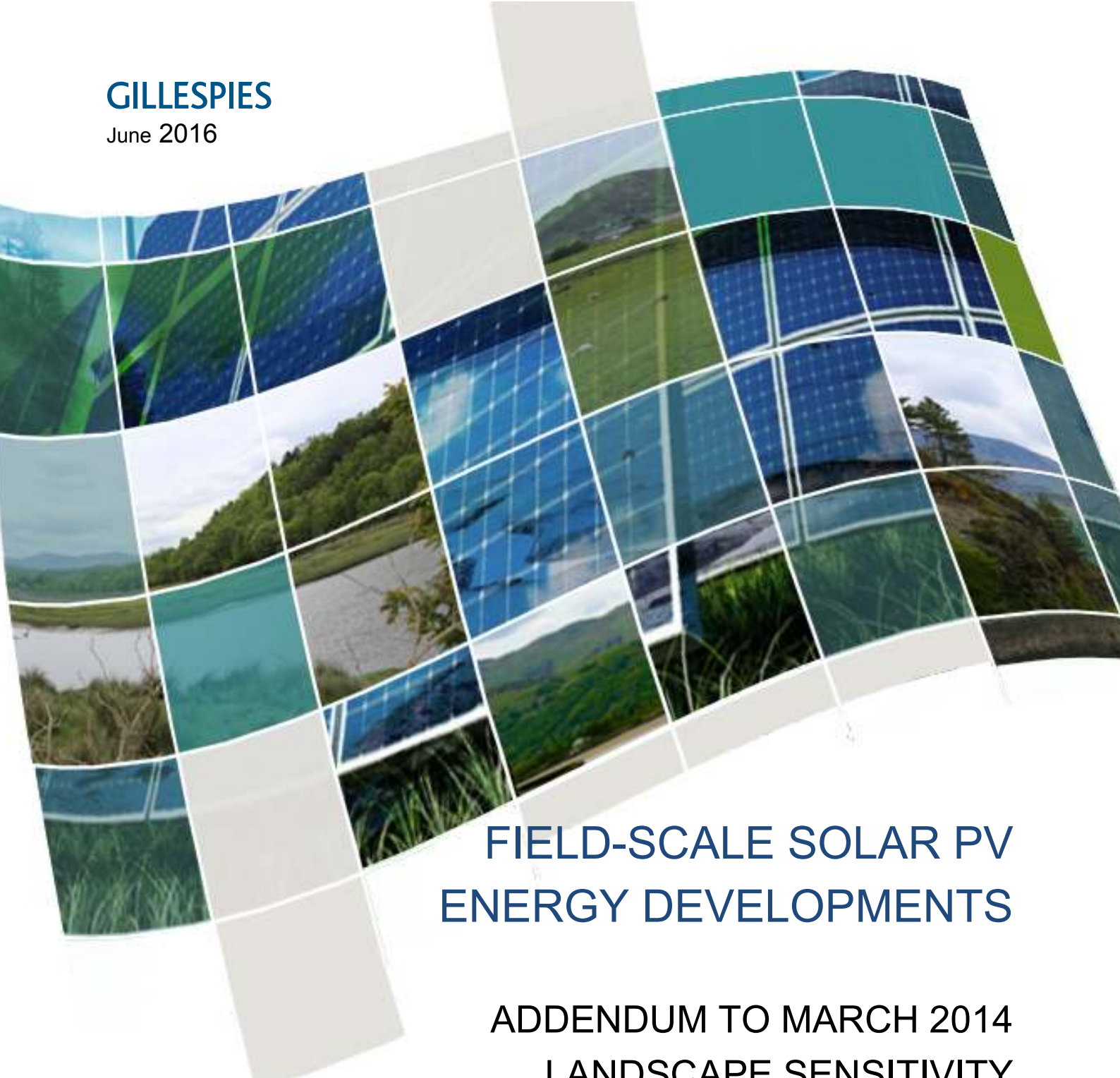


**GILLESPIES**

June 2016



# FIELD-SCALE SOLAR PV ENERGY DEVELOPMENTS

ADDENDUM TO MARCH 2014  
LANDSCAPE SENSITIVITY  
AND CAPACITY ASSESSMENT  
ANGLESEY & GWYNEDD

FINAL REPORT JUNE 2016



REV	DATE	BY	CHKD	STATUS	REASONS FOR REVISION/COMMENTS	
<b>ORIGINATOR</b> <b>GILLESPIES LLP</b>						<b>REVISION</b> <b>Final</b>

## CONTENTS

### Page No.

<b>SECTION 1</b> : Introduction	1
<b>SECTION 2</b> : Evaluation of Landscape Sensitivity and Formulation of Strategies	4
<b>SECTION 3</b> : Generic Guidance on Siting and Design, and Guidance for Assessing Cumulative Landscape and Visual Effects	5

## FIGURES

**FIGURE 1** : Study Area

**FIGURE 2** : Landscape Designations and Constraints

**FIGURE 3** : Landscape Related Cultural Heritage Designations

**FIGURE 4** : Operational/ Consented Field-Scale Solar PV Energy Developments

**FIGURE 5** : Overall Sensitivity to Field-Scale Solar PV Energy Developments

## APPENDICES

**APPENDIX A** : Sensitivity Assessment Tables, Landscape Strategies and Siting Guidance Notes

# SECTION 1: INTRODUCTION

## Purpose of the Study

- 1.1 In March 2014 Gwynedd Council, in partnership with Anglesey County Council and Snowdonia National Park Authority, produced a Landscape Sensitivity and Capacity Assessment<sup>1</sup> (hereafter referred to as ‘the March 2014 report’) in order to help protect their most sensitive and distinctive landscape from inappropriate development (including field-scale solar PV energy development). At the time, four Landscape Character Areas (LCA) within Gwynedd Council Authority were excluded from the study because they were not considered to be under significant pressure for field-scale solar PV energy developments. A brief overview of field-scale solar PV development can be found within paragraphs 1.13 to 1.17 of the March 2014 report.
- 1.2 Since the production of the March 2014 report, the Welsh Government publication of Practical Guidance: Planning for Renewable and Low Carbon Energy - A Toolkit for Planners (September 2015) superseded the previous 2010 Toolkit. The most significant change from the 2010 toolkit is the inclusion of a specific section on solar PV energy in fields and the requirement to identify potential areas that could be allocated.
- 1.3 This study was therefore commissioned by Gwynedd Council as an addendum to the March 2014 report to consider the landscape sensitivity and capacity of the following four Gwynedd LCA in relation to field-scale solar PV energy development:
- G11 – Blaenau Ffestiniog;
  - G13 – Barmouth;
  - G14 – Corris; and
  - G15 – Tywyn.

These four LCA are illustrated in Figure 1 (Study Area).

- 1.4 **It is important to note that this report has been prepared as an addendum to the March 2014 report and should be read in conjunction with it.**
- 1.5 The overall aim of this addendum is to inform the Council over the assessed sensitivity to field-scale solar PV developments of the 4 LCA which were not subject to assessment in the March 2014 Report. This will allow the Council to assess the suitability of allocating any potential areas within these LCA as areas of search for field-scale solar PV energy developments. It will also inform the development of Supplementary Planning Guidance and to assist the Council in assessing the landscape and visual effects of field-scale solar PV energy for development control purposes; and to minimise the impact of such developments on the landscape.

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<sup>1</sup> Gillespies (2014); Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Study (JLDP Supporting Document) (DC.020)

## Study Objectives

- 1.6 The main objectives of the study are to:
- Provide a strategic assessment of the sensitivity of the Blaenau Ffestiniog, Barmouth, Corris and Tywyn LCA to field-scale solar PV energy developments using a defined set of landscape and visual criteria that includes both physical and perceptual aspects as well as a consideration of landscape value;
  - Identify the key landscape, visual and perceptual sensitivities of different areas; and
  - Provide broad guidance on those areas where development of different scales is potentially most acceptable and those areas where there are likely to be significant adverse landscape and visual effects.

## Planning and policy Framework

- 1.7 A detailed review of the planning and policy framework relative to this study can be found within paragraphs 1.26 to 1.76 of the March 2014 report.

## Methodology

- 1.8 Section 2 of the March 2014 report sets out the methodology used in relation to the assessment of sensitivity to field-scale solar PV energy developments and to the formulation of strategies for each LCA. The same methodology was used to guide the assessments presented in this addendum report.
- 1.9 LANDMAP has been used to inform the assessments of the LCA (as described in the March 2014 report - paragraphs 2.5 to 2.9 and Table 2.04: Criteria for Assessing Landscape and Visual Sensitivity to Field-Scale Solar PV Energy Development). There have been no changes to the LANDMAP data in relation to the study area since March 2014; Appendix 6 of the March 2014 report therefore remains valid for cross referencing.

## Baseline Landscape

- 1.10 All four of the LCAs are located within Gwynedd. Section 3 of the March 2014 report describes the landscape character baseline of the study area and reference should be made to the original report in that regard. Landscape designations, together with landscape related cultural heritage designations are illustrated on Figure 2 (Landscape Designations and Constraints) and Figure 3 (Landscape Related Cultural Heritage Designations) of this addendum report. These figures are based on Figures 4.1 and 4.2 of the March 2014 report.

## Operational and Consented Field-Scale Solar PV Energy Developments

- 1.11 Paragraphs 2.46, 2.47 and Table 2.09 of the March 2014 report explain the different typologies or scale of solar PV development considered in the assessment.

- 1.12 Liaison with Gwynedd Council, Anglesey County Council and the Snowdonia National Park Authority in May 2016 determined that there are currently two operational/ consented field-scale solar PV energy developments within the study area/ study area buffer as follows. These are shown on Figure 4 (Operational/ Consented Field-Scale Solar PV Energy Developments):
- One medium scale development within G15 Tywyn (to the east of the Morfa Camp barracks);  
and
  - One micro scale development within the buffer of G14 Corris.

## SECTION 2: EVALUATION OF LANDSCAPE SENSITIVITY AND FORMULATION OF STRATEGIES

- 2.1 The four LCAs considered in this addendum report are listed below in Table 2.01 together with an overall evaluation of their landscape and visual sensitivity in relation to field-scale solar PV energy developments. The overall sensitivity evaluations are illustrated in Figure 5 (Overall Sensitivity to Field-Scale Solar PV Energy Developments) and the assessment tables, landscape strategies and siting guidance notes are included within Appendix A of this addendum report.

### Key to Sensitivity

Very High	High	Medium-High	Medium	Low-Medium	Low
<b>VH</b>	<b>H</b>	<b>M-H</b>	<b>M</b>	<b>L-M</b>	<b>L</b>

**Table 2.01: Summary of Sensitivity**

Gwynedd Landscape Character Area		Assessed Sensitivity to Field-Scale Solar PV Developments	Appendix Page no.
Ref	Name		
<b>G11</b>	Blaenau Ffestiniog	<b>M-H</b>	A-1
<b>G13</b>	Barmouth	<b>H</b>	A-8
<b>G14</b>	Corris	<b>H</b>	A-14
<b>G15</b>	Tywyn	<b>M</b>	A-20

### Approach to evaluating Sensitivity of Landscape Character Areas and the formulation of strategies for development

- 2.2 A detailed description as to how the sensitivity evaluations have been approached is described within paragraphs 4.2 and 4.3 of the March 2014 report.
- 2.3 A description of how the landscape strategy and guidance notes are presented for each LCA is contained within paragraph 4.4 and 4.5 of the March 2014 report.

## SECTION 3: GENERIC GUIDANCE ON SITING AND DESIGN AND GUIDANCE FOR ASSESSING CUMULATIVE LANDSCAPE AND VISUAL EFFECTS

### Generic Guidance on Siting and Design

- 3.1 Section 5 of the March 2014 report provides generic guidance on the siting and design of field-scale solar PV energy developments in order to aid the integration of such developments into the wider landscape. That guidance should be read in conjunction with the more specific guidance notes that are included for each relevant LCA (refer to Appendix A).

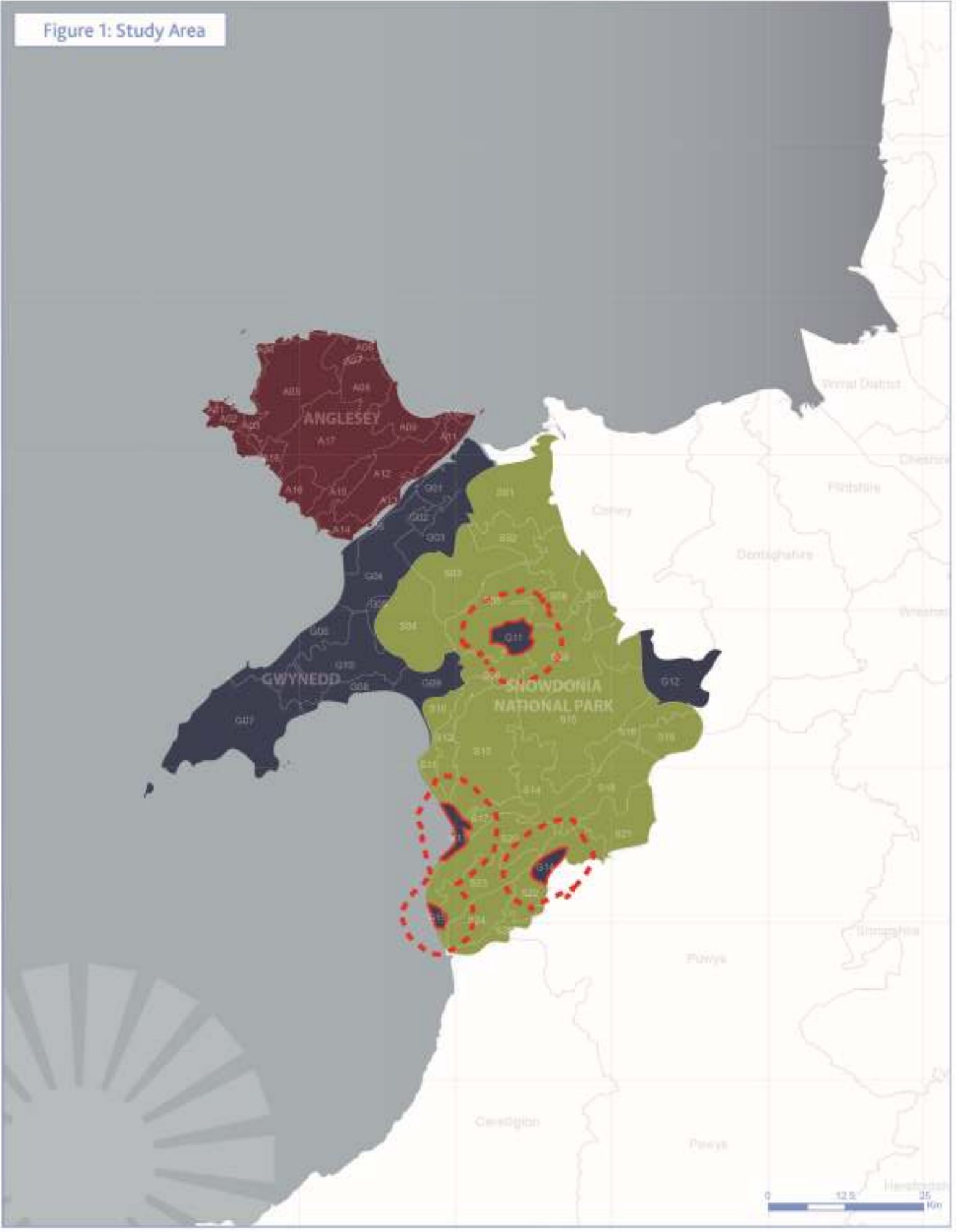
### Guidance for Assessing Cumulative Landscape and Visual Effects

- 3.2 Section 6 of the March 2014 report provides guidance on assessing cumulative landscape and visual effects.



## FIGURES

Figure 1: Study Area

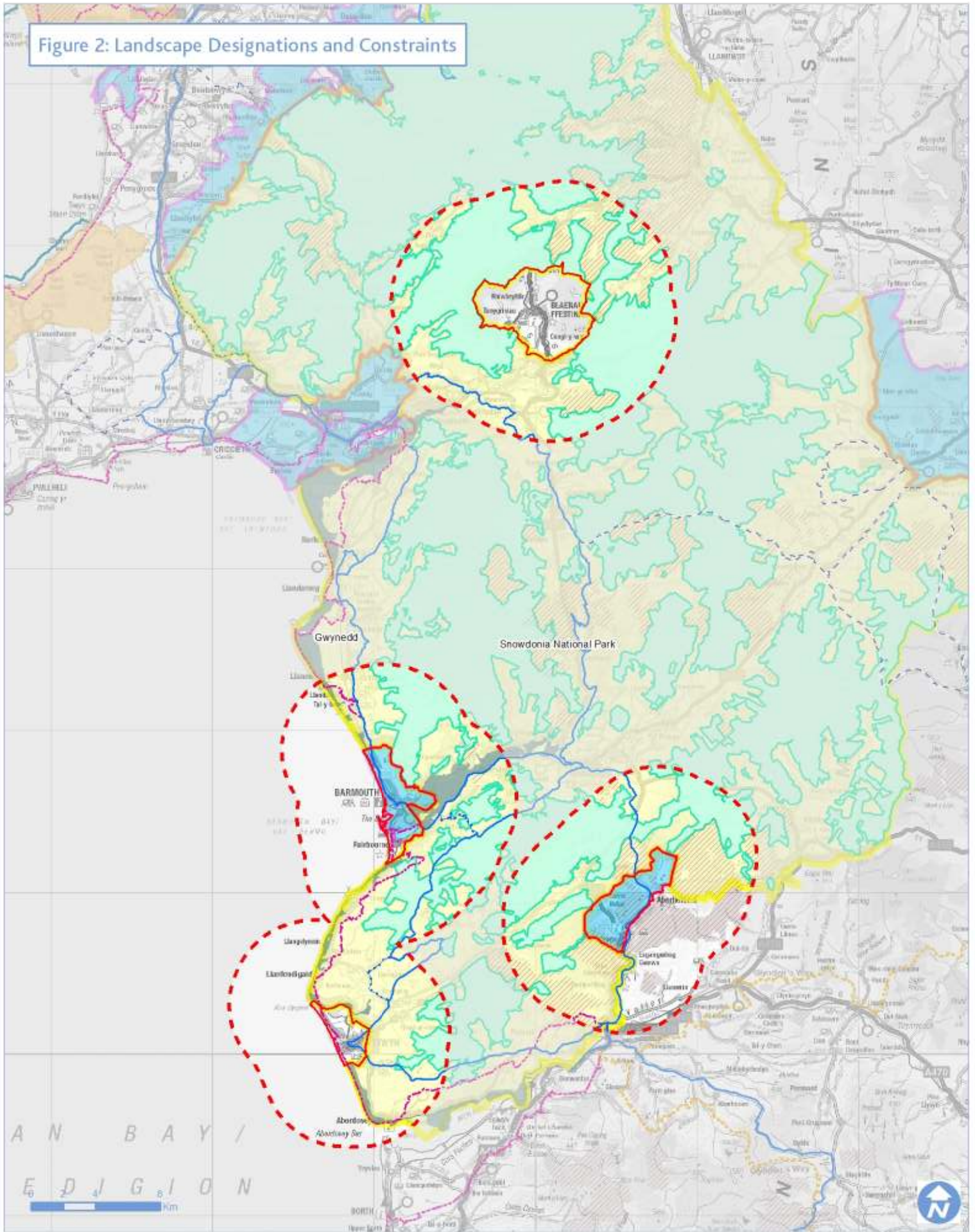


Solar PV  
Study Area

Solar PV  
Study Area Buffer



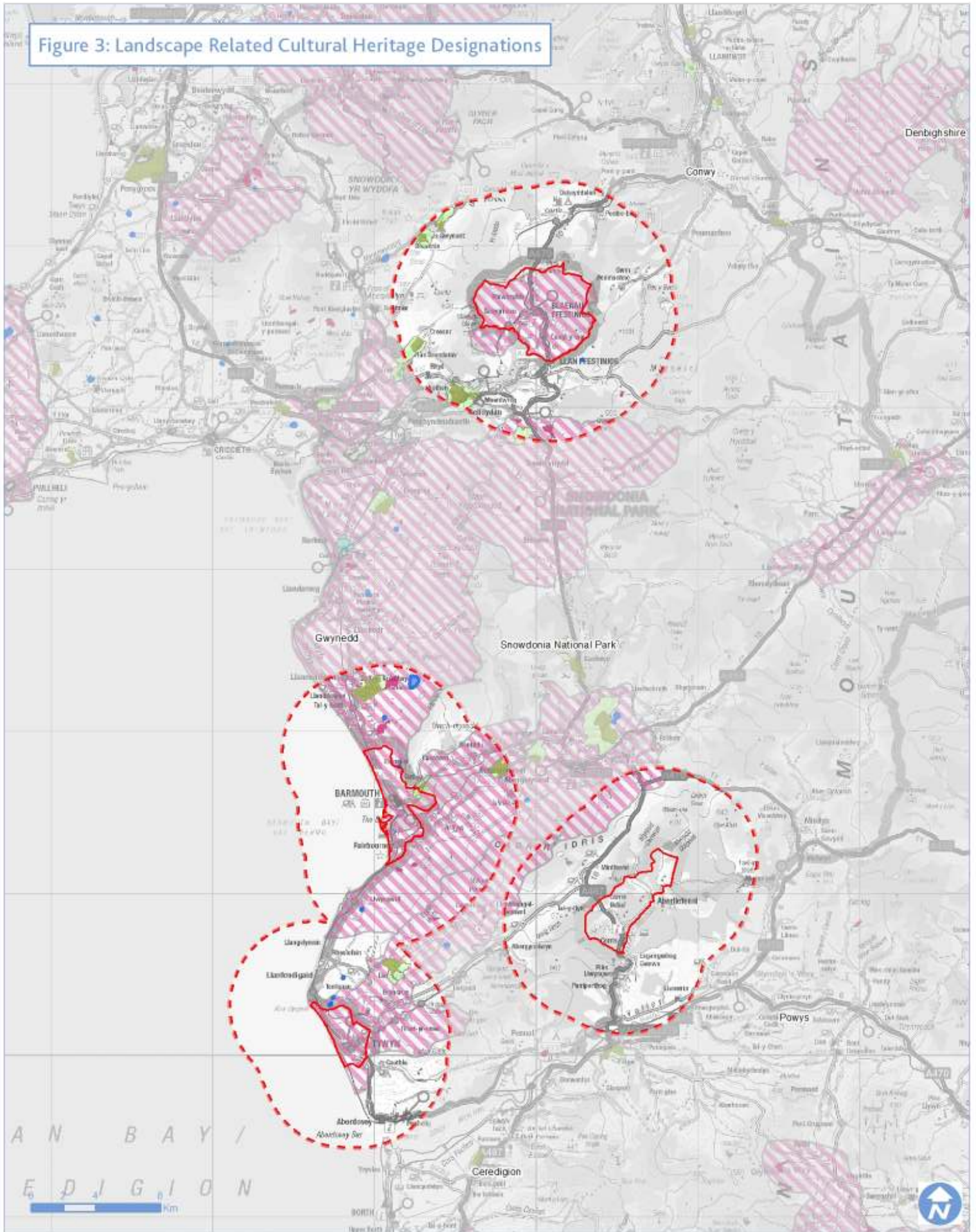
Figure 2: Landscape Designations and Constraints



- |                    |                      |  |  |
|--------------------|----------------------|--|--|
| Study Area         | Regional Cycle Route | Eryri Local Development Plan Undeveloped Coast   | Cynwyd and Llandrillo Area of Outstanding Beauty (AOB) |
| Overall Study Area | National Cycle Route | Eryri Local Development Plan Area Natural Beauty | AONB   |
|                    | National Cycle Link  | Special Landscape Areas                          | Heritage Coasts  |
|                    | National Trails      | Open Access Land                                 | National Park  |
|                    | Wales Coastal Path   |  |  |



Figure 3: Landscape Related Cultural Heritage Designations



Study

Overall Study

Hillfort

Conservation

Scheduled Ancient Monument (SAM)

Welsh Historic Landscape (WHL)

Historic Park and Garden

Gardens & Kitchen Gardens

Historic Park and Garden Essential Setting

Historic Park and Garden Significant View

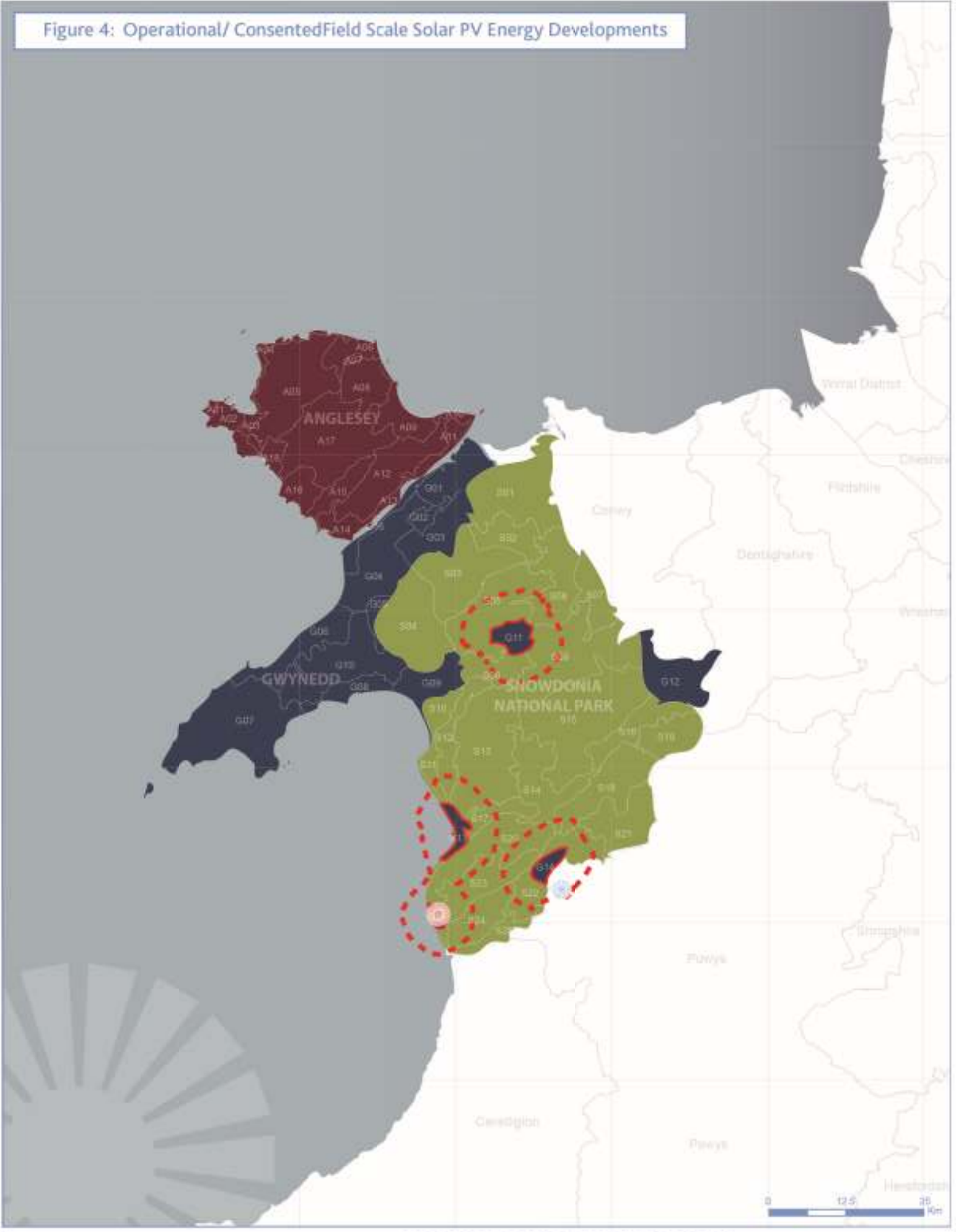
World Heritage Sites

World Heritage Sites Essential Setting

World Heritage Sites Significant View

World Heritage Sites Arcs of

Figure 4: Operational/ Consented Field Scale Solar PV Energy Developments



**FIELD SCALE SOLAR PV DEVELOPMENT TYPOLOGIES**  
 (Operational & Consented Developments)

Solar PV Study Area

Solar PV Study Area Buffer

Micro

Small

Medium

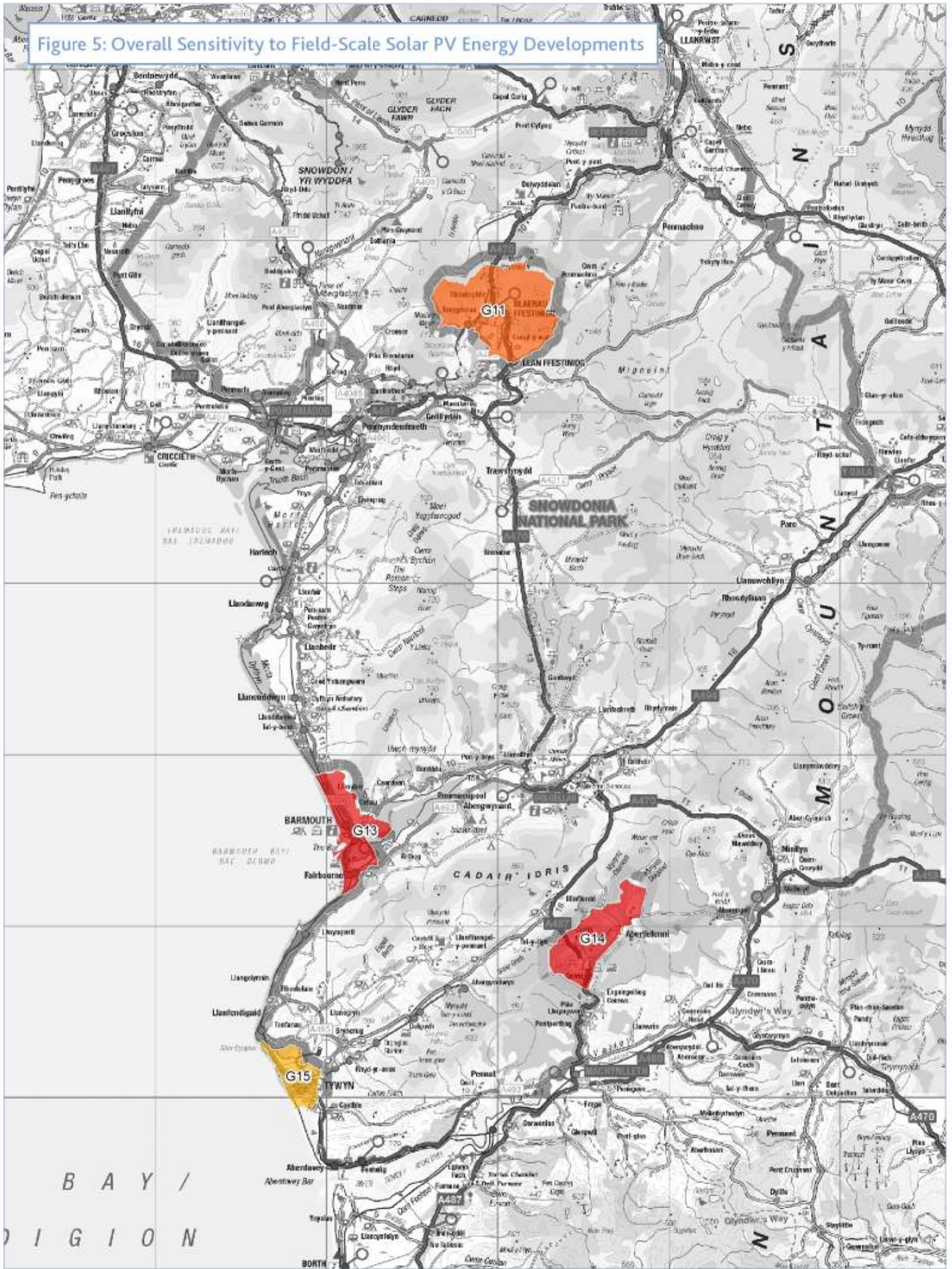
Large

Very Large





Figure 5: Overall Sensitivity to Field-Scale Solar PV Energy Developments



Medium Medium-High High

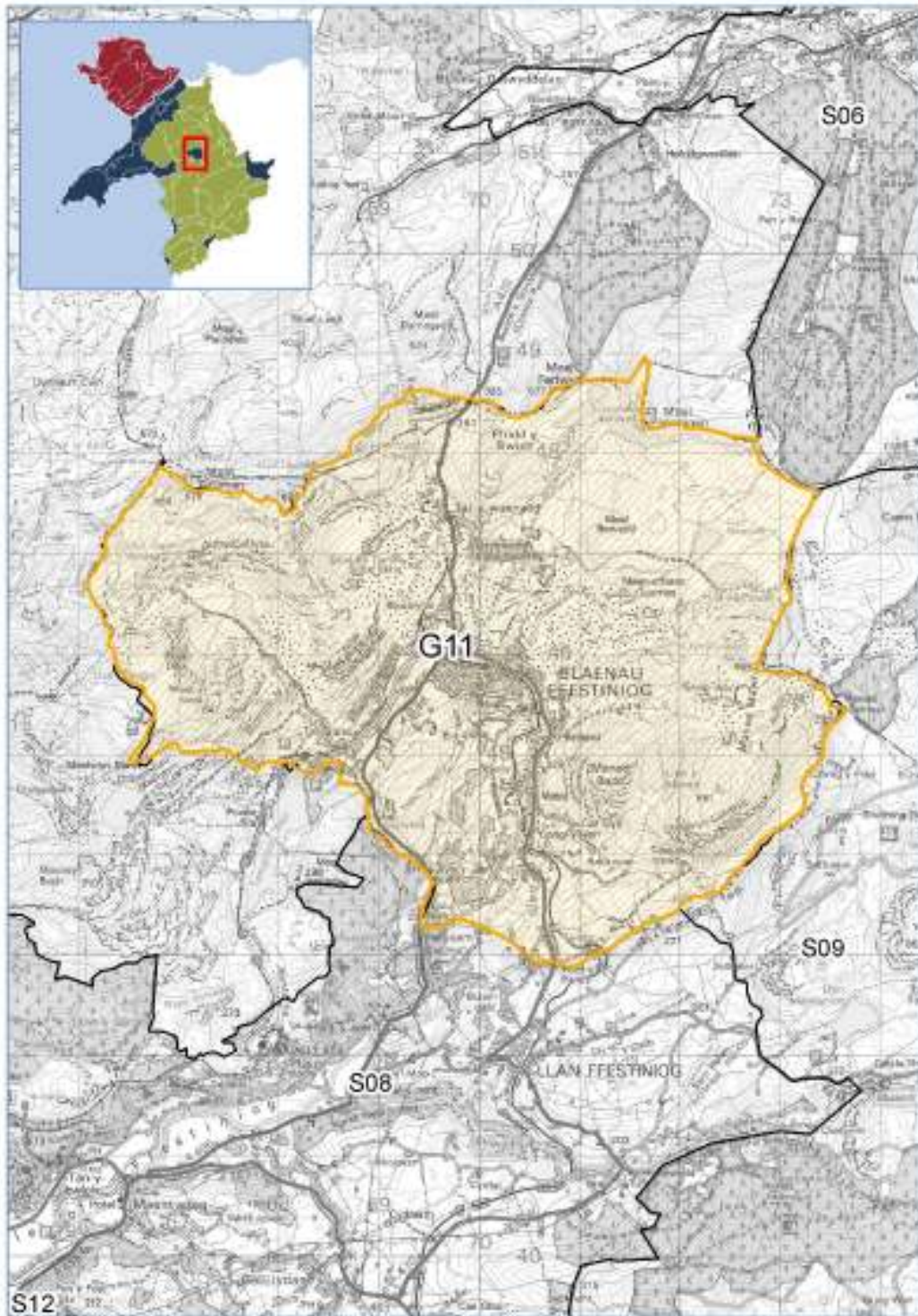


## **APPENDICES**

## **APPENDIX A : Sensitivity Assessment Tables, Landscape Strategies and Siting Guidance Notes**



### G11 Blaenau Ffestiniog



1:50,000



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**Location and Extent**

This LCA comprises a discrete area of landscape around the slate quarrying town of Blaenau Ffestiniog in Gwynedd. The LCA is completely surrounded by the National Park.

**Key Characteristics**

- Large to vast scale upland landscape
- Dominated by slate waste of former mineral extraction

**Evaluation**

The following table illustrates the appraisal of this Landscape Character Area (LCA) against sensitivity criteria which have been predetermined for field-scale solar PV energy development.

<b>Key</b>	Higher Sensitivity	↑	Medium Sensitivity	-	Lower Sensitivity	↓	Criterion not applicable	
------------	--------------------	---	--------------------	---	-------------------	---	--------------------------	--

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
<b>Landscape</b>	<b>Scale</b>	Not applicable	
	<b>Field Pattern, Scale and Enclosure</b>	The southern lower lying parts of this LCA comprises pastoral fields. This a small proportion of the overall LCA which is mostly open uplands. These fields are generally small in scale and irregular in pattern. Field boundaries comprise a <b>mix of fences, dry stone walls and hedges, all with frequent trees and interspersed with broadleaved woodland blocks.</b>  VS7: Mixture (7%) / <u>None</u> (93%) / Stone Walls (1%) VS8: Medium (8%) / <u>Large</u> (49%) / <u>Vast</u> (43%)	↑
	<b>Landform</b>	Landform is characterised by <b>high hills and valleys</b> and heavily influenced by slate quarrying.  VS Classification Level 2: <u>Built Land</u> (49%) / <u>Exposed Upland/Plateau</u> (43%) / Hills, Lower Plateau & Scarp Slopes (8%) VS4: <u>High Hills/Mountains</u> (43%) / <u>Hills/Valleys</u> (49%) / <u>Rolling/Undulating</u> (8%)	↑
	<b>Landcover</b>	Landcover is typified by <b>upland moorland interspersed with barren and rocky slopes and upland lakes and reservoirs.</b> This LCA is also heavily influenced by <b>former slate quarrying and associated waste tips</b> and to some degree urban development.	-

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
		VS Classification Level 3: Barren/Rocky Upland (10%) / Hillside & Scarp Slopes Grazing (8%) / <u>Upland Moorland</u> (33%) / <u>Urban</u> (49%) VS5: Mixture (57%) / Open Land (43%)	
	<b>Man-made Influences</b>	<b>Modern development is concentrated within and near to the urban settlements</b> that are concentrated along the main road corridors to the south of this LCA. Elsewhere this landscape is unsettled. In addition to settlements the main influences are the <b>former slate quarries and associated waste tips, the A470 tourist route and Ffestiniog Railway.</b>  VS6: Mixture (8%) / <u>No settlements</u> (43%) / <u>Village</u> (49%) VS27: Fair (51%) / Poor (49%)	↓
	<b>Settlement Pattern</b>	Not applicable	
Visual	<b>Skylines and Settings</b>	Not applicable	
	<b>Movement</b>	Not applicable	
	<b>Visibility, Key Views, Vistas and Typical Receptors</b> (both within and outside of each Landscape Character Area)	Views are typically <b>open and exposed</b> within higher parts of this LCA, whereas views within the lower lying areas are <b>enclosed</b> in contrast. There are strong visual links with the adjacent mountains of the National Park.  VS9: <u>Enclosed</u> (49%) / Open (8%) / <u>Exposed</u> (43%)  Typical receptors include occupiers, users and visitors to the following: <ul style="list-style-type: none"> <li>▪ Properties</li> <li>▪ Open Access Areas</li> <li>▪ Local attractions including the Llechwedd Slate Caverns</li> <li>▪ Local public rights of way</li> <li>▪ The A470 and A496 tourist routes</li> <li>▪ The Ffestiniog Railway</li> <li>▪ The local road network</li> </ul>	-

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
	<b>Views to and from Important Landscape and Cultural Heritage Features</b> (both within and outside of each Landscape Character Area)	Not applicable	
Aesthetic, Perceptual and Experiential	<b>Condition</b>	Not applicable	
	<b>Scenic Quality and Character</b>	A landscape with strong contrasts in scenic quality with <b>Low to Outstanding</b> LANDMAP evaluations.  VS25: <u>Strong</u> (92%) / <u>Weak</u> (8%) VS46: <u>Low</u> (49%) / <u>Moderate</u> (8%) / <u>Outstanding</u> (43%) VS47: <u>Low</u> (49%) / <u>Moderate</u> (8%) / <u>High</u> (43%) VS48: <u>Moderate</u> (8%) / <u>High</u> (49%) / <u>Outstanding</u> (43%)	-
	<b>Remoteness/Tranquillity</b>	The sense of remoteness and tranquillity <b>varies greatly</b> throughout this LCA. More elevated parts of the landscape are remote and have a stronger sense of tranquillity. This is much reduced in and around Blaenau Ffestiniog.  VS24: <u>Exposed</u> (33%) / <u>Other</u> (57%) / <u>Wild</u> (10%)	-
<b>Value</b>	<b>Landscape Value</b> (including landscape related features)	Nationally designated features include Open Access Areas.  Typically <b>High</b> LANDMAP evaluation with some areas <b>Outstanding</b> .  VS50: <u>Low</u> (49%) / <u>Moderate</u> (8%) / <u>High</u> (10%) / <u>Outstanding</u> (33%) VS49: <u>Low</u> (49%) / <u>Moderate</u> (8%) / <u>High</u> (43%) LH45: <u>Low</u> (7%) / <u>Moderate</u> (58%) / <u>High</u> (5%) / <u>Outstanding</u> (30%) LH42: <u>Unassessed</u> (100%) GL31: <u>Moderate</u> (47%) / <u>Outstanding</u> (37%) GL33: <u>Moderate</u> (47%) / <u>Outstanding</u> (53%)	↑

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
	<b>Historic Value</b>	<p>Much of this LCA lies within the Blaenau Ffestiniog Registered Historic Landscape.</p> <p>Typically <b>Outstanding</b> LANDMAP evaluation.</p> <p>HL38: <u>High</u> (74%) / <u>Outstanding</u> (14%) / <u>Unassessed</u> (11%)                      HL35: <u>High</u> (13%) / <u>Outstanding</u> (87%)                      HL40: <u>High</u> (10%) / <u>Outstanding</u> (90%)</p>	↑

### Overall Landscape Sensitivity and Strategy

The following table provides an overall summary of sensitivity in relation to field-scale solar PV development (based on the LCA sensitivity evaluation table), together with the proposed landscape strategy:

#### FIELD-SCALE SOLAR PV ENERGY DEVELOPMENTS

OVERALL SENSITIVITY	
<b>Medium-High</b>	<p>The landscape character of this LCA is heavily influenced by former slate quarrying with large areas of slate waste being visible throughout the area. Southern and central parts are also influenced by development particularly in an around Blaenau Ffestiniog. These factors are indicative of a lowered sensitivity to field-scale solar PV energy development.</p> <p>The reduction in scenic quality is counterbalanced by strong sense of place as this is a very historic landscape, which is reflected in much of the area being included within the Blaenau Ffestiniog Registered Historic Landscape.</p> <p>Much of this upland landscape is considered large to vast in scale with just a small proportion of the southern lower lying part of the LCA comprising typically small scale pastoral fields. Where such fields exist they are generally irregular in pattern and boundaries are mixed with frequent hedgerow trees. The field pattern is interspersed with areas of broadleaved woodland.</p> <p>These characteristics, together with the presence of a number of sensitive visual receptors and the area's prominent landform, and intervisibility and strong associations with the National Park increases the sensitivity of the landscape to field-scale solar PV energy development.</p>
LANDSCAPE STRATEGY	
Landscape Objective	<p><b>Landscape Protection</b> – all areas that contribute to the outlook and setting of the National Park and Eryri Local Development Plan (ELDP) Areas of Natural Beauty.</p> <p><b>Landscape Accommodation</b> – areas that do not contribute to the outlook and setting of the National Park and ELDP Areas of Natural Beauty.</p>
Baseline Development	No existing or consented field-scale solar PV energy developments.
Indicative Overall Capacity	<p>Within areas that contribute to the outlook and setting of the National Park and ELDP Areas of Natural Beauty, there is typically <b>no capacity for field-scale solar PV energy development</b>.</p> <p>Outside these areas, there may be <b>limited capacity for developments</b> which could typically comprise micro scale schemes in keeping with the localised field scale and pattern. Any new development should be carefully sited to minimise adverse landscape and visual impacts and to avoid unacceptable cumulative effects with existing modern developments.</p>

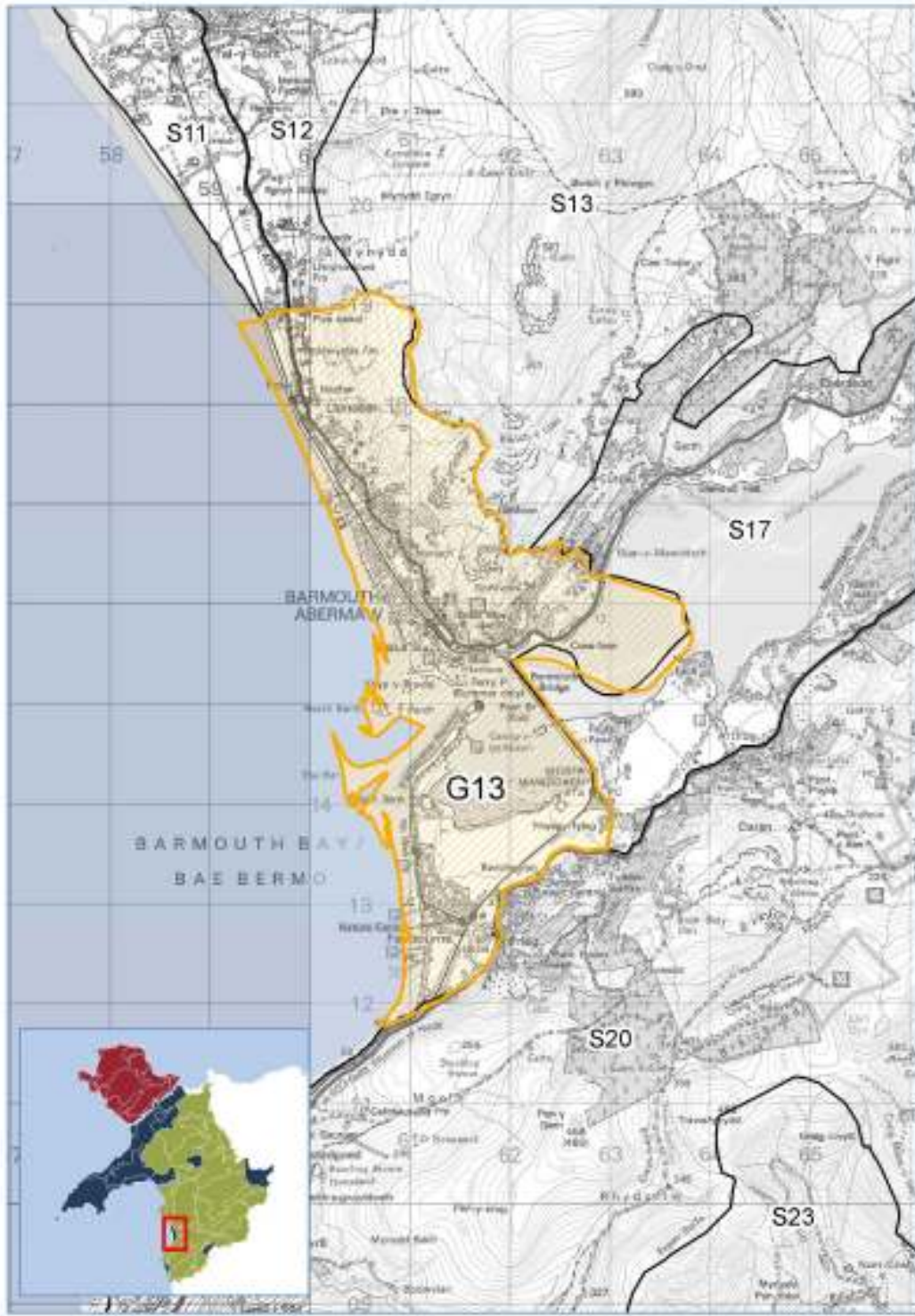


**Guidance**

The table below provides LCA specific guidance notes on siting developments to minimise adverse effects.

<b>Guidance Notes on Siting</b>	<b>Field-Scale Solar PV Energy Developments</b>
Conserve the natural beauty of Snowdonia National Park, its special qualities and its wider setting. Consider the effects of development on views to and from Snowdonia National Park. The effect of development outside the National Park boundary needs to be considered using visualisations. Development must avoid creating a sense of unacceptable encroachment, encirclement, prominence, or discordance, individually or cumulatively on the National Park.	✓
Development should respect and conserve the setting of the landscape defined within the ELDP as Areas of Natural Beauty, in particular areas valued for their remote and wild qualities.	✓
Carefully consider potential cumulative landscape effects of existing and proposed developments.	✓
Maintain the integrity of Blaenau Ffestiniog Registered Historic Landscape.	✓
Protect the settings of designated and other important cultural heritage features; and the key views to and from these features.	✓
Avoid cumulative effects on the A470 tourist route and Ffestiniog Railway.	✓
Avoid siting any development within the sight lines of key views, particularly towards the National Park.	✓
Developments should avoid adverse impacts on areas of ancient woodland as located within lower lying areas to the south of the LCA	✓

### G13 Barmouth



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**Location and Extent**

This relatively small LCA lies along the south-western coast of Gwynedd and comprises the coastal resorts of Barmouth and Fairbourne at the mouth of the Mawddach Estuary.

**Key Characteristics**

- Medium scale, low lying coastal landscape with a broad, open estuary
- Enclosed to the east by the rising upland landscape of the National Park
- Moderately developed for tourism

**Evaluation**

The following table illustrates the appraisal of this Landscape Character Area (LCA) against sensitivity criteria which have been predetermined for field-scale solar PV energy development.

<b>Key</b>	Higher Sensitivity	↑	Medium Sensitivity	-	Lower Sensitivity	↓	Criterion not applicable	
------------	--------------------	---	--------------------	---	-------------------	---	--------------------------	--

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
<b>Landscape</b>	<b>Scale</b>	Not applicable	
	<b>Field Pattern, Scale and Enclosure</b>	Field scale is generally <b>small to medium</b> with a varied field pattern and includes upland enclosures of ffridd <sup>1</sup> . Where fields exist, boundaries are <b>typically defined by traditional dry stone walls</b> .  VS7: Fences (2%) / <u>None</u> (63%) / Stone Walls (35%) VS8: <u>Medium</u> (91%) / Large (9%)	↑
	<b>Landform</b>	There are marked contrasts in the landform of this LCA which is typified by a <b>broad open estuary</b> and <b>narrow coastal plain</b> backed by sharply <b>rising ground inland</b> .  VS Classification Level 2: <u>Built Land</u> (31%) / <u>Coastal</u> (32%) / Exposed Upland/Plateau (9%) / <u>Rolling Lowland</u> (26%) VS4: High Hills/Mountains (9%) / Levels (22%) / <u>Rolling/Undulating</u> (66%)	↑
	<b>Landcover</b>	A mix of <b>agricultural landcover</b> , typified by pastoral fields interspersed between <b>coastal settlement</b> and large areas of <b>broadleaf woodland and coniferous plantation</b> (focused along the slopes of the estuary)	↑

<sup>1</sup> [Ffridd describes a diverse mixture of grassland and heathland vegetation with bracken and scrub often found on the valley sides between upland and lowland parts of Wales. There is no direct Welsh to English translation for this term.](#)

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
		<p>together with upland fringe enclosures of ffridd.</p> <p>VS Classification Level 3: <u>Intertidal</u> (31%) / <u>Open Rolling Lowland</u> (26%) / <u>Upland Moorland</u> (9%) / <u>Urban</u> (31%)</p> <p>VS5: <u>Mixture</u> (91%) / <u>Open Land</u> (9%)</p>	
	<b>Man-made Influences</b>	<p>Man-made influences in this LCA are typically <b>concentrated</b> along the narrow coastal strip <b>around the primary settlements</b> of Barmouth and Fairbourne, the A496 main road and Cambrian Coast Railway line. There are a number of static caravan/chalet parks. <b>As landform rises inland man-made influence is less evident.</b></p> <p>VS6: No settlements (9%) / <u>Scattered Rural/Farm</u> (58%) / <u>Urban</u> (31%)</p> <p>VS27: Fair (100%)</p>	-
	<b>Settlement Pattern</b>	Not applicable	
<b>Visual</b>	<b>Skylines and Settings</b>	Not applicable	
	<b>Movement</b>	Not applicable	

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
	<b>Visibility, Key Views, Vistas and Typical Receptors</b> (both within and outside of each Landscape Character Area)	<p>Views are typically <b>open</b> within this LCA.</p> <p>VS9: Enclosed <sub>(6%)</sub> / <u>Open</u> <sub>(70%)</sub> / Exposed <sub>(24%)</sub></p> <p>Typical receptors include occupiers, users and visitors to the following:</p> <ul style="list-style-type: none"> <li>▪ Numerous properties along the coast</li> <li>▪ Snowdonia National Park</li> <li>▪ Long distance routes including the Wales Coast Path, Sustrans national cycle route Lôn Las Cymru (NCN<sup>2</sup> route 8) and a link route to NCN route 8</li> <li>▪ Open Access Areas</li> <li>▪ popular coastal resorts and local attractions such as the Fairbourne Steam Railway</li> <li>▪ Public rights of way</li> <li>▪ Barmouth Bridge</li> <li>▪ Boats and Ferries</li> <li>▪ The A496 and A493 tourist routes and the Cambrian Coast Railway</li> <li>▪ The local road network</li> </ul>	↑
	<b>Views to and from Important Landscape and Cultural Heritage Features</b> (both within and outside of each Landscape Character Area)	Not applicable	
Aesthetic, Perceptual and Experiential	<b>Condition</b>	Not applicable	
	<b>Scenic Quality and Character</b>	<p>Typically <b>Moderate</b> LANDMAP evaluation.</p> <p>VS25: <u>Moderate</u> <sub>(81%)</sub> / Strong <sub>(19%)</sub></p> <p>VS46: Low <sub>(31%)</sub> / Moderate <sub>(29%)</sub> / High <sub>(40%)</sub></p> <p>VS47: Low <sub>(30%)</sub> / Moderate <sub>(30%)</sub> / High <sub>(40%)</sub></p> <p>VS48: <u>Moderate</u> <sub>(60%)</sub> / High <sub>(40%)</sub></p>	-

<sup>2</sup> National Cycle Network - <http://www.sustrans.org.uk/ncn/map/national-cycle-network>

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to field-scale solar PV energy
	<b>Remoteness/ Tranquillity</b>	<p>There is a <b>perception of remoteness and tranquillity in the more elevated parts</b> of this LCA. Away from this, that main road corridors and relatively large settlements along the coastal plain greatly <b>reduce the sense of remoteness and tranquillity</b>.</p> <p>VS24: Exposed <sup>(9%)</sup> / <u>Smell</u> <sup>(47%)</sup> / Smell; Attractive; Sheltered; Spiritual <sup>(10%)</sup> / <u>Unattractive</u>; <u>Smell</u> <sup>(31%)</sup></p>	-
Value	<b>Landscape Value</b> (including landscape related features)	<p>Much of this LCA lies within the Barmouth SLA (This LCA and the SLA share the same boundary with the exclusion of an area around Fairbourne).</p> <p>Nationally designated features include Open Access Areas, and Sustrans national cycle routes Lôn Las Cymru (NCN route 8) and a link route to NCN route 8.</p> <p>The Wales Coast Path runs along the length of the LCA.</p> <p>Typically <b>High</b> LANDMAP evaluation with some areas <b>Outstanding</b>.</p> <p>VS50: Low <sup>(31%)</sup> / Moderate <sup>(29%)</sup> / High <sup>(40%)</sup>                      VS49: Low <sup>(31%)</sup> / Moderate <sup>(29%)</sup> / High <sup>(40%)</sup>                      LH45: Low <sup>(31%)</sup> / Moderate <sup>(26%)</sup> / High <sup>(9%)</sup> / <u>Outstanding</u> <sup>(34%)</sup>                      LH42: Unassessed <sup>(100%)</sup>                      GL31: Outstanding <sup>(99%)</sup>                      GL33: Outstanding <sup>(99%)</sup></p>	↑
	<b>Historic Value</b>	<p>This LCA lies entirely within the Arduwy Registered Historic Landscape and the Mawddach Registered Historic Landscape.</p> <p>Part of the LCA also lies within the essential setting of a Registered Park and Garden.</p> <p>Typically <b>High-Outstanding</b> LANDMAP evaluation.</p> <p>HL38: Moderate <sup>(22%)</sup> / <u>High</u> <sup>(53%)</sup> / Outstanding <sup>(8%)</sup> / Unassessed <sup>(16%)</sup>                      HL35: Moderate <sup>(16%)</sup> / <u>High</u> <sup>(44%)</sup> / <u>Outstanding</u> <sup>(40%)</sup>                      HL40: Moderate <sup>(16%)</sup> / <u>High</u> <sup>(44%)</sup> / <u>Outstanding</u> <sup>(40%)</sup></p>	↑

### Overall Landscape Sensitivity and Strategy

The following table provides an overall summary of sensitivity in relation to field-scale solar PV development (based on the LCA sensitivity evaluation table), together with the proposed landscape strategy:

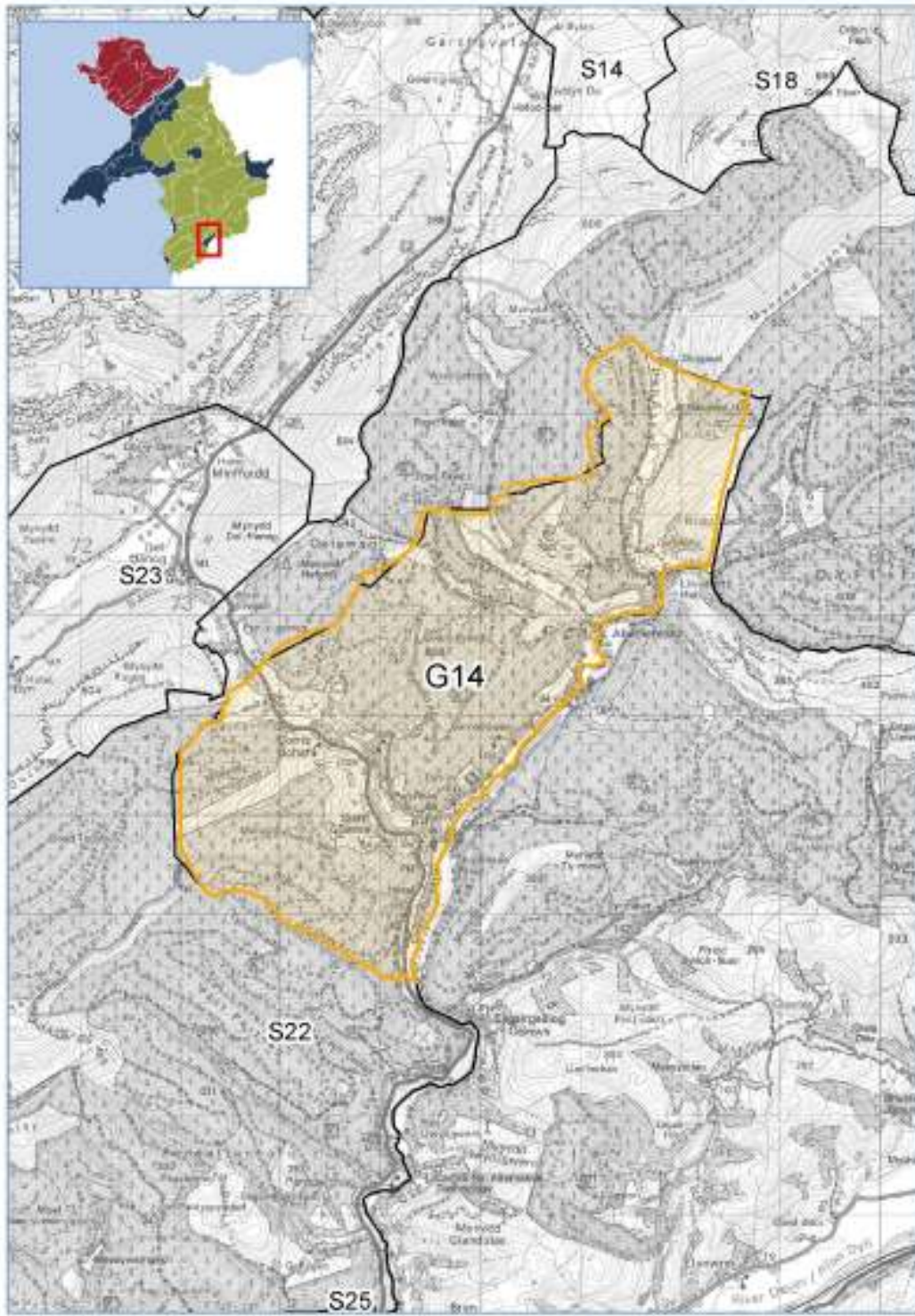
#### FIELD-SCALE SOLAR PV ENERGY DEVELOPMENTS

OVERALL SENSITIVITY	
<b>High</b>	<p>This coastal landscape comprises the mouth of Barmouth estuary with narrow coastal plain and rising landform to either side. It is enclosed inland by the upland landscape of the National Park. The coastal plain is relatively highly developed for tourism.</p> <p>Resorts, together with major road and rail infrastructure influence the character of the landscape along the immediate coast and diminish the sense of remoteness and tranquillity, thus reducing sensitivity to field-scale solar PV development.</p> <p>This lowered sensitivity is outweighed by the presence of dramatically rising landform inland and where enclosure exists, the prevalence of dry stone walls increases sensitivity. Sensitivity is further increased by presence of sensitive visual receptors, important cultural heritage features and a high degree of intervisibility with the highly valued landscape of the National Park. The LCA also lies entirely within the Barmouth SLA and parts of the Arduwy Registered Historic Landscape and the Mawddach Registered Historic Landscape.</p>
LANDSCAPE STRATEGY	
Landscape Objective	<b>Landscape Protection</b>
Baseline Development	No existing or consented field-scale solar PV energy developments.
Indicative Overall Capacity	Typically <b>no capacity for field-scale solar PV energy developments.</b>

### Guidance

Guidance notes are not applicable as there is typically no capacity for field-scale solar PV energy developments within Barmouth LCA.

### G14 Corris



1:50,000



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**Location and Extent**

This LCA is located to the far south of Gwynedd around Corris. The LCA borders Powys to the south and the National Park to the north, west and east.

**Key Characteristics**

- Large scale, upland landscape
- Extensive conifer plantations
- Remnant quarry sites with slate waste

**Evaluation**

The following table illustrates the appraisal of this Landscape Character Area (LCA) against sensitivity criteria which has been predetermined for field-scale solar PV energy development.

<b>Key</b>	Higher Sensitivity	↑	Medium Sensitivity	-	Lower Sensitivity	↓	Criterion not applicable	
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Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Developments
<b>Landscape</b>	<b>Scale</b>	Not applicable	
	<b>Field Pattern, Scale and Enclosure</b>	Small to medium scale fields are located along the lower slopes and valley bottoms in a relatively regular pattern. Field boundaries comprise a <b>mix of fences, dry stone walls and hedges, all with frequent trees.</b>  VS7: Fences <small>(2%)</small> / Mixture <small>(17%)</small> / <u>None</u> <small>(80%)</small> VS8: Medium <small>(16%)</small> / <u>Large</u> <small>(84%)</small>	-
	<b>Landform</b>	Upland landform typified by <b>high hills and mountains.</b>  VS Classification Level 2: <u>Hills, Lower Plateau &amp; Scarp Slopes</u> <small>(84%)</small> / Upland Valleys <small>(16%)</small> VS4: <u>High Hills/Mountains</u> <small>(84%)</small> / Hills/Valleys <small>(16%)</small>	↑
	<b>Landcover</b>	The uniformity of the <b>coniferous plantation which covers much of this LCA</b> is broken up by broadleaved woodland, open upland areas, remnant quarries and Small pastures are present along the valley bottoms.	-

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Developments
		VS Classification Level 3: <u>Wooded Hillside &amp; Scarp Slopes</u> (84%) / Wooded Upland Valleys (16%) VS5: Woodland (100%)	
	<b>Man-made Influences</b>	Much of this LCA is <b>unsettled</b> . Man-made influences include commercial forestry plantations, former slate quarries and the A487 tourist route, along which settlement is concentrated.  VS6: Clustered (16%) / <u>No Settlements</u> (84%) VS27: Fair (100%)	↑
	<b>Settlement Pattern</b>	Not applicable	
Visual	<b>Skylines and Settings</b>	Not applicable	
	<b>Movement</b>	Not applicable	
	<b>Visibility, Key Views, Vistas and Typical Receptors</b> (both within and outside of each Landscape Character Area)	Many views are <b>confined</b> within this LCA, particularly within the lower lying areas and in and around the plantations and woodlands. In elevated areas, there is <b>good intervisibility between this LCA and the National Park with strong visual links to and from higher areas</b> , particularly Cadair Idris.  VS9: <u>Confined</u> (84%) / Enclosed (16%)  Typical receptors include occupiers, users and visitors to the following: <ul style="list-style-type: none"> <li>▪ Relatively few properties</li> <li>▪ Snowdonia National Park</li> <li>▪ Open Access Areas</li> <li>▪ Long distance national cycle route Sustrans Lôn Las Cymru (NCN route 8)</li> <li>▪ Local attractions and public rights of way</li> <li>▪ The A487 tourist route</li> <li>▪ The local road network</li> </ul>	



Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Developments
	<b>Views to and from Important Landscape and Cultural Heritage Features</b> (both within and outside of each Landscape Character Area)	Not applicable	
Aesthetic, Perceptual and Experiential	<b>Condition</b>	Not applicable	
	<b>Scenic Quality and Character</b>	Typically <b>High</b> LANDMAP evaluation VS25: Moderate (16%) / <u>Strong</u> (84%) VS46: <u>Low</u> (84%) / Moderate (16%) VS47: Moderate (16%) / <u>High</u> (84%) VS48: Moderate (16%) / <u>High</u> (84%)	↑
	<b>Remoteness/ Tranquillity</b>	Being predominantly unsettled and with relatively few local roads, this LCA has a <b>sense of tranquillity and remoteness</b> . Away from these areas this is in places <b>locally reduced</b> by commercial forestry activities and modern developments along the A487 corridor.  VS24: Other (16%) / <u>Sheltered</u> (84%)	↑
Value	<b>Landscape Value</b> (including landscape related features)	This LCA lies entirely within the Corris SLA (The LCA and SLA share the same boundary).  Nationally designated features include Open Access Areas and Sustrans national cycle route Lôn Las Cymru (NCN route 8).  Typically <b>Moderate</b> LANDMAP evaluation.  VS50: <u>Moderate</u> (100%) VS49: <u>Low</u> (84%) / Moderate (16%) LH45: <u>Low</u> (51%) / Moderate (23%) / High (26%) LH42: Unassessed (90%) / (blank) (10%) GL31: High (100%) GL33: High (100%)	↑

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Developments
	<b>Historic Value</b>	Typically <b>Moderate-High</b> LANDMAP evaluation with some areas <b>Outstanding</b> . HL38: Moderate <sup>(22%)</sup> / <u>High</u> <sup>(67%)</sup> / Unassessed <sup>(11%)</sup> HL35: <u>Low</u> <sup>(41%)</sup> / High <sup>(22%)</sup> / <u>Outstanding</u> <sup>(37%)</sup> HL40: Low <sup>(11%)</sup> / <u>Moderate</u> <sup>(30%)</sup> / High <sup>(22%)</sup> / <u>Outstanding</u> <sup>(37%)</sup>	↑

### Overall Landscape Sensitivity and Strategy

The following tables provide an overall summary of sensitivity in relation to field-scale solar PV development (based on the LCA sensitivity evaluation table), together with the proposed landscape strategy:

#### FIELD-SCALE SOLAR PV ENERGY DEVELOPMENTS

OVERALL SENSITIVITY	
<b>High</b>	<p>This typically large scale, upland landscape is dominated by extensive coniferous plantations. Small to medium scale pastoral fields are located along the lower slopes and valley floors in a relatively regular pattern with a mix of boundaries. Existing development is limited and focussed along the roads which follow the valley floors. Overall there is a strong sense of tranquillity and remoteness in the landscape.</p> <p>Although the presence of sensitive visual receptors is relatively limited, sensitivity to field scale solar PV energy development is greatly increased by the area's upland landform, strong associations and intervisibility with the National Park and the regional value of the landscape which is reflected in it lying entirely within the Corris SLA.</p>
LANDSCAPE STRATEGY	
Landscape Objective	Landscape Protection
Baseline Development	<p>No existing or consented field-scale solar PV energy developments within this LCA.</p> <p>One consented <b>micro development</b> (180kw) located towards the edge of the 5km study area buffer within Powys (on land adjacent to farm at Caeddol Llanwrin).</p>
Indicative Overall Capacity	Typically <b>no capacity for field-scale solar PV energy developments.</b>

### Guidance

Guidance notes are not applicable as there is typically no capacity for field-scale solar PV energy developments within Corris LCA.

### G15 Tywyn



1:25,000



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**Location and Extent**

This relatively small LCA lies on the coastline to the far south west of Gwynedd. The LCA comprises the coastal town of Tywyn and is bordered by the National Park.

**Key Characteristics**

- Medium scale, flat, open coastal landscape
- Enclosed to the east by the rising upland landscape of the National Park
- Relatively heavily developed to the south

**Evaluation**

The following table illustrates the appraisal of this Landscape Character Area (LCA) against sensitivity criteria which have been predetermined for field-scale solar PV energy development.

<b>Key</b>	Higher Sensitivity	↑	Medium Sensitivity	-	Lower Sensitivity	↓	Criterion not applicable	
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Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Development
<b>Landscape</b>	<b>Scale</b>	Not applicable	
	<b>Field Pattern, Scale and Enclosure</b>	<p>Predominantly <b>medium to large scale fields in a regular pattern</b>. A <b>mix of field boundaries</b> consisting of post and wire fences and or field drains, gappy hedgerows and dry stone walls.</p> <p>VS7: Fences <sup>(7%)</sup> / Managed Hedge <sup>(6%)</sup> / Mixture <sup>(28%)</sup> / Stone Walls <sup>(59%)</sup>                      VS8: <u>Medium</u> <sup>(91%)</sup> / Large <sup>(9%)</sup></p>	-
	<b>Landform</b>	<p>Low lying, <b>flat</b> coastal plain.</p> <p>VS Classification Level 2: Built Land <sup>(37%)</sup> / <u>Coastal</u> <sup>(61%)</sup>                      VS4: Levels <sup>(99%)</sup></p>	↓
	<b>Landcover</b>	<p>Coastal resort settlement surrounded by low lying rough pastures. River estuary to the north.</p> <p>VS Classification Level 3: Dunes &amp; Dune Slack <sup>(9%)</sup> / <u>Intertidal</u> <sup>(52%)</sup> / <u>Urban</u> <sup>(37%)</sup>                      VS5: Development <sup>(37%)</sup> / <u>Mixture</u> <sup>(52%)</sup> / <u>Open Land</u> <sup>(9%)</sup></p>	↓

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Development
	<b>Man-made Influences</b>	<p>This LCA is <b>heavily influenced by development</b>. <b>Modern estates and caravan parks</b> dominate the resort town of Tywyn which covers just under half of this LCA. <b>Military barracks/ Morfa Camp</b> is located to the north-west of the town and a <b>sewage works</b> located to the north of the town, adjacent to the coast. The <b>A493 main road</b> runs through the south of the LCA. The <b>Cambrian Coast Railway line</b> runs through Tywyn and along the coastline. An <b>existing solar PV farm</b> is located adjacent to the military barracks.</p> <p>VS6: <u>No settlements</u> (52%) / Scattered Rural/Farm (9%) / <u>Urban</u> (37%)                      VS27: Poor (52%) / Fair (48%)</p>	↓
	<b>Settlement Pattern</b>	Not applicable	
Visual	<b>Skylines and Settings</b>	Not applicable	
	<b>Movement</b>	Not applicable	

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Development
	<b>Visibility, Key Views, Vistas and Typical Receptors</b> (both within and outside of each Landscape Character Area)	<p>Views are typically <b>open</b> and the area has <b>strong associations with the National Park</b> which lies immediately adjacent. In places views to the sea are limited by railway embankment. There are views from the north of the LCA to an active quarry across the water of the Afon Dysynni.</p> <p>Some views to the sea are limited by the raised railway line embankment.</p> <p>VS9: <u>Open</u> <small>(100%)</small></p> <p>Typical receptors include occupiers, users and visitors to the following:</p> <ul style="list-style-type: none"> <li>▪ Numerous properties</li> <li>▪ Long distance routes including Sustrans Porthmadog to Machynlleth cycle route (NCN route 82) and the Wales Coast Path</li> <li>▪ Local attractions such as the Talyllyn Railway</li> <li>▪ Local public rights of way</li> <li>▪ The A493 tourist route and Cambrian Coast Railway</li> <li>▪ The local road network</li> <li>▪ Water sport and boat users</li> </ul>	↑
	<b>Views to and from Important Landscape and Cultural Heritage Features</b> (both within and outside of each Landscape Character Area)	Not applicable	
Aesthetic, Perceptual and Experiential	<b>Condition</b>	Not applicable	
	<b>Scenic Quality and Character</b>	<p>Typically <b>Low</b> LANDMAP evaluation</p> <p>VS25: <u>Weak</u> <small>(90%)</small> / Moderate <small>(10%)</small></p> <p>VS46: <u>Low</u> <small>(89%)</small> / High <small>(10%)</small></p> <p>VS47: <u>Low</u> <small>(89%)</small> / High <small>(9%)</small></p> <p>VS48: <u>Low</u> <small>(89%)</small> / High <small>(9%)</small></p>	↓

Sensitivity Criteria		Characteristics of the LCA	Assessment of Landscape Sensitivity to Field-Scale Solar PV Energy Development
	<b>Remoteness/ Tranquillity</b>	<p>The main road and rail corridors and relatively large settlement of Tywyn greatly <b>reduce the sense of remoteness and tranquillity</b> within this LCA.</p> <p>VS24: Exposed; Other (9%) / <u>Sheltered; Other</u> (37%) / <u>Smell</u> (52%)</p>	↓
Value	<b>Landscape Value</b> (including landscape related features)	<p>Typically <b>Moderate</b> LANDMAP evaluation with some areas <b>Outstanding</b>.</p> <p>Nationally designated features include Sustrans national cycle route Porthmadog to Machynlleth (NCN route 82).</p> <p>The Wales Coast Path runs along the length of the LCA.</p> <p>VS50: <u>Low</u> (89%) / <u>High</u> (9%)                      VS49: <u>Low</u> (37%) / <u>Moderate</u> (54%) / <u>High</u> (9%)                      LH45: <u>Low</u> (27%) / <u>Moderate</u> (45%) / <u>Outstanding</u> (28%)                      LH42: <u>High</u> (45%) / <u>Unassessed</u> (55%)                      GL31: <u>Outstanding</u> (100%)                      GL33: <u>Outstanding</u> (100%)</p>	-
	<b>Historic Value</b>	<p>This LCA lies within the Dysynni Valley Registered Historic Landscape.</p> <p>Typically <b>Outstanding</b> LANDMAP evaluation.</p> <p>HL38: <u>High</u> (25%) / <u>Outstanding</u> (75%)                      HL35: <u>High</u> (25%) / <u>Outstanding</u> (75%)                      HL40: <u>Outstanding</u> (100%)</p>	↑



### Overall Landscape Sensitivity and Strategy

The following tables provide an overall summary of sensitivity in relation to field-scale solar PV development (based on the LCA sensitivity evaluation table), together with the proposed landscape strategy:

#### FIELD-SCALE SOLAR PV ENERGY DEVELOPMENTS

OVERALL SENSITIVITY	
<b>Medium</b>	<p>This medium scale, low lying, open coastal landscape is enclosed to the east by the rising upland landscape of the National Park.</p> <p>Fields are predominantly medium to large in scale and regular in pattern. A mix of field boundaries consisting of post and wire fences and/ or field drains, gappy hedgerows and dry stone walls. The coastal town of Tywyn, together with main road and rail infrastructure, influence the character of the landscape along this section of coastline and diminish the sense of remoteness and tranquillity, thus also reducing sensitivity.</p> <p>This lowered sensitivity is counterbalanced by the presence of a number of sensitive visual receptors, together with strong associations and a high degree of intervisibility with the National Park in some places. The LCA also lies entirely within the Dysynni Valley Registered Historic Landscape.</p>
LANDSCAPE STRATEGY	
Landscape Objective	<p><b>Landscape Protection</b> – all areas that contribute to the outlook and setting of the National Park and ELDP Areas of Natural Beauty.</p> <p>Landscape Accommodation – <b>areas that do not contribute to the outlook and setting of the National Park and ELDP Areas of Natural Beauty.</b></p>
Baseline Development	1 no. medium scale development (3.6MW solar farm exists immediately to the east of Morfa Camp).
Indicative Overall Capacity	<p>Within areas that contribute to the outlook and setting of the National Park and ELDP Areas of Natural Beauty, there is typically <b>no capacity for field-scale solar PV energy development.</b></p> <p>Outside these areas, there may be <b>very limited capacity for further development</b> which could typically comprise micro to small scale schemes in keeping with the localised field scale and pattern; however, any new development should be carefully sited to minimise adverse landscape and visual impacts and to avoid unacceptable cumulative effects with existing modern developments.</p>

**Guidance**

The table below provides LCA specific guidance notes on siting developments to minimise adverse effects.

<b>Guidance Notes on Siting</b>	<b>Field-Scale Solar PV Energy Developments</b>
Conserve the natural beauty of Snowdonia National Park, its special qualities and its wider setting. Consider the effects of development on views to and from Snowdonia National Park. The effect of development outside the National Park boundary needs to be considered using visualisations. Development must avoid creating a sense of unacceptable encroachment, encirclement, prominence, or discordance, individually or cumulatively on the National Park.	✓
Avoid siting any development along the coastline and its immediate setting, in particular avoiding the setting of areas defined as ELDP Undeveloped Coast.	✓
Maintain the integrity of Dysynni Valley Registered Historic Landscape.	✓
Protect the settings of designated and other important cultural heritage features; and the key views to and from these features.	✓
Carefully consider potential cumulative landscape effects of existing and proposed developments.	✓
Avoid cumulative effects on popular routes including the Wales Coast Path and Sustrans Bangor to Fishguard cycle route (NCN route 82) and local viewpoints – use visualisations to assess sequential views (including views to existing development).	✓
Site development close to existing urban areas to avoid the proliferation of development within the wider landscape.	✓
Consider views from residential receptors, particularly those that already have views of modern development. Siting should aim to avoid cumulative visual effects.	✓
Avoid cumulative effects on the A493 main/ tourist routes and the Cambrian Coast Railway.	✓