines, simple landcover patterns (on the plateau) and presence of existing tracks could indicate a lower sensitivity to wind energy development, the scenic coast, intimate valleys and presence of some historic skyline features increase sensitivity to wind energy development. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development outside the AONB and **moderate-high** within the AONB. The intimate steep wooded valleys and dramatic scenic coastline and its immediate hinterland would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of this plateau landform is medium-large, the scale of the valleys and overlying field patterns means that the landscape would be particularly sensitive to turbines within the upper end of the 'large' category in the southern portion of the LCA and turbines within the 'large' category in the northern portion of the LCA. The smaller scale landscapes of the valleys would also be particularly sensitive to turbines within the 'small' and 'medium' categories. The dramatic scenic coastline would be sensitive to the development of any turbines.		
Sensitivities to	The size of undulations and fields mean that the LCA would be particularly sensitive		

Criteria	Lower sensitivity	⟷	Higher sensitivity
different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	to 'medium', 'large' and 'very large' clusters of turbines. The dramatic scenic coastline would be sensitive to all scales of wind energy development.		

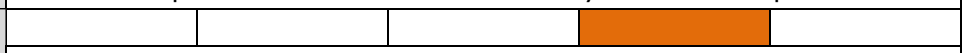
Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single or small groups of turbines** comprising turbines that may be up to the smaller end of the 'large' scale on the inland southern plateau, single or small groups of turbines comprising turbines that may be up to and including 'medium' scale on the inland northern plateau, and no turbines along the undeveloped coast or its immediate hinterland. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines on the undeveloped coastal edge. • Avoid damage and alterations to the small-scale rural lane network including the small stream bridges when transporting turbines to site. • Ensure tracks associated with development do not damage historic field patterns (east of Gooseham and around Grimscott and Ossington in the north of the LCA) and ensure minimum disturbance of traditional Cornish hedges, replacing any hedgebanks affected by development. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including Kilkhampton church. • Avoid siting turbines within the HLC Types of 'Upland Rough Ground' 'Coastal Rough Ground' and 'Ornamental' parkland (at Crosstown and Stowe Barton) – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (including views from the South West Coast Path) when considering the siting and design of wind energy development in the landscape – ensure turbines do not adversely affect the experience of walking along the path and if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the intimate steep wooded valleys, coastal heath, tall dramatic cliffs of the coastline, modest stone bridges or local vernacular as distinctive features of this landscape • Protect the factors which contribute to the scenic quality of the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (particularly the sense of grand scale, the skylines of Morwenstow Church and Hawker's Hut, and the narrow lanes that weave up and down the steep valley sides) – ensure choice of site and scale of development does not detract from these.

	• Protect the factors which contribute to the scenic quality of the Gooseham - Launcells AGLV (particularly the hedges and woodland within the valleys) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Upper Tamar AGLV (particularly the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, and the ancient woodland and hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Week St. Mary AGLV (particularly the sinuous hedges, 'lumpy' nature of the topography, and the native trees and woodlands in the valley bottom) – ensure choice of site and scale of development does not detract from these.

Criteria for Assessing Landscape Sensitivity to Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	A high gently undulating plateau surrounding the Bude Basin (LCA 31) which rises from 130 AOD at the coast to 233 AOD inland in the north (Hedon Moor) and to 160 AOD in the south. In the north the rolling plateau is dissected by some steep sided valleys (including the River Coombe and tributaries), of varying scale, with small rivers forming cliff waterfalls along the coast. In the south the medium-large scale rolling landform is drained by shallow stream valleys flowing to the River Ottery and Tamar. The east side of the Upper Tamar Lake reservoir lies in the north of the LCA.		
Sense of openness / enclosure	This LCA is relatively open particularly across the exposed plateau in the south and east and along the windswept coast in the north west. Wooded river valleys, particularly in the north and a strong pattern of Cornish hedges and hedgerows throughout the LCA offer shelter and a sense of enclosure.		
Field pattern and scale	Field pattern varies in scale. Smaller scale fields (of medieval origin), with sinuous boundaries, dominate the north; these are interspersed with small areas of medium-scale, more regular modern fields. In the east (along the side of the Upper Tamar) field pattern has been altered by the removal of field boundaries and along the north coastal edge small scale pattern is lost where former coastal rough ground is enclosed as large scale fields. A significant proportion of the south of the LCA is dominated by larger more rectilinear modern fields.		
Landcover	This is a predominantly pastoral landscape including improved grassland, pasture and some patches of arable land. Areas of woodland and scrub are mostly found following the valleys with some small areas of Lowland Heathland along the coastal strip.		
Perceptual qualities	This landscape is sparsely populated, particularly in the southern part, with scattered hamlets, isolated farmsteads and churchtowns such as Morwenstow, St Gennys and Whitstone. In places settlements and churches are hidden in steep valleys. High cliffs along the coastline have resulted in it remaining undeveloped along the coastal edge which adds to the perception of naturalness influenced by the wild untamed nature of the sea (with the exception of the areas near the signals station near the coast north of the Coombe valley). The open and exposed nature of the plateau in the south and east can be bleak, particularly in bad weather. Areas of least tranquillity are associated with the major transport route the A39 (running north-south through the centre of the north and the west of the southern part of the LCA), and the A3072 which runs east-west linking to Bude. The powerlines which run north-east to south-west across the southern end of the LCA also provide additional reminders of human intervention in the landscape.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA (predominantly in the north), as of 'moderate-high' vulnerability to solar PV. Areas of 'Post-medieval Enclosed Land' (Reorganisation of AEL) and 'Post-medieval Enclosed Land' (Intakes) scattered throughout the LCA, with larger patches of Intakes present in the south, are assessed as of 'moderate' vulnerability to solar PV development.		
Distinctive			

Criteria	Lower sensitivity	⟷	Higher sensitivity
landscape features	The LCA describes the intimate steep wooded valleys, coastal heath and tall dramatic cliffs of the coastline (contrasting strongly with the open almost empty countryside elsewhere), modest stone bridges (allowing access to farms are abundant inland). local materials - slate and sandstone, cob, formerly limewashed or slate hung and now often rendered, some thatched buildings and slate hanging as distinctive features of this landscape. Some of these could be affected by solar PV development.		
Scenic quality	 The coastal edge in the north and areas near the coast in the south fall within the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (19% of the LCA is AONB) and part is also defined as Heritage Coast. Qualities that may particularly be affected by solar PV development are the coastal heathland, valleys clothed in broadleaved woodland, 'culm' grassland, and the irregular field pattern. A significant central strip of the north of the LCA falls within the Gooseham - Launcells AGLV - special qualities include the hedges and woodland within the valleys. The eastern fringes of the south of the LCA fall within the Upper Tamar AGLV. Special qualities include the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, the ancient woodland and hedges. Small areas of the south of the LCA fall within the Week St. Mary AGLV - special qualities include the sinuous hedges, 'lumpy' nature of the topography, the native trees and woodlands in the valley bottom.		
Overall sensitivity assessment	 Although the undulating nature of the topography and presence of some enclosure, the agricultural land use and presence of existing human influences could indicate a lower sensitivity to solar PV development, the open and visible hills, predominantly pastoral character of the landscape and relatively high scenic quality (particularly along the coast) increase levels of sensitivity. Overall this landscape is considered to have a **moderate** sensitivity to solar PV development outside the AONB and **moderate-high** within the AONB. The exposed upper slopes and scenic coastline (and its immediate hinterland/coastal slopes) would be particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	In more open areas or areas with smaller scale field patterns, the LCA is likely to be particularly sensitive to 'large' scale solar PV development. The dramatic naturalistic coastline would be sensitive to the development of any scale of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

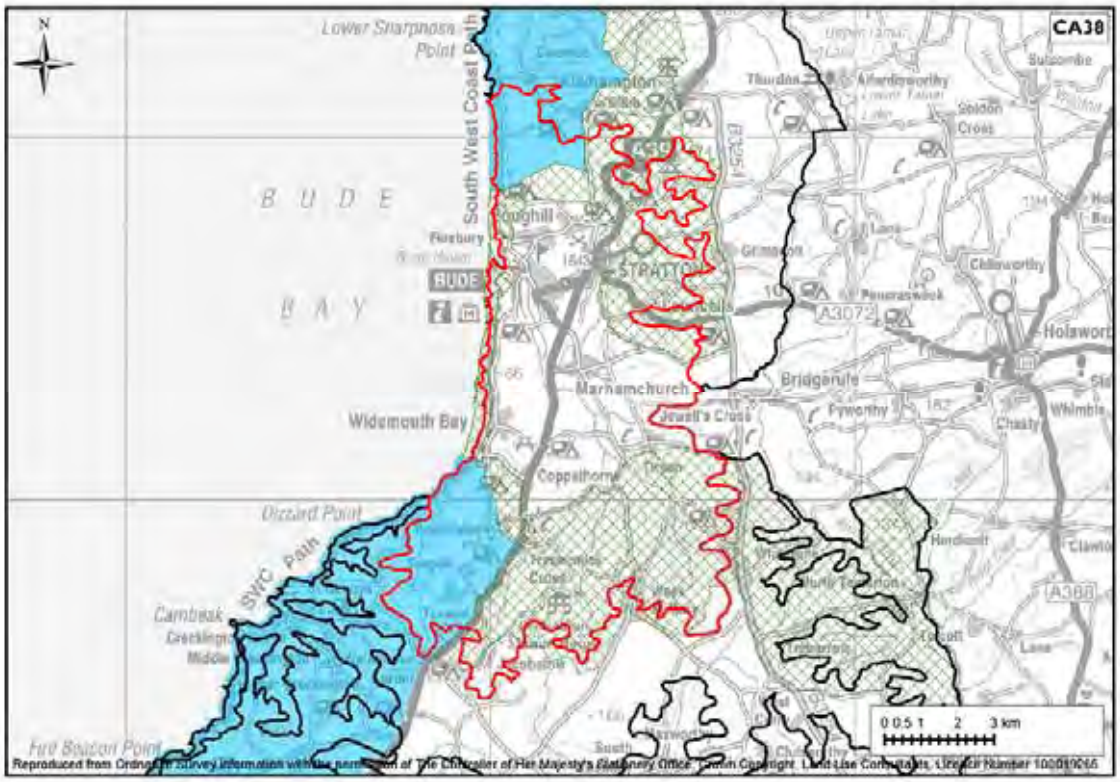
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (size of development should relate to landscape scale which varies within the LCA), with **no solar PV development** along the undeveloped coast and its immediate hinterland. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments. There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.

Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on slopes close to the coastal edge, where PV panels would be particularly visible. • Aim to locate development on lower slopes or in sheltered folds in the landform where it will be less visible and have less of an influence on landscape character. • Preserve the strong field patterns, particularly relating to irregularly-shaped medieval fields (east of Gooseham and around Grimscott and Ossington in the north of the LCA), by minimising the number of adjacent fields that are developed and setting PV panels back from the edges of fields • Use existing landscape features, such as Cornish hedges, trees and woodland to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. . • Avoid, wherever possible, siting solar PV development within the HLC Zone of 'Rough Ground', and HLC Type of 'Ornamental' parkland (at Crosstown and Stowe Barton) - assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (including the South West Coastal Path) when considering the siting and design of solar PV development in the landscape – ensure PV panels do not adversely affect the experience of walking along the path and avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the intimate steep wooded valleys, coastal heath, dramatic cliffs, 'empty' character of the countryside elsewhere, the modest stone bridges, or local vernacular as distinctive features of this landscape • Protect the factors which contribute to the scenic quality of the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (particularly the coastal heathland, valleys clothed in broadleaved woodland, 'culm' grassland, and the irregular field pattern) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Gooseham - Launcells AGLV (particularly the hedges and woodland within the valleys) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Upper Tamar AGLV (particularly the parkland character and mature trees on the floodplain, the designed character of the landscapes at Werrington and Ogbeare Hall, the ancient woodland and hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Week St. Mary AGLV (particularly the sinuous hedges, 'lumpy' nature of the topography, the native trees and woodlands in the valley bottom) – ensure choice of site and scale of development does not detract from these.

CA38: Bude Basin

Key Landscape Characteristics[1]

- *Gently undulating basin with underlying shales and sandstones stretching inland from coast with incised valleys to the south.*
- *Straight coastline of low, unstable cliffs and long sandy beaches.*
- *Major tourism centre on the coast centred on Bude with commercialised beaches and caravan/campsites.*
- *Inland areas of improved grassland and pasture and arable occuring within a medium scale field pattern.*
- *Woodland generally restricted to small stream valleys with large mixed coniferous plantation to the south.*
- *Modern building associated with Bude and Stratton has a strong visual influence.*
- *Vernacular architecture of white painted cottages with thatch roofs.*



[1]Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform and scale	This LCA forms a large scale undulating basin - located between the Irish Sea on the west and rising gently to the surrounding areas of the Culm Plateau (CA37) providing a catchment for River Neet and its many small valleys and feeder streams. The coastline is distinctively straight with low cliffs interspersed with a number of sandy beaches.		
Land cover pattern and presence of human scale features	This LCA is dominated by a pattern of medium scale fields (of medieval origins) with sinuous, often irregular boundaries. There are patches of some larger more modern rectilinear fields (east of Stibb, and near Whalesborough near the coast and around Newmill inland in the south). Landcover pattern varies although predominantly pastoral (including improved grassland and pasture on valley floors and some patches of arable land), in addition there are some areas of woodland on the valley bottoms becoming more extensive on the steeper and narrower valley sides to the south and north. Extensive reed beds are located along the coast in the lower Neet Valley. Human scale features include holiday campsites and caravan parks, occasional thatch cottages, Cornish hedges, groups of mature trees associated with scattered farmsteads and humped-backed bridges.		
Tracks/transport pattern	Contains existing roads and vehicular tracks including the A39, A3073 and A3072. There are some restrictions in terms of some ancient lanes and humpback bridges (associated with a dismantled railway route through the area).		
Skylines	Although the LCA description does not refer specifically to skylines, it notes the church towers of the medieval villages including such as Marhamchurch, Launcells Barton and Stratton as distinctive features of the landscape. The adjacent LCA37 (Western Culm Plateau) has more prominent skylines than this LCA.		
Perceptual qualities	This coastal lowland is relatively settled, particularly concentrated around Bude and Stratton. Developed areas and human influence are associated with areas along the busy route of the A39. However, the smaller valleys in the south of the LCA show fewer signs of human intervention and are more tranquil as a result.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA (predominantly in the north), as of 'moderate-high' vulnerability to wind turbines. Areas of '20th Century Farmland' (Amalgamations of Anciently Enclosed Land) are assessed as of 'low-moderate' vulnerability. Areas of 'Post-medieval Enclosed Land' (Intakes) occurring in three main patches throughout the LCA, are assessed as of 'moderate' vulnerability. Small areas of 'Coastal Rough Ground' are assessed as of 'high' vulnerability and areas of 'Plantations and Scrub' located mostly along the many small stream valleys are assessed as of 'low' vulnerability to wind turbines.		
Distinctive landscape features	The LCA describes the medium scale field pattern with hedgerows, woodland in valleys to the south, coastal heath in patches, the marshes in the River Neet and the church towers of the medieval villages as distinctive features of this landscape. Some of these could be affected by wind energy development.		
Scenic quality	Part of the coastal edge in the north falls within the Hartland (Morwenstowe and Kilkhampton) part of the Cornwall AONB and part of the coastal edge in the south		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	falls within the Pentire Point to Widemouth part of the Cornwall AONB (16% of the LCA is AONB). Part is also defined as Heritage Coast. Qualities of the Hartland (Morwenstowe and Kilkhampton) part of the AONB that may particularly be affected by wind energy development are the sense of grand scale, the skylines of Morwenstow Church and Hawker's Hut as distinctive features, and the narrow lanes that weave up and down the steep valley sides. Qualities of the Pentire Point to Widemouth part of the Cornwall AONB that may particularly be affected by wind energy development are the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges. The remainder of the coastal strip falls within the Bude Coast AGLV - special qualities include the open character of the coastal strip. A portion of the north-eastern edge falls within the Gooseham - Launcells AGLV - special qualities include the hedges and woodland within the valleys. A sizable portion of the south-east of the LCA falls within the Week St. Mary AGLV - special qualities include the sinuous hedges, 'lumpy' nature of the topography, and the native trees and woodlands in the valley bottom.		
Overall sensitivity assessment			Although the large scale of the undulating catchment basin, relatively simple landcover pattern and strong human influence in parts could indicate lower levels of sensitivity to wind energy development, the presence of medium scale fields (of medieval origins), the relatively high scenic quality (particularly on the coast), presence of ancient lanes and landmark church towers increase levels of sensitivity. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development outside the AONB and **moderate-high** within the AONB. The undeveloped coastal edge and its immediate hinterland would be particularly sensitive.
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***			The size of the undulations and size of the fields mean this landscape would be particularly sensitive to turbines within the 'large' category. The smaller scale landscapes of the feeder stream valleys in the east and south of the LCA would also be particularly sensitive to turbines within the 'medium' category. The undeveloped coastal edge would be sensitive to the development of any turbines.
Sensitivities to different cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***			The size of the undulations and size of the fields mean that this LCA would be particularly sensitive to 'medium', 'large' and 'very large' clusters of turbines. The small-scale wooded valleys of the upper Neet River (in the north of the LCA) and Millook Haven (in the south of the LCA) would also be sensitive to 'small' turbine clusters. The undeveloped coastal edge would be sensitive to the development of any turbines.

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional single turbines or small clusters of turbines** located inland away from the coastal edge and comprising turbines that may be up 'medium' size (turbine and cluster size should relate to landscape scale which varies within the LCA), and **no wind energy developments** along the undeveloped coastal edge or its immediate hinterland.

	Elsewhere in the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings).. There may be more than one wind energy development in the LCA, but they should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA : • Avoid locating wind energy developments along the undeveloped coastal edge. • Consider locating wind turbines in association with existing businesses and industries on brownfield sites on the edge of the larger settlements. • Avoid damage and alterations to the small-scale rural road network including the humpback bridges. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path and Compass Point) when considering the siting and design of wind energy development in the landscape – ensure development does not adversely affect experience of travelling this path or visiting this point, and if development will be visible aim for a balanced composition as viewed from these sensitive areas. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including church towers of the medieval villages including such as Marhamchurch, Launcells Barton and Stratton. • Avoid siting turbines within the HLC Type 'Coastal Rough Ground' - assessed by Cornwall Council as being highly vulnerable to wind energy development. • Ensure wind energy development (including ancillary features) does not adversely affect the medium scale field pattern with hedgerows, woodland in valleys to the south, coastal heath, marshes in the River Neet, or church towers of the medieval villages as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (particularly the sense of grand scale, the skylines of Morwenstow Church and Hawker's Hut, and the narrow lanes that weave up and down the steep valley sides) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Pentire Point to Widemouth part of the Cornwall AONB (particularly the 'unspoilt' nature of the cliffs, and the network of narrow lanes and hedges) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Bude Coast AGLV (particularly the open character of the coastal strip) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Gooseham - Launcells AGLV (particularly the hedges and woodland within the valleys) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Week St. Mary AGLV (particularly the sinuous hedges, 'lumpy' nature of the topography, the native trees and woodlands in the valley bottom) – ensure choice of site and scale of development does not detract from these.

Criteria for Assessing Landscape Sensitivity to Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	This LCA forms a large scale undulating basin with some hidden areas as well as some visible slopes – land rises gently to the surrounding areas of the Culm Plateau (CA37) providing a catchment for River Neet and its many small valleys and feeder streams. The coastline is distinctively straight with low cliffs interspersed with a number of sandy beaches.		
Sense of openness / enclosure	This landscape has contrasting levels of enclosure with the coast being mostly open and exposed to the Irish Sea, with sparse tree cover. Inland the undulating topography formed by the rivers and feeder streams of the catchment basin produce both open hill tops and sheltered valleys.		
Field pattern and scale	This LCA is dominated by a medium scale field pattern (of medieval origins) with sinuous, often irregular boundaries. There are patches of some larger more modern rectilinear fields (east of Stibb, and near Whalesborough near the coast and north of Newmill inland).		
Landcover	Predominantly agricultural land with a mixture of improved grassland/pasture (a significant amount of which is permanent pasture on valley floors) and arable land. There are also areas of woodland along the valleys and extensive reed beds along the low-lying coastal areas of the Neet valley. The coastal edge supports a narrow strip of heathland and scrub.		
Perceptual qualities	This coastal lowland is relatively settled, particularly around Bude and Stratton. Developed areas and human influence are associated with the busy A39. The smaller valleys in the south of the LCA show less signs of human intervention and are more tranquil as a result.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC type of 'Medieval Farmland', which makes up a significant proportion of the LCA (predominantly in the north), as of 'moderate-high' vulnerability to solar PV development. Areas of '20th Century Farmland' (Amalgamations of AEL) are assessed as of 'low-moderate' vulnerability. Areas of 'Post-medieval Enclosed Land' (Intakes) occurring in three main patches throughout the LCA, are assessed as of 'moderate' vulnerability and small areas of 'Coastal Rough Ground' are assessed as of 'high' vulnerability to solar PV development. The study did not assess the vulnerability of the 'Plantations and Scrub' HLC Type to solar PV installations.		
Distinctive landscape features	The LCA describes the medium scale field pattern with hedgerows, woodland in valleys to the south, coastal heath in patches, the marshes in the River Neet and the church towers of the medieval villages as distinctive features of this landscape. Some of these could be affected by solar PV development.		
Scenic quality	Part of the coastal edge in the north falls within the Hartland (Morwenstowe and Kilkhampton) part of the Cornwall AONB and part of the coastal edge in the south falls within the Pentire Point to Widemouth part of the Cornwall AONB (16% of the LCA is AONB). Part is also defined as Heritage Coast. Qualities of the Hartland (Morwenstowe and Kilkhampton) part of the AONB that may particularly be affected by solar PV development are the coastal heathland,		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	valleys clothed in broadleaved woodland, 'culm' grassland, and the irregular field pattern. Qualities of the Pentire Point to Widemouth part of the Cornwall AONB that may particularly be affected by solar PV development are the wooded valleys, coastal heath, green pastoral fields, and strong field pattern (including Medieval open strip fields). The remainder of the coastal strip falls within the Bude Coast AGLV - special qualities include the open character of the coastal strip. A portion of the north-eastern edge falls within the Gooseham - Launcells AGLV - special qualities include the hedges and woodland within the valleys. A sizable portion of the south-east of the LCA falls within the Week St. Mary AGLV - special qualities include the sinuous hedges, 'lumpy' nature of the topography, and the native trees and woodlands in the valley bottom.		
Overall sensitivity assessment			
	Although the LCA includes some low-lying areas, some arable cropping and considerable human influence which could indicate a lower sensitivity to solar PV development, the open character (particularly of the upper slopes and coastal edge), the predominantly pastoral character, medieval field patterns and relatively high scenic quality (particularly along the coast) increase levels of sensitivity. Overall this landscape is considered to have a **moderate** sensitivity to solar PV outside the AONB and **moderate-high** within the AONB. The open and undeveloped coastline and its immediate hinterland would be would be particularly sensitive to solar PV development.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The size of the undulations (including small scale stream valleys) and predominantly medium scale, irregular medieval field patterns mean that this LCA would be particularly sensitive to solar PV developments within the 'large' size range. The open and undeveloped coastline would be sensitive to the development of any scale of solar PV development.		

Landscape strategy and Guidance for Solar PV Development

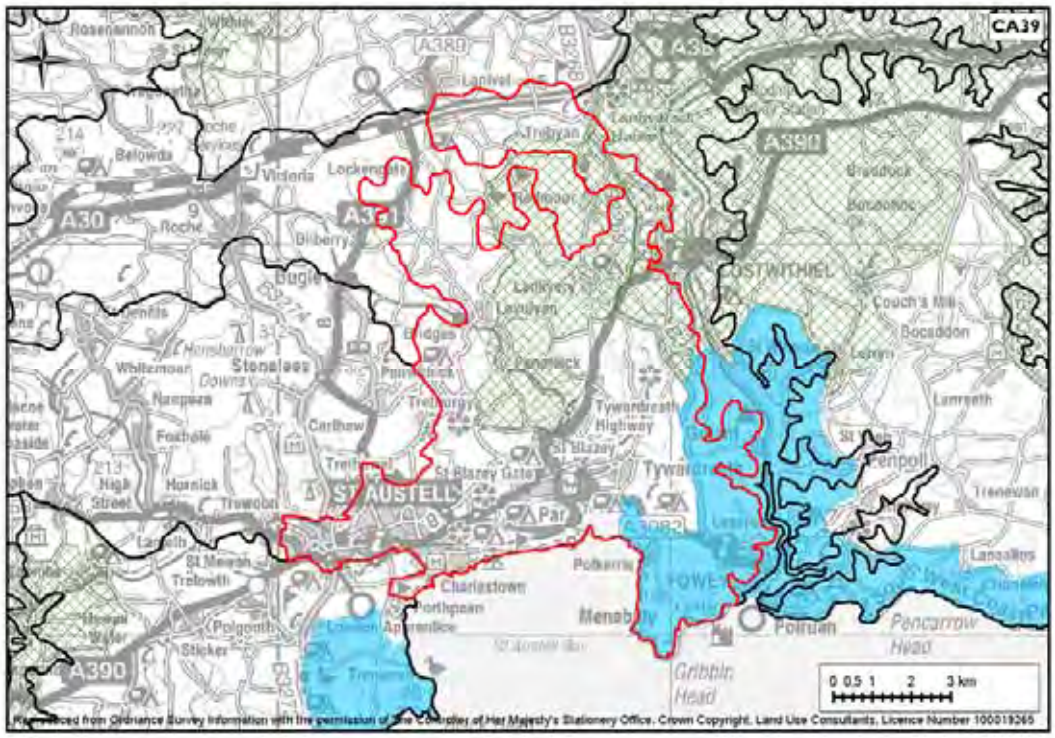
Landscape strategy	The landscape strategy is for **a landscape with occasional solar PV developments** (up to and including medium size) on lower slopes and folds in the landscape, with **no solar PV development** along the open and undeveloped coastal edge/slopes or its immediate hinterland. Elsewhere within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments. There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating development on the undeveloped open coastal edge or on coastal slopes, where PV panels would be particularly visible. • Locate PV development in sheltered folds in the landscape where it will be less visible and have less of an influence on landscape character. • Use existing landscape features, such as woodlands, tree belts and high Cornish

	hedges to screen development and ensure that any additional screening provided is in character with the landscape. • Avoid locating solar PV development on valley floors which tend to be open and have significant areas of permanent pasture or marshes. • Avoid siting solar PV development within the HLC Zone of 'Rough Ground', assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path or Compass Point) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect the strong field pattern, woodland in valleys to the south, coastal heath, or marshes in the River Neet as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Hartland (Morwenstoew and Kilkhampton) part of the Cornwall AONB (particularly the coastal heathland, valleys clothed in broadleaved woodland, 'culm' grassland, and the irregular field pattern) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Pentire Point to Widemouth part of the Cornwall AONB (particularly the wooded valleys, coastal heath, green pastoral fields, and strong field pattern (including Medieval open strip fields) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Bude Coast AGLV (particularly the open character of the coastal strip) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Gooseham - Launcells AGLV (particularly the hedges and woodland within the valleys) – ensure choice of site and scale of development does not detract from these. Protect the factors which contribute to the scenic quality of the Week St. Mary AGLV (particularly the sinuous hedges, 'lumpy' nature of the topography, the native trees and woodlands in the valley bottom) – ensure choice of site and scale of development does not detract from these.

CA39: St Austell Bay and Luxulyan Valley

Key Landscape Characteristics[1]

- *Long sandy beaches fringed with vegetated dunes, cliffs and development including tourist infrastructure and holiday homes.*
- *The western coastal stretches are highly developed with residential and commercial buildings.*
- *Strongly undulating pasture farming plateau inland, with long views down towards coast.*
- *Small woods and linear woodland along river valleys and streams, including Luxulyan and Prideaux valleys.*
- *Industrial development around St Blazey, and suburban belt on fringes of main urban area of St Austell.*
- *Luxulyan Valley has high concentration of early 19th C industrial remains.*
- *The south-eastern corner of the LCA is with the South Coast Eastern section of the Cornwall AONB.*
- *A small area in the east of the LCA is within the Boconnoc AGLV.*
- *A sizeable chunk of the northern LCA is within the Luxulyan Valley and Helman Tor AGLV.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A rolling plateau heavily incised with small deep valleys – the hills afford long views from the central stretches of the LCA (e.g. Penpillick) down to the coast. The coast comprises cliffs, long sandy beaches and an alluvial estuary at Par.
Land cover pattern and presence of human scale features	Landcover pattern is dominated by an irregular pattern of medieval fields bounded with sinuous Cornish hedges with trees. The pattern has been altered in places by the removal of boundaries during the twentieth century. There is also extensive woodland on the steep valley sides around Prideaux and Luxulyan Valley and Wet Woodland in the shallower valley north of Tywardreath. Human scale features include tourist and residential development along the coast, plus hedgerows and smaller settlements inland.
Tracks/transport pattern	The LCA contains some major roads, including the A391 in the west, A390, which runs across the LCA, the B3269, which runs from N to S, and the B3268. Elsewhere are generally windy lanes. Gribbin Head has little access.
Skylines	Although the LCA description does not specifically refer to a skyline, it notes Helman Tor, Par Docks and the smoking chimneys of the clay dries, the Treffry Viaduct and the Daymark at Gribben Head as distinctive features. It also notes Castle Dore Iron Age Hillfort as a historic feature.
Perceptual qualities	This LCA contains considerable human settlement, including two large settlements, whilst the surrounding countryside retains a rural character, and appealing rural and long coastal views. The settlements are mainly historic and retain heritage features such as medieval churches. There is an extensive road network, and some unsympathetic extension to the settlements. The area around Luxulyan and Redmoor, and around Gribbin Head is particularly tranquil.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of moderate-high vulnerability to wind turbines. Other HLC types which cover large tracts of the LCA are '20th Century Settlements', which have 'low' vulnerability to wind development, and '20th Century Farmland (Amalgamations)', which also has low vulnerability to wind development. There are patches of 'Post-Medieval Enclosed Land' which has moderate vulnerability to wind development, and 'Plantation and Scrub', which was considered unsuitable for wind energy development and therefore not assessed through the HLC. There are also a few areas of Upland Rough Ground in the north of the LCA around Red Moor and Luxulyan, which has 'high' vulnerability to wind development, and 'Ornamental' areas at Tregrehan, Prideaux, Menabilly and Pelyn, which are 'moderate/highly' vulnerable to wind development.
Distinctive landscape features	The LCA description lists Helman Tor; St Austell Bay; sandy beaches, golf course and caravan site at Carlyon Bay and Par; Par Docks and the smoking chimneys of the clay dries; extensive wooded estate of Menabilly on eastern edge of area (associated with Daphne du Maurier); the Luxulyan Valley and Treffry Viaduct; the Daymark at Gribben Head; the Eden Project; the Gardens at Tregrehan and Pine Lodge; and Charlestown as distinctive features of the landscape. Some of these could be affected by wind turbine development – particularly the prominence of Helman Tor, the smoking chimneys of the clay dries at Par Docks, the Treffry Viaduct and the Daymark at Gribben Head.

Criteria	Lower sensitivity	⟷	Higher sensitivity
Scenic quality	The south-eastern corner of the LCA is within the South Coast Eastern section (the Fowey Ria) of the Cornwall AONB (15% of the LCA is designated as AONB). Qualities that may particularly be affected by wind energy development include the spectacular promontory of Gribben Head with its prominent beacon, and the panoramic views along the coast and across the Fowey Estuary. A sizeable chunk of the northern LCA is within the Luxulyan Valley and Helman Tor AGLV - special qualities include boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature, the woodlands within the Luxulyan Valley, the dominance of the Treffry Viaduct as a landmark within the Luxulyan Valley, and the ornamental character of the landscape at Prideaux. A small area in the east of the LCA is within the Boconnoc AGLV - special qualities include Restormel Castle as a prominent feature and the ornamental parkland character of the Boconnoc Estate.		
Overall sensitivity assessment	Although the relatively large scale rolling plateau landform and presence of human influence could indicate a lower sensitivity to wind energy development, the presence of some skyline features, tranquil areas at Luxulyan and Redmoor, and Gribbin Head, areas of upland rough ground and relatively high scenic quality increase sensitivity. Overall, this LCA is considered to have **moderate** sensitivity to wind energy development outside the AONB and **moderate-high** within the AONB. The undeveloped coast and its immediate hinterland, the wooded valleys and upland rough ground would be particularly sensitive.		
Sensitivities to turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	Although the scale of the landform is relatively large this LCA would be particularly sensitive to turbines at the upper end of the 'large' category. The undeveloped coast, wooded valleys and upland rough ground would be particularly sensitive to any turbines.		
Sensitivities to cluster sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	Although the landform is relatively large scale, the scale of the undulations and scale of the overlying landcover pattern means this LCA would be particularly sensitive to 'large' or 'very large' clusters of turbines. The smaller scale landscapes to the west would also be particularly sensitive to 'medium' scale clusters.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for a **landscape with occasional single turbines or small to medium sized clusters of turbines** (depending on scale of the landscape, which varies across the LCA), comprising turbines that may be up to the smaller end of the large scale category with **no turbines** on the undeveloped coast or its immediate hinterland, in the steep wooded valleys or on upland rough ground. Within the AONB a **landscape without wind energy development** (except for occasional very small scale single turbines linked to existing buildings eg farm buildings). There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.

Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Avoid locating turbines on the undeveloped coast, in the steep wooded valleys or on upland rough ground. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, visible historic landmarks on the skyline, such as Gribbin Head and lighthouse, and Castle Dore. • Consider views from local viewpoints and popular routes (e.g. Helman Tor, the South West Coastal Path and Saints Way) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not dominate or adversely affect Helman Tor, the smoking chimneys of the clay dries at Par Docks, the Treffry Viaduct or the Daymark at Gribben Head as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the spectacular promontory of Gribben Head with its prominent beacon, and the panoramic views along the coast and across the Fowey Estuary) - ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Luxulyan Valley and Helman Tor AGLV (including the boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature, the woodlands within the Luxulyan Valley, the dominance of the Treffry Viaduct as a landmark within the Luxulyan Valley, and the ornamental character of the landscape at Prideaux) or the Boconnoc AGLV (including Restormel Castle as a prominent feature and the ornamental parkland character of the Boconnoc Estate) - ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform			
	A rolling plateau heavily incised with small deep valleys – the hills afford long views from the central stretches of the LCA (e.g. Penpillick) down to the coast. The coast comprises cliffs, long sandy beaches and an alluvial estuary at Par.		
Sense of openness / enclosure			
	Sense of openness and enclosure varies across the LCA, with some strong undulations and wooded valleys in central and northern parts of the LCA creating some enclosed, intimate landscapes. South of Penpillick, the landform opens up with a coastal plain running down to the coast, creating a more open landscape with fewer trees and long views to the sea.		
Field pattern and scale			
	The field pattern varies across this LCA, but many fields are fairly small and irregularly shaped, particularly in the west and north of the LCA.		
Landcover			
	This is an area of pastoral farmland with improved grassland and arable with trees together with extensive woodland in the larger valleys and small areas of rough ground in the valleys and in the northern part of the LCA. The coastal area west of Par with its sandy beaches has largely been subsumed by extensive urban development and recreational/tourism uses.		
Perceptual qualities			
	This LCA contains considerable human settlement, including two large settlements, whilst the surrounding countryside retains a rural character, and appealing rural and long coastal views. The settlements are mainly historic and retain heritage features such as medieval churches. There is an extensive road network, and some unsympathetic extension to the settlements. The area around Luxulyan and Redmoor, and around Gribbin Head is particularly tranquil.		
Historic landscape character			
	Cornwall Council's HLC Sensitivity Mapping for solar PV development assesses the HLC types of 'Medieval Farmland' which make up over half of the LCA, as of moderate-high vulnerability to solar PV development. Other HLC types which cover large tracts of the LCA are '20th Century Settlements', was considered unsuitable for solar PV development and therefore not assessed through the HLC, and '20th Century Farmland (Amalgamations)', which also has 'low' vulnerability to solar PV development. There are patches of 'Post-Medieval Enclosed Land' which has 'moderate' vulnerability to solar PV development, and 'Plantation and Scrub', which was considered unsuitable for solar PV development and therefore not assessed through the HLC. There are also a few areas of Upland Rough Ground in the north of the LCA around Red Moor and Luxulyan, which has 'high' vulnerability to solar PV development, and 'Ornamental' areas at Tregrehan, Prideaux, and Pelyn, which are also 'highly' vulnerable to solar PV development.		
Distinctive landscape features			
	The LCA description lists Helman Tor; St Austell Bay; sandy beaches, golf course and caravan site at Carlyon Bay and Par; Par Docks and the smoking chimneys of the clay dries; extensive wooded estate of Menabilly on eastern edge of area (associated with Daphne du Maurier); the Luxulyan Valley and Treffry Viaduct; the Daymark at Gribben Head; the Eden Project; the Gardens at Tregrehan and Pine Lodge; and Charlestown as distinctive features of the landscape. Some of these could be affected by solar PV development – particularly the rough ground of Helman Tor, the extensive wooded estate of Menabilly on eastern edge of area (associated with Daphne du Maurier), and the Gardens at Tregrehan and Pine Lodge.		
Scenic quality			

Criteria	Lower sensitivity	⟷	Higher sensitivity
	The south-eastern corner of the LCA is within the South Coast Eastern section (the Fowey Ria) of the Cornwall AONB (15% of the LCA is designated as AONB). Qualities that may particularly be affected by solar PV development are the spectacular and well wooded Menabilly Valley, the medieval field patterns, the vineyards visible amongst the more traditional agricultural uses, and the exposed rugged character of the coast and Gribben Head. A sizeable chunk of the northern LCA is within the Luxulyan Valley and Helman Tor AGLV - special qualities include boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature, the woodlands within the Luxulyan Valley, the dominance of the Treffry Viaduct as a landmark within the Luxulyan Valley, and the ornamental character of the landscape at Prideaux. A small area in the east of the LCA is within the Boconnoc AGLV - special qualities include Restormel Castle as a prominent feature and the ornamental parkland character of the Boconnoc Estate.		
Overall sensitivity assessment			Although the undulating landform including some fairly enclosed areas, the presence of human influence on the landscape and presence of some areas of arable land could indicate lower sensitivity to solar PV development, the sense of openness on the coastal plain, the largely pastoral character of the landscape and the presence of areas of rough ground and broadleaf woodland increase sensitivity to solar PV development. Overall, this LCA is considered to have **moderate** sensitivity to solar PV development outside the AONB and **moderate-high** within the AONB. The coastal edge and its immediate hinterland, and areas of rough ground would be particularly sensitive.
Sensitivities to different scales of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The scale of fields in this LCA means that this LCA would be particularly sensitive to 'large' scale solar PV development. The smaller scale field patterns in the west may also be particularly sensitive to 'medium' scale developments. The coastal edge and areas of rough ground would be particularly sensitive to any solar PV development.		

Landscape strategy and Guidance for Solar PV Development

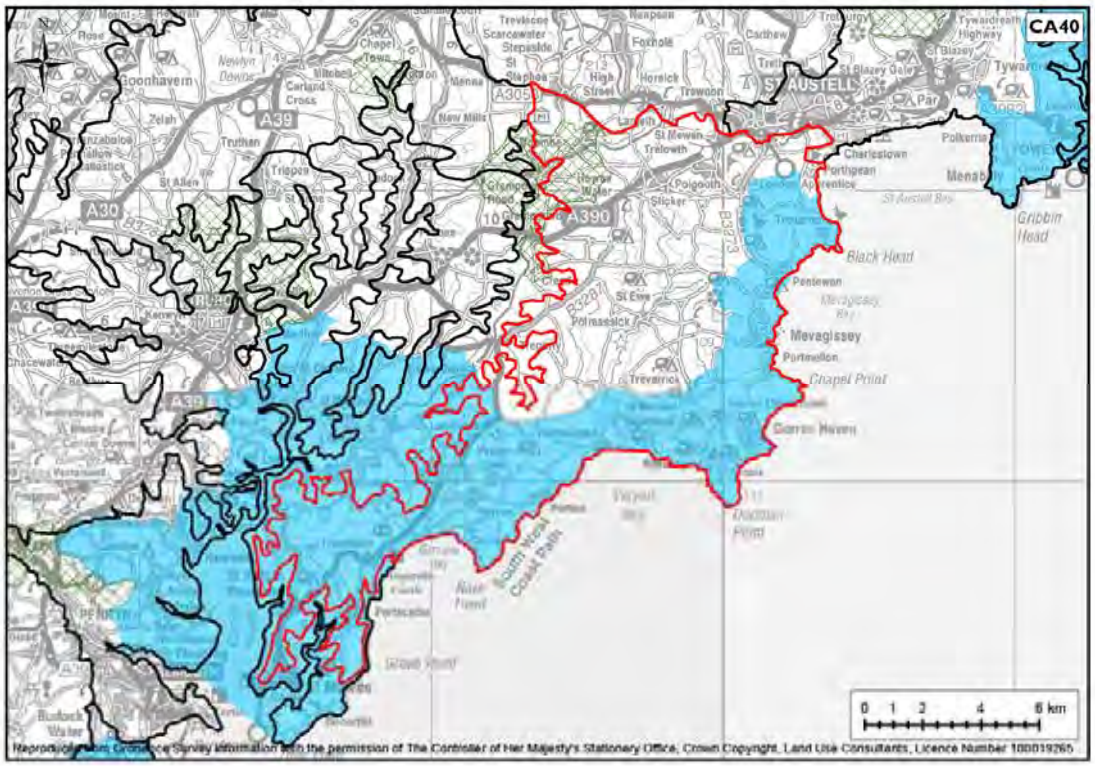
Landscape strategy	The landscape strategy is for **a landscape with occasional very small or small solar PV developments** (and possibly some 'medium' scale in the larger scale landscapes to the east) with **no solar PV development** along the coastal edge and its immediate hinterland or on areas of rough ground. Within the AONB a **landscape without solar PV development** (except for very occasional very small scale well sited developments. There may be several solar PV developments in the LCA, but these should be clearly separated so that, although each PV development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Locate development within dips and sheltered folds in the undulating landform of the hills; areas where PV development would be less visible and have less of an influence on landscape character.

	• Avoid locating development in more prominent and open areas along the coastal edge or on areas of rough ground • Use existing landscape features, such as hedgerows and belts of trees to screen development wherever possible ensuring that any extra screening provided is in character with the landscape. • Avoid siting turbines within the HLC types of 'Upland Rough Ground' and 'Ornamental' – assessed by Cornwall Council as being particularly vulnerable to solar PV development. • Ensure the LCA retains a pastoral and wooded character and that cumulative development does not change this. • Consider views from local viewpoints and popular routes (e.g. Helman Tor, the South West Coastal Path and Saints Way) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not dominate or adversely affect the rough ground of Helman Tor, the extensive wooded estate of Menabilly on eastern edge of area (associated with Daphne du Maurier), and the Gardens at Tregrehan and Pine Lodge as distinctive features of this LCA. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the spectacular and well wooded Menabilly Valley, the medieval field patterns, the vineyards visible amongst the more traditional agricultural uses, and the exposed rugged character of the coast and Gribben Head) - ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Luxulyan Valley and Helman Tor AGLV (including the boggy woodland, marsh, wetland vegetation and heaths at Helman Tor/Redmoor, the dominance of Helman Tor as a landmark feature, the woodlands within the Luxulyan Valley, the dominance of the Treffry Viaduct as a landmark within the Luxulyan Valley, and the ornamental character of the landscape at Prideaux) or the Boconnoc AGLV (including Restormel Castle as a prominent feature and the ornamental parkland character of the Boconnoc Estate) - ensure choice of site and scale of development does not detract from these.

CA40: Gerrans, Veryan and Mevagissey Bays

Key Landscape Characteristics[1]

- *Large coastal bays with sandy beaches and small coves.*
- *Coastal fishing villages located at the mouths of stream valleys.*
- *Highly articulated cliffs and headlands.*
- *Few inland settlements and farmsteads regularly dispersed throughout the landscape with a few larger villages.*
- *Bracken scrub and rough ground behind cliffs on the coastal strip.*
- *Woodland mainly located in valleys with some trees around farmsteads.*
- *Undulating high plateau of a mixture of arable and pastoral farmland.*
- *Ancient yet variable field pattern of medium to small irregular fields.*
- *Steep stream valleys with associated wetland vegetation with remnant pasture or secondary or ancient woodland on slopes.*
- *Areas of estate parkland and gardens.*



[1] Taken from Cornwall Council (2007) Cornwall and Isles of Scilly Landscape Character Study [http://www.cornwall.gov.uk/default.aspx?page=20139 accessed January 2011]

Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity ⟷ Higher sensitivity
Landform and scale	A strongly undulating landscape dissected by streams creating small wooded valleys, contrasting with areas of more exposed hills and subtle ridges, giving the landscape variety in scale and topography. The land comes to an abrupt end at high coastal cliffs which rise above sandy beaches and small coves, with prominent headlands at Nare Head, Dodman Point and Black Head. The sweeping bays of Garrans, Veryan and Mevagissey convey an expansive sense of scale to the coastal landscape.
Land cover pattern and presence of human scale features	This LCA has is dominated by a medium-size irregular field pattern (a medieval landscape of Anciently Enclosed Land). There are clear examples of fossilised medieval stripfield systems are frequent and there are particularly well-preserved medieval field systems on Dodman Point and adjacent to Tregony (the former town fields). In addition there are areas of woodland on the plateau, areas of parkland and ornamental gardens (at Caerhays Castle and Heligan) as well as areas of rough ground and scrub along the coastal strip. Frequent human scale features include Cornish hedges, trees, woodland, finger posts and farmsteads.
Tracks/transport pattern	Although the LCA contains the A390 and some of the lanes on the higher ground have been widened and 'improved' over the years (including the A3078 from Tregony to St Just in Roseland, the B3287 from Tregony to Hewas Water, and the B3273 which hugs the broad valley of the St Austell River between St Austell and Mevagissey), as the lanes descend to cross the valleys, they dip and narrow, enclosed by steep sided Cornish hedges, becoming winding with tight corners.
Skylines	Although the LCA does not refer to a skyline in the description, the LCA description notes the highly articulated cliffs and headlands, including the prominent headlands of Nare Head, Dodman Point and Black Head. The historic features section notes the presence of Carne (Veryan) Beacon (the largest Bronze Age burial mound in the county); the Iron Age cliff castle on Dodman Point (the largest prehistoric enclosure in Cornwall); a spectacular cliff castle on Black Head; Resugga Castle Iron Age hillfort overlooking the confluence of the St Stephen and Fal rivers; Medieval churches; and other nationally important hillforts and other late prehistoric remains found in strategic locations across the LCA.
Perceptual qualities	This is a peaceful, rural landscape defined by its dispersed medieval settlement pattern of farmsteads and small hamlets. Few coastal villages within the three main bays are mostly tucked into small coves at the mouth of streams. The character of some villages (e.g. Gorran Haven and Mevagissey), has been weakened by tourist development such the proliferation of B&Bs and holiday homes, having an incremental impact on perceptions of tranquillity. The development of amenity land, such as golf courses and caravan/camping sites, is also eroding these qualities. Levels of tranquillity are affected in the north-east by the close proximity of the town of St Austell and views to the nearby china clay industry (in CA17). In the south-west, recreational boating and cruise ships operating along the Fal and in Falmouth Docks (CA13) are affecting the generally rural, tranquil character of the landscape.
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for wind turbines assesses the HLC types of 'Rough Ground' ('Coastal' and 'Upland' – the latter found along some valleys and in more exposed areas) as of 'high' vulnerability to development. Locations of 'Ornamental' parkland, particularly at Heligan and Caerhays, are also assessed as of 'high' vulnerability to wind turbines. The landscape's large tracts of 'Medieval'

Criteria	Lower sensitivity	⟷	Higher sensitivity
	farmland are assessed as of 'moderate-high' vulnerability, as are the patches of 'Ancient Woodland' found in some valleys. The LCA's blocks of 'Post-Medieval (Intakes)'and 'Modern Enclosures (Intakes)' are assessed as of 'moderate-low' and 'low' vulnerability respectively. Areas of 'Recreational' land, particularly associated with golf course and caravan sites in the north-east of the LCA, are assessed as of 'moderate' vulnerability to wind turbines. The lowest vulnerability scores are associated with the landscape's areas of modern development as well as blocks of 'Plantations and Scrub' found in some valleys.		
Distinctive landscape features			
	The LCA describes the Carne Beacon and the Dodman cliff castle, the medieval urban topography of Tregony, Caerhays Castle architecture and parkland, the Lost Gardens of Heligan, the many white-painted metal fingerposts, Portloe fishing village set amid spectacular cliff scenery, and Pentewan harbour as distinctive features of this landscape.		
Scenic quality			
	The majority of the coast and all of the south-west hinterland of the LCA falls within the 'South Coast Central' (Roseland) part of the Cornwall AONB (52% of the LCA is designated as AONB). Qualities that may particularly be affected by wind energy development are the majestic scale of the cliffs, far reaching panoramic views from the rugged cliff tops, the wild character of the cliff tops, and the prominence and skyline of pre-historic features from the largest Bronze Age burial mound in Cornwall at Carne Beacon to the County's largest prehistoric enclosure at the Iron Age cliff castles at Dodman, and the narrow winding lanes with high hedges and blind corners. The coastline backing Gerrans Bay to Portmellon is also defined as Heritage Coast. In addition, the north-eastern tip of the LCA (around Coombe and Grampound) falls within the Fal Valley AGLV [NB the Fal Valley AGLV extends further south and west on the paper map than on the GIS version] – special qualities include the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts. The 'Trenowth' AGLV is also shown on GIS mapping, but not on the paper maps.		
Overall sensitivity assessment			
	Although the relatively large scale of the landscape and presence of modern human influence could indicate a lower sensitivity to wind energy development, the LCA's rugged coastline with prominent headlands, dominance of small-scale, ancient field patterns, and high scenic quality (particularly along the coast) heighten levels of sensitivity to turbines. However, the sensitivities related to the coast are restricted to the coastal strip. Overall this LCA is considered to have a **moderate** sensitivity to wind energy development outside the AONB and a **moderate-high** sensitivity to wind energy development within the AONB. The landscape's rugged and naturalistic coastline and its immediate hinterland, and the small scale valleys would be particularly sensitive.		
Sensitivities to different turbine heights ***Very small: 18-25m*** ***Small: 26-60m*** ***Medium: 61-99m*** ***Large: 100-150m***	This medium-scale landscape, characterised by its medieval field pattern, would be particularly sensitive to turbines at the upper end of the 'large' scale. The smaller scale valleys would also be sensitive to 'medium' scale turbines. The highly scenic coastline with its prominent headlands and scenic coastal views would be sensitive to any wind turbines.		
Sensitivities to different cluster	The medium-scale landscape, characterised by its strong undulations and overlying medieval field pattern, would be particularly sensitive to 'medium', 'large' and 'very		

Criteria	Lower sensitivity	⟷	Higher sensitivity
sizes and distribution ***Single turbine*** ***Small (<5 turbines)*** ***Medium (6-10)*** ***Large (11-25)*** ***Very large (>25)***	large' scale turbine clusters. The highly scenic coastline with its prominent headlands and scenic coastal views would be sensitive to any scale of wind energy development.		

Landscape strategy and Guidance for Wind Turbines

Landscape strategy	The landscape strategy is for **a landscape with occasional small clusters of turbines, or single turbines,** comprising turbines up to the lower end of the 'large' scale (turbine size and cluster size should relate to landscape scale which varies within the LCA), and with **no turbines** along the coastal edge or its immediate hinterland. Elsewhere within the AONB development limited to **occasional** very small scale single turbines linked to existing buildings (eg farm buildings). There may be several wind energy developments in the LCA, but these should be clearly separated so that, although each wind energy development influences the perception of the landscape at close proximity, collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 2 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any wind energy developments within this LCA: • Locate wind energy development away from the rugged and highly visible coastline, including the prominent headlands of Dodman Point, Nare Head and Black Head. • Avoid siting wind turbines within areas of small-scale historically important medieval stripfield systems, including on Dodman Point and on the fringes of Tregony. • Locate any larger turbines in areas of larger post-medieval and modern fields wherever possible; where they would be more easily incorporated into the scale of the landscape. • Avoid siting development in the historic parkland at Heligan and Caerhays Castle. • Avoid damage and alterations to the network of narrow winding lanes enclosed by steep Cornish hedges. • Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including the nationally important Carne (Veryan) Beacon, Dodman Point Iron Age cliff castle, the cliff castle on Black Head, the Iron Age hillfort of Resugga Castle and Medieval churches. • Avoid, wherever possible, siting turbines within the HLC Types of 'Rough Ground'(Coastal and Upland) and 'Ornamental' parkland – assessed by Cornwall Council as being highly vulnerable to wind energy development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of wind energy development in the landscape – if development will be visible, aim for a balanced composition. • Ensure wind energy development does not adversely affect the Carne Beacon and the Dodman cliff castle, Caerhays Castle architecture and parkland, the Lost Gardens of Heligan, Portloe fishing village set amid spectacular cliff scenery, or Pentewan harbour as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall

	AONB (particularly the majestic scale of the cliffs, far reaching panoramic views from the rugged cliff tops, the wild character of the cliff tops, and the prominence and skyline of pre-historic features from the largest Bronze Age burial mound in Cornwall at Carne Beacon to the County's largest prehistoric enclosure at the Iron Age cliff castles at Dodman, and the narrow winding lanes with high hedges and blind corners) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Fal Valley AGLV (particularly the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts) – ensure choice of site and scale of development does not detract from these.

Landscape Sensitivity Assessment for Solar PV Development

Criteria	Lower sensitivity	⟷	Higher sensitivity
Landform	A strongly undulating landscape dissected by streams creating small wooded valleys, contrasting with areas of more exposed hill summits and subtle ridges, giving the landscape variety in scale and topography. The land comes to an abrupt end at high coastal cliffs which rise above sandy beaches and small coves, with prominent headlands at Nare Head, Dodman Point and Black Head. The sweeping bays of Garrans, Veryan and Mevagissey convey an expansive sense of scale to the coastal landscape.		
Sense of openness / enclosure	There are variations in levels of enclosure across this landscape, reflecting its diverse character. Fields are either enclosed by low, stone hedges without shrubby vegetation, along the coast or more exposed land, or broad, overgrown hedges with frequent mature trees in sheltered areas or valley sides. Woodland associated with the parkland estates and valleys emphasises a sense of enclosure and intimacy in these locations. The open, exposed character of the coastal strip is reinforced by its predominant land cover of unenclosed rough ground.		
Field pattern and scale	The field pattern is generally medium scale and irregular (of medieval origin), including clear examples of fossilised medieval stripfield systems e.g. on the Dodman and on the fringes of Tregony. There are some significant areas of larger post-medieval and modern fields, such as on Nare Head, the southern tip of the Dodman and inland of Gerrans Bay. The coastal strip and some of the steeper valley slopes are characterised by open rough ground.		
Landcover	A mixed pastoral and arable landscape – comprising mostly farmed land (of improved grassland and arable) with a network of Cornish hedges linking to the semi-natural habitats of woodland, scrub and bracken in the stream valleys with some woodland also in discrete areas on the plateau around farmsteads. In some areas mature trees on top of Cornish hedges give a wooded feel. There are some areas of parkland and ornamental gardens and areas of rough ground and scrub along the coastal strip.		
Perceptual qualities	This is a peaceful, rural landscape defined by its dispersed medieval settlement pattern of farmsteads and small hamlets. Few coastal villages within the three main bays are mostly tucked into small coves at the mouth of streams. The character of some villages (e.g. Gorran Haven and Mevagissey), has been weakened by tourist development such the proliferation of B&Bs and holiday homes, having an incremental impact on perceptions of tranquillity. The development of amenity land, such as golf courses and caravan/camping sites, is also eroding these qualities. Significant areas of intensive farming also convey a strong human influence to the landscape. Levels of tranquillity are affected in the north-east by the close proximity of the town of St Austell and views to the nearby china clay industry (in CA17). In the south-west, recreational boating and cruise ships operating along the Fal and in Falmouth Docks (CA13) are affecting the generally rural, tranquil character of the landscape.		
Historic landscape character	Cornwall Council's HLC Sensitivity Mapping for solar PV installations assesses the HLC types of 'Rough Ground' ('Coastal' and 'Upland' – the latter found alongside the steep valley slopes and on some higher ridges) as of 'high' vulnerability to development. This vulnerability score also applies to the LCA's 'Ornamental' parkland at Heligan, Caerhays, Garlenick Manor, Penrice and Penans. Areas of 'Medieval' farmland, which cover much of the landscape, are assessed as of		

Criteria	Lower sensitivity	⟷	Higher sensitivity
	'moderate-high' vulnerability. The LCA's areas of 'Post-Medieval (Intakes)'and 'Modern Enclosures (Intakes)'are both assessed as of 'moderate' vulnerability. Small areas of 'Recreational' land, particularly associated with golf courses and caravan parks in the north-east of the LCA, are assessed as of 'moderate' vulnerability to solar PV development		
Distinctive landscape features	The LCA describes the Carne Beacon and the Dodman cliff castle, the medieval urban topography of Tregony, Caerhays Castle architecture and parkland, the Lost Gardens of Heligan, the many white-painted metal fingerposts, Portloe fishing village set amid spectacular cliff scenery, and Pentewan harbour as distinctive features of this landscape.		
Scenic quality	The majority of the coast and all of the south-west hinterland of the LCA falls within the 'South Coast Central' (Roseland) part of the Cornwall AONB (52% of the LCA is designated as AONB). Qualities that may particularly be affected by solar PV development are the outlines of early strip field systems are preserved in the current field patterns, the coastal rough ground including scrub and bracken on wild cliff tops. The coastline backing Gerrans Bay to Portmellon is also defined as Heritage Coast. In addition, the north-eastern tip of the LCA (around Coombe and Grampound) falls within the Fal Valley AGLV [NB the Fal Valley AGLV extends further south and west on the paper map than on the GIS version] – special qualities include the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts. The 'Trenowth' AGLV is also shown on GIS mapping, but not on the paper maps.		
Overall sensitivity assessment	Although the presence of regular post-medieval/modern fields, sense of enclosure in lower lying areas, and existing human influence (particularly owing to the farmed character of many parts of the landscape) indicate lower sensitivity to PV development, the presence of open areas (on higher ridges and along the coast), areas of rough ground (along the coast) and relatively high scenic quality heighten sensitivity to solar PV development. Overall, this landscape is considered to have a **moderate** sensitivity to solar PV development outside the AONB and a **moderate-high** sensitivity to solar PV development within the AONB. The coast and its immediate hinterland is particularly sensitive.		
Sensitivities to different sizes of solar PV development ***Very small: < 1 ha*** ***Small: >1 to 5 ha*** ***Medium: >5 to 10 ha*** ***Large: >10 to 15 ha***	The presence of medium scale ancient, irregular field patterns, means that it would be particularly sensitive to 'large' scales of solar PV development, as well as the larger areas of development in the 'medium' category. The rugged coastline and naturalistic cliff tops would be sensitive to all sizes of solar PV development.		

Landscape strategy and Guidance for Solar PV

Landscape strategy	The landscape strategy is for **a landscape with occasional very small, small or medium solar PV developments** and **no PV development** along the coastal edge or its immediate hinterland. Elsewhere within the AONB development limited to **very occasional** very small scale PV development. There may be several developments in the LCA, but these should be clearly separated so that, although each development influences the perception of the landscape at close proximity,

	collectively they do not have a defining influence on the overall experience of the landscape.
Siting Guidance	See Annex 3 of the Technical Report for generic siting and design guidance. In addition, the following guidance should apply to any solar PV developments within this LCA: • Avoid locating solar PV developments along the remote and naturalistic coastal edge. • Avoid locating development on the steep upper slopes of the stream valleys where PV panels would be particularly visible. • Aim to locate solar PV developments on lower slopes and in folds in the landscape where they will be have less of an influence on landscape character. • Avoid siting solar PV development within areas of fossilised medieval stripfield systems, such as on the Dodman and fringes of Tregony. • Prevent damage to the landscape's network of narrow winding lanes enclosed by steep Cornish hedges (particularly in valleys) during the installation phase. • Use existing landscape features, such as high Cornish hedges, trees, plantations and woodland to screen development wherever possible, ensuring that any additional screening provided is in character with the landscape. • Avoid, wherever possible, siting solar PV development within the HLC zones of 'Rough Ground' or 'Ornamental' parkland (particularly at Heligan and Caerhays) – assessed by Cornwall Council as being highly vulnerable to solar PV development. • Consider views from local viewpoints and popular routes (e.g. the South West Coastal Path) when considering the siting and design of solar PV development in the landscape - avoid locating solar PV development where it would be directly overlooked at close quarters. • Ensure solar PV development does not adversely affect Carne Beacon and Dodman Cliff castle, the medieval urban topography of Tregony, Caerhays Castle architecture and parkland, the Lost Gardens of Heligan, Portloe fishing village set amid spectacular cliff scenery, and Pentewan harbour as distinctive features of this landscape. • Protect the factors which contribute to the scenic quality of the Cornwall AONB (particularly the outlines of early strip field systems are preserved in the current field patterns, the coastal rough ground including scrub and bracken on wild cliff tops) – ensure choice of site and scale of development does not detract from these. • Protect the factors which contribute to the scenic quality of the Fal Valley AGLV (particularly the inaccessible and 'unspoilt' nature of the valley, the woodland and thick hedgerows, the ornamental landscapes around Trewithen, the peaceful character in areas of coppice, and the dramatic viaducts) – ensure choice of site and scale of development does not detract from these.