MAES BACH ENERGY STORAGE SYSTEM

PRE-APPLICATION CONSULATION LANDSCAPE AND VISUAL IMPACT ASSESSMENT PART 1 of 7



Prepared for Net Zero Twenty Five November 2024

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I.0 INTRODUCTION

- 1.1 RHLA Ltd were instructed by Firstway Energy on behalf of Net Zero Twenty Five Limited to undertake a Landscape and Visual Impact Assessment (LVIA) of a new temporary Energy Storage System ('ESS') and associated infrastructure and landscaping ('the Proposed Development') at Maes Bach Farm ('the Site').
- 1.2 The LVIA has been undertaken as part of the Pre-Application Consultation (PAC) process, prior to the submission of the planning application and final LVIA.
- 1.3 With reference to Figure I, the ESS Site covers a field to the south-west of the main farm buildings, with the below ground Cable Corridor extending along part of Pound Farm Lane and the A473, to connect with an existing electrical sub-station.
- 1.4 The ESS Site is to the immediate north of the Maes Bach Solar Farm, which like the ESS Site is within a Special Landscape Area. Development is permitted within Special Landscape Areas, with supporting policies requiring the highest standards of design, as well as the protection of the distinctive landscape features of the area.
- 1.5 The LVIA therefore undertakes a baseline review of the relevant published landscape information, policies and fieldwork to identify the existing landscape character and visual amenity of the area, so as to inform the iterative design process in response to the Special Landscape Area. The LVIA sets out the embedded mitigation with the design and the predicted landscape and visual effects of the Proposed Development during the construction and operational phases.
- 1.6 The ESS Site is also located to the south and west of the approved Maes Mawr Solar Farm, such that once completed, the ESS Site will be consolidated between two solar farms. Due to this, the LVIA includes a cumulative assessment of the potential combined effects of the Proposed Development and the approved Maes Mawr Solar Farm.
- 1.7 The LVIA has been undertaken by Chartered Landscape Architects with extensive experience in ESS LVIAs, as well as LVIAs in Wales.
- 1.8 The LVIA is based upon the PAC drawings, the Concept Landscape Plan and technical studies including Highways, Arboriculture and Ecology as of October 2024. These plans and documents should be read in combination with the LVIA.
- 1.9 Any updates to these drawings and technical studies following the PAC process will be reflected in the final LVIA submitted with the planning application.

2.0 LVIA METHODOLOGY SUMMARY

Landscape and Visual Impact Assessment

- 2.1 With reference to Appendix I, the LVIA methodology follows the best practice principles for assessing landscape and visual effects as recommended by the Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013 (GLVIA 3). The LVIA methodology is set out in full in Appendix I and is summarised below.
- 2.2 Landscape and visual matters are assessed separately, such that:
 - Landscape assesses the effects of the Proposed Development on the landscape as a resource (i.e. change to the physical features of the landscape and/or the aesthetic, perceptual and experiential characteristics that make different landscapes distinctive); and
 - Visual assess effects of the Proposed Development on people's views from the change to existing features or the introduction of new elements within the composition of the view.

Landscape Effects

- 2.3 The landscape effects are assessed by determining the sensitivity of the landscape receptors (i.e. the Site and published landscape character areas). In accordance with GLVIA 3, the sensitivity of landscape receptors is determined via an assessment of their landscape value and landscape susceptibility. With reference to **Appendix I**, the landscape sensitivity is defined as either very high, high, medium, low or very low.
- 2.4 The potential landscape magnitude of impact (change) is informed by judgements about the size and extent of the Proposed Development and the duration and reversibility of the Proposed Development. With reference to Appendix I, the magnitude of impact is assessed as either high, medium, low, very low or none.
- 2.5 The relationship between the landscape sensitivity and the landscape magnitude of impact determines a landscape effect. Landscape effects may be beneficial or adverse and are assessed as either major, moderate, minor, negligible or neutral as set out below.

Visual Effects

- 2.6 The visual effects are determined by identifying a representative range of people ('visual receptors') with the potential for views of the Proposed Development.
- 2.7 The sensitivity of the visual receptors is assessed by determining their value and susceptibility. With reference to **Appendix I**, visual sensitivity is defined as either very high, high, medium, low or very low.

- 2.8 The visual magnitude of impact (change) is described with reference to the scale of change in the composition of the view and the distance between the visual receptor and the Proposed Development. The magnitude of visual impact is assessed as either high, medium, low, very low or none.
- 2.9 Like the landscape assessment, the relationship between the visual sensitivity and visual magnitude of impact establishes a visual effect. Visual effects may be beneficial or adverse and are determined as either major, moderate, minor, minor negligible or neutral, as set out below.

Landscape and Visual Effects

2.10 As set out in **Appendix I**, Table 2-1 is used to guide the assessment of landscape and visual effects, based upon the relationship between the sensitivity of receptors and the magnitude of impact. Where the assessment differs from this guide, a reasoned explanation is provided in the assessment narrative.

| Sensitivity | Magnitude of Impact | | | | | |
|-------------|-----------------------|------------------------|--------------------------|--------------------------|---------|--|
| or neceptor | High | Medium | Low | Very Low | None | |
| Very High | Major | Major | Major or Moderate | Moderate or Minor | Neutral | |
| High | Major o Moderate | r Major or Moderate | Moderate or Minor | Minor or Negligible | Neutral | |
| Medium | Major o Moderate | r Moderate or Minor | Minor or Negligible | Negligible | Neutral | |
| Low | Moderate o Minor | r Minor | Minor or Negligible | Negligible or Neutral | Neutral | |
| Very Low | Minor o Negligible | r Negligible | Negligible or Neutral | Neutral | Neutral | |

Table 2-1: Guide to the Significance of Landscape and Visual Effects

- 2.11 Major or moderate effects are considered important in landscape and visual terms, with minor, negligible and neutral effects considered less important. Where the guide allows for a choice in the effect (i.e. moderate or minor), the decision is based on professional judgement with a reasoned explanation in the assessment narrative for the single predicted effect (i.e. minor).
- 2.12 The LVIA assessment is undertaken for the following phases:
 - Construction, winter, assuming peak construction activity; and
 - Operation years 1, 5 and 10 for winter and summer months, assuming the Proposed Development is completed and in use.

Assessment Assumptions

The LVIA assumptions and limitations are:

- The assessment is based on the PAC drawings and the Concept Landscape Plan, as of October 2024. Any changes to these plans following the PAC responses will be addressed in the planning application submission and therefore the conclusions of this LVIA are subject to change;
- The main focus of this LVIA is the ESS units, sub-station and equipment, as the Cable Corridor would be below ground in operation;
- The ESS units and acoustic fencing around the sub-station would be rendered a dark green tone, so as to aid in their integration within the landscape;
- New planting would be up to 3.5 metres (m) in height at year 1, with an assumed growth rate of 1m every 3 years, such that by year 10, new trees would be up to 7m in height;
- A landscape management plan would form part of the conditions, but the existing hedgerows would be positively managed to grow up to 3m in height, with the retained trees positively managed to ensure their longevity;
- Viewpoints are located on publicly accessible land with impacts to residential receptors assessed via fieldwork and professional judgement;
- The assessment is based on a single point in time to cover the peak construction activity, such that in reality, the construction effects would likely be less, due to phased works; and
- The construction, year I and year 5 assessments are temporary, with the year 10 assessment representing the residual effects of the Proposed Development, albeit that the Proposed Development is reversible.

Residential Amenity

2.13 Due to the settlement pattern in the immediate context of the Site being sparse, existing features and distance between the ESS Site and receptors, the LVIA does not include an assessment of residential amenity.

Character of the Night Sky

2.14 As the Proposed Development is not lit in operation, there would be no impacts from lighting and therefore the LVIA does not include a qualitative assessment of the character of the night sky.

Verifiable Views

2.15 Verifiable views (photomontages) illustrating the Proposed Development overlaid onto an existing photography will be submitted for the planning application and undertaken in accordance with the Landscape Institutes Technical Guidance Note 06/19 Type 4 Image. Photomontages will be undertaken for viewpoints 3, 5, 9 and 14.

3.0 THE SITE

3.1 With reference to **Figure I**, the Site ('the red line'), covers the proposed location for the energy storage units, sub-station and associated equipment ('the ESS Site') and the route of the underground cable connection, along the A473 and Pound Farm Lane ('the Cable Corridor'). The relevant landscape features of these two parts of the Site are set out below, with the main focus being on the ESS Site, due to the Cable Corridor being underground in operation.

The ESS Site

- 3.2 With reference to **Figure I**, the ESS Site covers part of a grass field, to the west of Maes Bach Farm. The ESS Site is bound by:
 - An established hedgerow, the existing access track between Pound Farm Lane and Maes Bach farm and steeply rising landform. The track also forms part of Public Right of Way (PRoW) (footpath) DRE/53/2;
 - The remainder of the field to the east;
 - Established trees and Maes Bach Solar Farm to the south; and
 - Pound Farm Lane to the west.



Image 3-1: View from the south-west edge of the ESS Site looking east, illustrating the established hedgerow and rising landform to the north of the Site (left of image), Maes Bach Farm to the east of the Site (centre of image), the mature trees along the southern edge of the Site and the Maes Bach Solar Farm to the south of the Site (right of image).

- 3.3 With reference to **Figure 2**, the ESS Site forms part of a localised plateau to the east of Pound Farm Lane, situated at around 123m Above Ordnance Datum (AOD). The landform across the Site undulates very gently from north to south.
- 3.4 The vegetation cover across the ESS Site consists of perennial rye grass, such that there is no established vegetation within the proposed footprint of the ESS compound. The southern edge of the ESS Site consists of a row of established oak trees, up to 15m in height (twice the height of the proposed sub-station). There is an established hedgerow along the western edge of the ESS Site, adjacent to Pound Farm Lane, approximately 1.5m in height. With reference to on-line mapping, none of the vegetation within the ESS Site is ancient woodland, nor is it covered by any Tree Preservation Orders.

- 3.5 With reference to on-line mapping¹, the ESS Site is not crossed by any PRoW and is not publicly accessible.
- 3.6 With reference to **Figure I**, the ESS Site is not covered by any statutory landscape designations (e.g. National Park), nor is the ESS Site within, or adjacent to, a Conservation Area.

The Cable Corridor

- 3.7 With reference to **Figure I**, the Cable Corridor covers two roads, between the ESS Site and the existing electrical sub-station, 1.3km to the north of the ESS Site.
- 3.8 The first road is Pound Farm Lane, which extends to the north of the ESS Site in a broadly straight alignment, before turning acutely to merge with the A473 and B4595, via a roundabout, 1km to the north-west of the ESS Site. Pound Farm Lane is a relatively narrow road, bordered by hedgerows and individual trees for the majority of its length. As the lane turns towards the roundabout, it is bordered by established woodland.



Image 3-2: Extract of Viewpoint I, illustrating the character of Pound Farm Lane

3.9 The second road is the A473, which transitions from a single lane road in proximity to the existing sub-station, to a dual carriageway at the B4595 and Pound Farm Lane roundabout. The A473 is in cutting and bordered by tall lighting columns.

¹ Rhondda Cynon Taf,

 $https://maps.rctcbc.gov.uk/myRhondda.aspx?MapSource=RCT/AllMaps_english&StartEasting=306432&StartNorthing=189805&StartZoom=4000$

The Special Landscape Area (SLA)

3.10 With reference to Figure I, the ESS Site and part of the ESS Cable Route (along Pound Farm Lane) are within SLA - Isaf, Garth and Nantgarw Western Slopes, for which Local Development Plan Policy SSA 23: Special Landscape Area² states:

"Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area."

3.11 The supporting policy text states:

"In the Southern Strategy Area SLAs have been identified to protect the distinctive landscape of the area. Particular consideration has been given to the protection of the unspoilt low lying farmland, common land and gentle valley slopes which form a visual backdrop to the settlements of the area."

- 3.12 In relation to the above, the ESS Site is farmland, but this is a common feature of the SLA, with the ESS Site located between Maes Bach Solar Farm and the approved location of Maes Mawr Solar Farm, such that it is not an integral part of the farmland. The ESS Site is also located across a plateau, rather than forming part of the gentle valley slopes. The ESS Site is not publicly accessible and is therefore not common land. Due to this, the ESS Site is not fully representative of the distinctive landscape of the SLA.
- 3.13 The supporting policy text also notes that SLA's have been designated to protect areas of fine landscape quality, based upon the following factors and definitions³ (ref to **Appendix I**).

| SLA Factors | Stated Strategic Criteria (Refer to Appendix I) | The ESS Site |
|---|--|---|
| Prominence | Eastern part is prominent wooded valley slopes seen from A470 and backdrop to Treforest Industrial Estate. | The ESS Site does not form part of the wooded valley slopes, nor the immediate backdrop to Treforest Industrial Estate, due to being located to the west of Maes Bach Farm. |
| Unspoilt areas – pre- industrial patterns of land use | Western part is farmland generally undisturbed by industrialisation. | The ESS Site is farmland, but is located adjacent to Maes Bach Solar Farm, such that the ESS Site is not 'undisturbed' by changes in land use. As set out above, the ESS Site will also be bordered by the approved Maes Mawr Solar Farm. |
| Vulnerability and sensitivity to change | Western part is vulnerable to spread of development relating to Efail Isaf and Church Village bypass Buffer zone between | The ESS Site is not geographically related to these areas, nor the stated risk of urban and residential development. |

Table 3-1: Stated SLA Factors in Relation to the ESS Site.

² Rhondda Cynon Taf, Local Development Plan,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/Relateddocuments LDP20062021/AdoptedLocalDevelopmentPlan.pdf

³ Proposals for Designation of Special Landscape Areas,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/LDPEvidenceBaseLibraryandAnnualMonitoringRe/RelateddocumentsEvidenceBase/EB49.pdf

| SLA Factors | Stated Strategic Criteria (Refer to Appendix I) | The ESS Site | |
|------------------------------------|---|---|--|
| | Garth Hill ridge and Church Village/Efail Isaf. | | |
| Setting for special landscapes. | Western part is setting for prominent Garth Hill SLA (Cardiff) | The ESS Site is at distance from Garth Hill, and is perceived beyond the Maes Bach Solar Farm, which is evidently considered acceptable in planning terms within the setting of Garth Hill. As demonstrated by the following visual appraisal, the visibility of the ESS from Garth Hill is limited by the height and density of the mature trees along the southern part of the ESS Site. As set out in the following cumulative assessment chapter, the Proposed Development would also be perceived in the context of the approved Maes Mawr solar farm which is also considered acceptable in planning terms in the setting of Garth Hill. | |

- 3.14 From the above table, the ESS Site does therefore not contribute fully to the stated SLA factors of fine landscape quality.
- 3.15 The stated 'Primary Landscape Qualities and Features' of the SLA area:
 - "Attractive farmland on rolling plateau, with irregular fields mainly of improved grassland, large hedges, scattered farms and winding lanes;
 - This farmland forms the foreground in views from popular Garth Hill to the south Wooded slopes to Taff Vale are important part of views from A470 and Treforest Industrial Estate;
 - These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales; and
 - Mix of broadleaf and coniferous woodlands."
- 3.16 From the above, the ESS Site is part of the farmland and improved grassland, as well as the large hedges; but these are common features across the SLA. The ESS Site is not part of the foreground in views from Garth Hill, the A470 nor Treforest Industrial Estate, due to being located beyond Maes Bach Solar Farm and Maes Bach Farm. The ESS Site is not part of the wooded Taff Vale, with mature trees localised to the southern part of the ESS Site.
- 3.17 The stated key policies and management for the SLA are:
 - *"Maintain farmland character of plateau;*
 - Restrict spread of development around Efail Isaf;
 - Management to conserve wooded slopes; and
 - Conserve hedges and small woods."

LANDMAP (the published Welsh Landscape baseline information)

3.18 With reference to the following landscape character assessment chapters and LANDMAP, the Site is within a predominantly 'moderate' LANDMAP classification, which equates to a local level 'importance'; rather than a regional, county or national 'importance'.

4.0 SITE CONTEXT

STUDY AREA

- 4.1 With reference to GLVIA 3, the purpose of the LVIA study area is to identify the geographic area in which effects may occur due to the Proposed Development. The study area is required to be proportionate to the Proposed Development and has been determined through desk-based studies, reviews of aerial mapping, published landscape character assessments and fieldwork.
- 4.2 With reference to **Figure I**, the extent of the study area is a 5km radius of the ESS Site. This is assessed as being proportionate to the Proposed Development, due to areas of elevated landform across the study area. Any perception of the Proposed Development from beyond the study area would not result in landscape and visual effects due to the combination of distance and intervening features, along with the Proposed Development being perceived in the context of the Maes Bach Solar Farm.
- 4.3 The following section summarises the key landscape features across the study area in relation to the ESS Site, due to the Cable Corridor being below ground in operation.

Landform and Hydrology

- 4.4 With reference to **Figure 2**, the landform rises steeply to the immediate north of the ESS Site, up to around 139m AOD (16m higher than the ESS Site at 123m AOD) due to a localised hillock which extends to the north of the farm access track. The landform falls gradually northwards from the hillock, before transitioning into the southern side of the Taff Valley, to fall steeply towards the valley floor and the Afon Taff, which is situated around 50m AOD, 750m to the north-east of the ESS Site. The landform remains around 50m AOD on the opposite bank of the Afon Taff, before rising steeply to form the north side of the Taff Valley, rising up to around 322m AOD across Mynydd Meio, 2.9km to the north-east of the ESS Site. The remainder of the landform across the northern part of the study area, extending towards Pontyprodd, reflects that of the Taff Valley.
- 4.5 To the east of the ESS Site, the landform falls gradually to around 120m AOD across Maes Bach Farm, before falling steeply across the southern side of the Taff Valley, to the Afon Taff, at around 40m AOD. The landform remains low lying and generally flat across Treforest Industrial Estate, before rising up to around 177m AOD at Gwaun-gledyr-uchaf, 2.2km to the east of the ESS Site. Several valley systems also converge to the east of the ESS Site, due to the conflux of the Afon Taff and the Nant Cwmbedw, such that there is also elevated land across Craig yr Allt, up to 273m AOD, to the south of Gwaun-gledyr-uchaf, and 2.9km to the south-east of the ESS Site. The remainder of the eastern part of the study area consists of a complex pattern of undulating landform, due to the numerous watercourses, including elevated land across Caerphilly Common, around 271m AOD, 4.9km to the east of the ESS Site.

- 4.6 To the south of the ESS Site, the landform is undulating, falling gradually towards a series of small watercourses, before rising to form the lower slopes of Garth Hill, which extends up to 307m AOD, 2km to the south of the ESS Site. The landform then falls steeply southwards from the summit of Garth Hill to Pentryrch, which is situated around 150m AOD, 3.2km to the south of the ESS Site. The landform across the remainder of the southern part of the study area is undulating, although falling gradually as part of the transition to the plains of the Afon Ely.
- 4.7 To the west of the ESS Site, the landform falls from the alignment of Pound Farm Lane (between 110m AOD and 154m AOD), to the A473, which is in cutting and situated around 80m AOD. The landform remains low lying to the west of the A473 before rising gradually, to form a curved tract of elevated land extending up to 200m AOD from the north of Upper Church Village (1.8km to the north-west of the ESS Site) to Llantwit Fadre (4.3km to the west of the ESS Site).
- 4.8 In summary, the ESS Site is situated within a complex topography, due to numerous valleys which form a varied arrangement of undulating landform, hills and notable elevated areas of land. The ESS Site forms part of a tract of lower lying undulating land at the base of Garth Hill, which forms a localised plateau to the east of Pound Farm Lane, across which Maes Bach Farm and part of Maes Bach Solar Farm are also located, beyond which the landform transitions to the steeper valley sides. The exception is to the immediate north of the ESS Site, where a localised hillock extends up to 16m in height above the ESS Site, physically and visually enclosing the ESS Site from the wider landscape to the north.

Vegetation Patterns

- 4.9 With reference to **Figure I**, there are extensive tracts of ancient woodland across the study area, mainly located across the valley sides and lower lying land in the south-east part of the study area.
- 4.10 In closer proximity to the ESS Site, there is an established hedgerow immediately adjacent to the northern edge of the ESS Site, approximately 1.7m in height and 1.5m wide, consisting of hawthorn, hazel, oak and sycamore. There are also individual trees across the hillock to the immediate north of the farm access track, which form part of a generally well vegetated pattern of field boundaries. The extent of woodland then increases to the north of the ESS Site, across the southern aspect of the Taff Valley and adjacent to the Afon Taff. There is a high degree of tree cover across the lower slopes of the northern valley side, including across Pontypridd Golf Club, in the northern part of the study area. The more elevated land is far more open in character, due to livestock grazing.
- 4.11 To the east of the ESS Site, the vegetation patterns are similar to those to the north, with mature woodlands along the valley sides, including at Coed Maes-Bach, 560m to the east of the ESS Site, and the lower valley sides between Gwaun-gledyr-uchaf and Craig yr Allt. As set out above, the south-east part of the study area is well wooded, with large scale plantations and ancient woodland, including Fforest-fawr, 2.5km to the south-east of the ESS Site. However, more elevated land, including across

Craig yr Allt and Caerphilly Common is open in character, with the vegetation cover consisting of grasses, gorse and heathers.

- 4.12 To the south of the ESS Site, the landscape is well vegetated via a combination of established field boundaries and small tracts of woodland, including across the lower slopes of Garth Hill, at Coedgae Bassett, I.6km to the south-west of the ESS Site. The upper parts of Garth Hill are open in character.
- 4.13 To the west of the ESS Site, the small scale fields are divided by established hedges and trees, resulting in a high degree of vegetation cover. The extent of woodland increases adjacent to the A473 and around the residential area of Celyn Farm, 975m to the south-west of the ESS Site.
- 4.14 The study area is therefore well vegetated across the valley sides and lower slopes by the combination of woodlands and established field boundaries consisting of hedgerows and trees. The extent of vegetation cover across the developed valley floors and larger scale residential areas is generally limited, likewise across the more elevated land within the study area, where the vegetation cover is mainly grasses, gorse and heather. As demonstrated by the following visual appraisal, the open character of this elevated land enables extensive views across the study area, in contrast to the shorter range views from the lower lying and wooded land.

Settlement Pattern and Land Use

- 4.15 With reference to **Figure 1**, there is continuous ribbon development north to south across the study area, extending from Pontypridd to Tongwynlais along the lower parts of the Taff Valley.
- 4.16 To the east of the Afon Taff, residential and commercial land uses are concentrated across the valley floor between Gwaun-gledyr-uchaf and Craig yr Allt, adjacent to the A468 and the B4600, forming the western part of Caerffili, at the eastern edge of the study area. The intervening land is generally grazing land, with intermittent farms or individual properties, linked by a network of local lanes and tracks. There are recreational land uses to the south-east of Craig yr Allt, at the Mountain View Ranch Activity Centre and Castell Heights Golf Club.
- 4.17 To the west of the Afon Taff, there are several large scale residential areas adjacent to the north side A473, at Church Village, Beddau and Llantrisant. Smaller scale residential settlements extend to the south of the A473, at Celyn Farm and Efail Isaf. These are connected by Pound Farm Lane, which extends across the lower slopes of Garth Hill, past the ESS Site, to connect with the A473 to the north-west of the ESS Site.
- 4.18 In closer proximity to the ESS Site, Maes Bach Farm consists of several agricultural barns, approximately 8m in height to the east of the ESS Site, with the farm house over 150m to the northeast of the ESS Site. Maes Bach Solar Farm extends for approximately 650m to the south of the ESS Site, adjacent to Pound Farm Lane. To the west of Pound Farm Lane, the main land use is agriculture,

via a series of small to medium scale fields divided by established hedgerows and trees, with infrastructure localised to overhead pylons and their associated wires.

4.19 The ESS Site is therefore part of landscape characterised by a variety of land uses, with built development mainly concentrated across lower lying land and the valley floors. In terms of renewable infrastructure, the ESS Site is adjacent to Maes Bach solar farm and the local road network, in a part of the study area where the main land use is agriculture, characterised by small to medium scale fields, often divided by established hedgerows and trees.

Public Rights of Way and Access

- 4.20 With reference to on-line mapping⁴, there are a high number of PRoW across the study area. The following routes are in proximity to the ESS Site:
 - PRoW (footpath) DRE/53/2, along the existing farm track, 5m to the north of the ESS Site;
 - PRoW (footpath) DRE/53/1, extending from Maes Bach Farm, 100m to the east of the ESS Site; and
 - PRoW (footpath) DRE/50b/2), extending westwards from Pound Farm Lane, 230m to the north-west of the ESS Site.
- 4.21 Designated routes include the Taff Trail, along the lower slopes of the Taff Valley; the Rhymney Valley Ridgeway Walk across Mynydd Meio; the TER Walk across Craig yr Allt and Caerphilly Common, and the Taff Ely Ridgeway Walk across Garth Hill.
- 4.22 In addition to the above formal routes, there are several areas of open access land (common land) across the study area, including at Mynydd Meio (in the north-east part of the study area), Craig yr Allt and Caerphilly Common (in the eastern parts of the study area) and at Garth Hill (in the southern part of the study area).
- 4.23 As set out previously, the ESS Site is not publicly accessible.

Designations

4.24 With reference to **Figure 1**, the study area is not covered by any statutory landscape designations. The ESS Site and elevated land across the study area is within a Special Landscape Area, for which the relevant matters are set out in Chapter 3.

⁴ Rhondda Cynon Taf

https://maps.rctcbc.gov.uk/myRhondda.aspx?MapSource=RCT/AllMaps_english&StartEasting=306432&StartNor thing=189805&StartZoom=4000 and

https://caerphillycbc.maps.arcgis.com/apps/View/index.html?appid=053c3d746d32432c8e2a1c1d474fb980

4.25 There are no Conservation Areas in proximity to the ESS Site, with the closest 2.5km to the southeast of the ESS Site at Gwaelod-y-garth. There are no listed buildings in proximity to the ESS Site, the closest of which are within the Treforest Industrial Estate, to the east of the ESS Site. There are also no Registered Parks and Gardens in proximity to the ESS Site.

5.0 PUBLISHED LANDSCAPE CHARACTER ASSESSMENTS AND RELATED STUDIES

5.1 The Site and study area are covered by several published landscape character assessments and related studies, with the relevant aspects summarised below and set out in full in **Appendix II**.

NATIONAL LANDSCAPE CHARACTER AREAS (NLCA)

5.2 The Site and study area are covered by NLCA South Wales Valleys⁵, which is a large geographic area, extending from Pontypool to Rhydaman. The NLCA is described by the published study as a landscape of 'contrasts', due to:

"The valleys contain the extensive ribbon development, which snakes along the valley floors and lower valley sides, and sometimes with settlements precariously extending over intervening slopes and spurs. The windswept upland plateaux that separate the valleys could not be more different. Devoid of settlement, the uplands engender a strong sense of openness and remoteness, although in places compromised by proximity to industry and people, for example reclaimed spoil heaps, fly tipping, abandoned cars, 'horsiculture' and associated ramshackle sheds or allotments, pressure of people accessing the area for recreation in an unmanaged way, and occasional pylon lines, telecommunications masts and occasional wind turbine developments."

- 5.3 The stated relevant key characteristics of the NLCA are:
 - "Extensive upland plateaux;
 - Numerous steep-sided valleys;
 - Ribbon urban and industrial areas in valleys;
 - Extensive remains of heavy industry;
 - Contrast of urban valley activity next to quiet uplands;
 - Large blocks of coniferous plantation and deciduous woodland fringes;
 - Improved pastures on some lower valley sides;
 - Field boundaries; and
 - Transport routes restricted to valleys."

LANDMAP⁶

- 5.4 LANDMAP provides information on defined data sets, which classify the landscape and describe the relevant key characteristics, along with appropriate management guidance.
- 5.5 The data sets covering the Site are set out in the following table, along with the relevant descriptions and should be read in combination with **Figures 3A to 3D**.

⁵ Natural Resources Wales, https://cdn.cyfoethnaturiol.cymru/media/682625/nlca37-south-wales-valleys-description-1.pdf?mode=pad&rnd=131550626704970000

⁶ LANDMAP, https://smnr-nrw.hub.arcgis.com/apps/1b7b831d7aa14b158e40f398d568a8b1/explore

| LANDMAP | The Site | Stated Description and Guidance | Study Area |
|---|--|--|--|
| Cultural (Figure 3A) 2960 | The Site is predominantly within an area of High Cultural Landscape, with the northern part of the Cable Corridor within an area of Outstanding Cultural Landscape. | Large expanses of (mostly) upland and moorland landscape that are present. They have been variously designated statutorily as Sites of Special Scientific Interest by the Countryside Council for Wales, or by Unitary Authorities as Special Landscape Areas, Sites of Interest for Nature Conservation or as part of the Coalfield Plateaux. Such designations are a reflection of 20th/21st century perceptions of the value of protecting both natural habitats and of rural areas. | The majority of the rural landscape covering elevated land across the study area is defines as High Cultural Landscape. The settlements across the valley floors are mainly Outstanding, except for the western part of Caerphilly, which is defined as a Moderate Cultural Landscape. |
| Historic (Figure 3B) Garth-fawr 8117 | Most of the Site, including the ESS Site is within an area of Moderate Historic Landscape. The central and northern parts of the Cable Corridor are within areas of Low and Outstanding Historic Landscape. | Discontinuous area of similar landscape character and historical identity to Coedcaerau-bach. An aspect area dominated by an irregular fieldscape that encloses a series of isolated and dispersed post- medieval farmsteads. The boundary to the south is defined by the dismantled Llantrisant line of the Ely railway; whilst northern route of this line from Llantrisant to Church Village identifies the aspect area's western and northern limits. The division of the dismantled Cwm Ely line. | The study area is varied in terms of its Historic Landscape, with elevated rural land either being of Moderate or High Historic Landscape. |
| Landscape Habitats (Figure 3B) 8839 | The ESS Site and southern part of the Cable Corrido are within an area of Moderate Landscape Habitat. The central part of the Cable Corridor is within an area of High Landscape Habitat, with the remainder of the Cable Corridor in an area of Low Landscape Habitat, reflecting its position within developed areas. | Improved grassland with limited broadleaved woodland / marsh grassland / 2nd calcareous grassland associated with limestone quarries. Lake at Talygarn House. Hedges/trees - biodiversity focus. Encourage appropriate management of notable habitats | The study area is varied in terms of its Landscape Habitats, but the settlements are generally Low Landscape Habitats, with the more elevated land and sparsely populated parts of the study area being areas of Moderate and High Landscape Habitat. |
| Visual (Figure 3D) Hendre 7001 | Most of the Cable Corridor and the ESS Site are within an area of Moderate Visual Sensory. The remainder of the Cable route is within an area of Low Visual Sensory, reflecting the developed parts of the landscape. | A rolling rural landscape with small/medium sized fields, predominantly grazing, defined by hedgerows with scattered blocks of broadleaf and mixed woodland, some with a slight parkland /estate feel. Landform lies between approximately 40m and 100mAOD. Scattered villages and farmsteads sit within this attractive rural landscape, slightly spoilt by the presence of intrusive/visually detractive elements e.g. M4, pylons, sharply defined urban edges. | Most of the study area is a mix of Moderate or Low Visual sensory, reflecting the developed nature of valley floors and sides. More elevated land in the northern and southern parts of the study area is classified as High Visual Sensory. |

Table 5-1: LANDMAP in Relation to the Site and Study Area

- 5.6 From the above table, the ESS Site is in an area of High Cultural Landscape, but this relates to areas of ecological designation and expanses of moorland, such that the ESS Site is not fully representative of these cultural aspects.
- 5.7 The ESS Site is in an area of Moderate Historic Landscape, due in part do the enclosed fieldscape pattern, for which the ESS Site is representative.
- 5.8 The ESS Site is in an area of Moderate Landscape Habitat, due in part to the improved grassland, hedges and trees, for which the ESS Site is representative.
- 5.9 The ESS Site is in an area of Moderate Visual Sensory, due to the balance between rural and developed areas, for which relevant guidelines are to limit future urban development.
- 5.10 Apart from the Cultural Landscape assessment, the ESS Site is in an area of Moderate LANDMAP classification, which equates to a local level 'importance'; rather than a regional, county or national 'importance'.

Local Landscape Character Areas (LLCA) identified by the LVIA

- 5.11 To add an additional level of detail to the published studies and a more proportionate scale of assessment using information from LANDMAP, the LVIA has identified the following LLCA within a 2km radius of the ESS Site:
 - LLCA I: Taff Vale covering undulating and generally elevated land between the Taff Vale Railway Line and Pound Farm Lane. The main land use is agriculture, via grazing fields, along with intermittent farms and properties. Infrastructure includes the Maes Bach Solar Farm. The ESS Site and part of the Cable Corridor are located in the LLCA;
 - LLCA 2: Dryscoed Agricultural covering undulating arable land to the west of Pound Farm Lane, extending to the A473. Infrastructure includes overhead pylons and their associated wires;
 - LLCA 3: The A473 covering the road and its immediate grass verges, which include tall lighting columns;
 - LLCA 4: Garth Hill covering rising and elevated land to the south of the Site; and
 - LLCA 5: Celyn Farm Residential covering residential land uses to the west of the Site.

Landscape Receptor Summary

5.12 From the above reviews and with reference to **Appendix IV**, the following table summarises the landscape receptors included in the assessment and their sensitivity to the Proposed Development.

Table 5-2: Landscape Receptor Summary

| Landscape Receptor | Landscape Sensitivity | | | |
|--|-----------------------|--|--|--|
| The ESS Site | Medium | | | |
| Cable Corridor | Low | | | |
| Published Landscape Character Areas | | | | |
| NCA South Wales Valleys | High | | | |
| Local Landscape Character Areas | | | | |
| LLCA I: Taff Vale (covers the ESS Site and part of the Cable Corridor) | High | | | |
| LLCA 2: Dryscoed Agricultural | High | | | |
| LLCA 3: The A473 (covers part of the Cable Corridor) | Very Low | | | |
| LLCA 4: Garth Hill | Very High | | | |
| LLCA 5: Celyn Farm Residential | Low | | | |

5.13 From the above table, the sensitivity of the landscape receptors, reflecting the varied character and contrasts between the land uses across the study area. The arable and generally less developed parts of the local landscape are assessed as being of higher sensitivity, particularly the notable and elevated landform across Garth Hill (LLCA 4). The ESS Site is part of a landscape of high sensitivity (LLCA 1) due to dominance of agriculture and the high functional value from woodlands and hedgerows. However, the sensitivity of the ESS Site is lower than that of LLCA 1 due to its proximity to the Maes Bach Solar Farm, due to the influence on the ESS Site character.

6.0 VISUAL AMENITY

- 6.1 As set out in the methodology, the LVIA includes an assessment of the likely changes to people's views (visual receptors) due to the Proposed Development. The identification of people's views is based upon a representative range of differing groups, e.g. residents, recreational users or road users.
- 6.2 The identification of representative views is a two stage process, which as set out below includes desk-based reviews and fieldwork from publicly accessible locations ('viewpoints').

Stage I: Desk-based reviews and Zone of Theoretical Visibility (ZTV) Mapping

6.3 From the baseline review, the Site is not covered by any designated views.

Zone of Theoretical Visibility (ZTV) Analysis

- 6.4 To aid the fieldwork and with reference to **Figures 4A and 4B**, Zones of Theoretical Visibility (ZTV) have been generated based upon both the tallest equipment within the ESS Site (at 7m in height) and the majority of the remaining equipment (at 3m in height). The Cable Corridor has not been included as this would be underground.
- 6.5 With reference to **Figure 4A**, which omits existing vegetation and buildings in the study area, the theoretical visibility of the ESS Site is concentrated to within immediate proximity of the Site. The theoretical visibility is then:
 - Negated to the north of the ESS Site, mainly due to the steeply rising hillock adjacent to the farm access track and opposite the ESS Site;
 - Concentrated across elevated land between 2km and 5km to the east of the ESS Site, but negated across the lower lying valley floors;
 - Extensive across rising land to the south of the Site, culminating at Garth Hill, around 2km from the ESS Site. The theoretical visibility does not extend across the lower lying valley floors, and is negated across the remainder the southern part of the study area, due to the height of Garth Hill; and
 - Concentrated to between 2 and 5km to the west of the Site, due to the intervening landform.
- 6.6 To provide a more '*realistic*' approach to the theoretical modelling, **Figure 4B** includes the existing vegetation and buildings (as derived from on-line data sources) across the study area. With the inclusion of these features, the theoretical visibility of the ESS Site is reduced even further, particularly in relation to the south and west of the ESS Site.
- 6.7 The theoretical visibility remains consistent across elevated land to the east of the ESS Site and the more elevated parts of Garth Hill, to the south to the south of the ESS Site, as demonstrated by the following extract of Figure 4B.



Image 6-1: Extract of Figure 4B: Screened Zone of Theoretical Visibility, with the theoretical visibility of the ESS Site illustrated by the green hatching. The dashed black line indicates a 2mk radius of the ESS Site.

Stage 2: Fieldwork

- 6.8 Fieldwork has been undertaken in September 2024 to review the ZTV and identify visual receptors and 'viewpoints', i.e. where a photograph from a publicly accessible locations represents the existing view.
- 6.9 The following section sets out the visual analysis of the Site, mainly focused on the ESS Site, as the Cable Corridor would be below ground and therefore not visible in the operational phases of the Proposed Development. As the fieldwork was undertaken whilst deciduous vegetation was in leaf, consideration is also given to the winter views (i.e. when deciduous vegetation is not in leaf), in order to support the following visual assessment.
- 6.10 The following section should be read in combination with the viewpoint locations illustrated on Figure 5 and the photographs on Figures 6 to 13.
- 6.11 **Viewpoint I** is taken from Pound Farm Lane, 380m to the north of the ESS Site and is representative of road users. The view demonstrates that the ESS Site is not visible, due to the steeply rising landform between the receptor and the ESS Site, which creates a localised hillock. Views extend along Pound

Farm Lane and part of the route of the cable corridor, characterised by a single lane, bordered by established hedgerows. Views extend to elevated land across Garth Hill in the background of the view. In winter, the composition of the view is considered to be similar, with the ESS Site remaining not visible, due to the intervening landform. There would be an increase in the extent of visible sky, due to the established trees not being in leaf and a slight increase in views of Garth Hill.

- 6.12 **Viewpoint 2** is taken from PRoW (footpath) DRE/50b/2, 240m to the north-west of the ESS Site, where the route meets Pound Farm Lane, such that the receptor is in a localised elevated position, on the verge, above the road. The view is representative of recreational users and demonstrates that the height of the roadside hedgerows on the opposite side of the Pound Farm Lane truncate views of the majority of the ESS Site, except for its western edge and associated roadside hedges, which are seen in the context of the Maes Bach solar farm. Part of the cable route is also visible along the lane. The overall extent of views is truncated by the proximity to the roadside hedgerows. In winter, the composition of the view would remain similar, due to the height and density of the hedgerows in the foreground of the view, even when not in leaf.
- 6.13 **Viewpoint 3** is taken from PRoW (footpath) DRE/53/2, 5m to the north of the ESS Site, which follows the alignment of the farm access track and is representative of recreational users. The view demonstrates that the height of the hedgerow screens the field, but views extend across the ESS Site to part of the Maes Bach solar Farm and Garth Hill. There are also longer distant views to Craig yr Alt. In winter, there would be an increased visibility of the field within the ESS Site due to the intervening hedgerow not being in leaf, but seen in an increasing context of the Maes Bach Solar Farm.
- 6.14 **Viewpoint 4** is also taken from PRoW (footpath) DRE/53/2, 50m to the north-east of the ESS Site and is similarly representative of road users. The view demonstrates that the field within the ESS Site is visible, seen bordered by an established tree belt, which separates the ESS Site from the Maes Bach Solar Farm. The overall extent of the view is truncated by steeply rising land to the north of the access track, and the mature trees, but parts of Garth Hill are visible in the background of the view.
- 6.15 **Viewpoint 5** is taken from PRoW (footpath) DRE/53/1, 110m to the east of the ESS Site and is representative of recreational users. The view demonstrates that the ESS Site is visible, although partially softened by the intervening trees. The ESS Site is seen in the context of utilitarian farm buildings, telegraph poles and parts of the Maes Bach Solar Farm, such that there is a developed context to the ESS Site and within the composition of the view. The overall extent of the view is short in range, due to the elevated landform to the immediate north of the ESS Site and the density of the intervening trees. In winter, the visibility of the ESS Site would increase, due to the intervening trees not being in leaf, but the overall extent and composition of the view would remain similar, with the Maes Bach Solar Farm also becoming more apparent.
- 6.16 **Viewpoint 6** is taken from Pound Farm Lane, 250m to the south of the ESS Site and is representative of road users. The view demonstrates that the ESS Site is not visible, due to the intervening vegetation

and distance. In winter, with the trees not in leaf, there would be views across the ESS Site, although still softened by the intervening branches and vegetation.

- 6.17 Continuing along Pound Farm Lane, **Viewpoint 7** is taken 800m to the south-west of the ESS Site and is representative of road users. The view demonstrates that relatively low lying position of the ESS Site within the composition of the view, at the base of more elevated land to the immediate north of the ESS Site. The view also demonstrates that most of the ESS Site is not visible, due to the intervening trees, including those bordering Maes Bach Solar Farm being in leaf. The exception is the western part of the ESS Site which is visible, seen as part of the wider pattern of fields extending around the solar farm. The elevated position of the receptor enables long distance views across the landscape to Church Village and elevated land in the eastern part of the study area, including Mynydd Meio. In winter, the ESS Site would become more visible, due to the intervening vegetation not being in leaf, although seen in the context of a more apparent Maes Bach solar farm. The ESS Site would remain a relatively small part of the wider composition of the view.
- 6.18 **Viewpoint 8** is taken from PRoW (footpath) DRE/63/10, 1km to the south-west of the ESS Site and is representative of recreational users. The view demonstrates that the ESS Site is not visible due to the density of the intervening vegetation. In winter, the ESS Site is also considered to be not visible, due to the density of the intervening vegetation, even when not in leaf.
- 6.19 **Viewpoint 9** is taken from Garth Hill, 2km to the south of the ESS Site and is representative of recreational users. The view demonstrates that there are panoramic views from the viewpoint, which extend across the valleys, such that the range of land uses within the study area are visible. The western edge of the ESS Site is visible, whilst the remainder of the ESS Site is predominantly screened by the established trees bordering Maes Bach Solar Farm which is also visible. In winter, the ESS Site would become more visible, due to the intervening vegetation not being in leaf, although seen in the context of a more apparent Maes Bach Solar Farm. The ESS Site would remain a relatively very small part of the wider composition of the view.
- 6.20 Moving to the western part of the study area, **Viewpoint 10**, from Penycoedcae Road, 4.5km from the ESS Site and is representative of road users. The view demonstrates that neither the ESS Site, nor the cable corridor, are visible, due to the height of the intervening vegetation. The composition of the view would remain similar in winter, due to the height of the roadside vegetation continuing to screen the ESS Site.
- 6.21 **Viewpoint II** is taken from Maindy Road, 2.6km to the north-west of the ESS Site and is representative of road users. The view demonstrates that the trees along the southern part of the ESS Site are visible, but that the field within the ESS Site is screened by the intervening hedgerows and vegetation. Views towards the ESS Site are seen in the context of the upper parts of the solar panels within Maes Bach Solar Farm, which are discernible due to their colour tone at the base of Garth Hill.

In winter, the composition of the view is considered to remain similar to that in winter, due to the slightly elevated position of the receptor.

- 6.22 **Viewpoint 12** is taken from open access land across Mynydd Meio, 2.9km to the north-east of the ESS Site and is representative of recreational users. The view demonstrates that there are panoramic views across the valley and the range of land uses within the study area. The trees along the southern edge of the ESS Site are visible, seen in the context of Maes Bach Farm, although at distance from the receptor, such that it is not immediately apparent and forms a very small part of a wider view. The ESS field is not visible, due to the rising landform to the north of the ESS Site, adjacent to the farm track. In winter, the composition of the view would remain similar, due to the elevated position of the receptor.
- 6.23 **Viewpoint 13** is taken from PRoW (footpath) PTE/FP122/1, 2.1km to the east of the ESS Site and is representative of recreational users. The view demonstrates that there are channelled views of the ESS Site, seen beyond Maes Bach Farm and the backdrop of residential land uses across the western part of the study area. In winter, the composition of the view would remain similar, due to the relatively elevated position of the receptor.
- 6.24 **Viewpoint 14** is taken from Craig yr Allt, 2.9km to the south-east of the ESS Site and is representative of recreational users The elevated position of the receptor enables views of the ESS Site, consisting of the northern part of the field and the mature trees on the southern edge of the ESS Site. The ESS Site is seen in the context of Maes Bach Solar Farm and Maes Bach Farm, forming part of the lower plateau at the base of Garth Hill and above a range of land uses across the valley floor.
- 6.25 **Viewpoint 15** is taken from Caerphilly Common, 4.9km to the east of the ESS Site and is representative of recreational users. The view demonstrates that the ESS Site is visible, due to the elevated position of the receptor and is seen as part of the arable land uses across elevated land above the valley floor. The ESS Site is seen in the context of Maes Bach solar farm and larger scale farm buildings at Maes Bach Farm.

Visual Summary

- 6.26 From the above fieldwork, the visibility of the ESS Site is less than suggested by the ZTVs, due to the difference between the extent of vegetation across the study area and that sourced from on-line data. The main differences relate to land to the south-west of the ESS Site, where the density of the intervening vegetation negates views of the ESS Site from the few areas of publicly accessible land.
- 6.27 The main visibility of the ESS Site from along Pound Farm Lane and PRoW (footpath) DRE/53/2, which are close range locations bordering the ESS Site. From both of these locations, the ESS Site is seen in the context of Maes Bach Farm and Maes Bach Solar Farm, i.e. a developed part of the landscape. There are also views of the ESS Site at close range from PRoW (footpath) DRE/53/1, to the east of the ESS Site, as the route extends across Maes Bach Farm.

- 6.28 From the wider landscape to the east, the ESS Site is visible from more elevated parts of the study area, including Craig yr Allt, where the ESS Site is seen in the context of Maes Bach Solar Farm and Maes Bach Farm, forming part of the lower plateau at the base of Garth Hill and above a range of land uses across the valley floor. The ESS Site is not seen as part of the arable and undeveloped land extending across the valley sides, due to being located beyond Maes Bach Farm.
- 6.29 From the south of the ESS Site, the ESS Site is visible from more elevated parts of Pound Farm Lane, to the south of the ESS Site and Garth Hill, where the ESS Site forms a very small part of the composition of the view, with the field being predominantly screened by the established trees along the southern edge of the ESS Site. Within all of these views, the ESS Site is seen in the context of Maes Bach Solar Farm.
- 6.30 From the above baseline and fieldwork, the following table sets out the visual receptors ('people') taken forwards for the visual assessment and their sensitivity, which is set out in full in **Appendix V**.

| VP | Visual Receptor | Sensitivity |
|----|---|-------------|
| I | Road users on Pound Farm Lane | Medium |
| 2 | Recreational users on PRoW (footpath) DRE/50b/2 | High |
| 3 | Recreational users on PRoW (footpath) DRE/53/2 | High |
| 4 | Recreational users on PRoW (footpath) DRE/53/2 | High |
| 5 | Recreational users on PRoW (footpath) DRE/53/1 | Medium |
| 6 | Road users on Pound Farm Lane | Medium |
| 7 | Road users on Pound Farm Lane | Medium |
| 8 | Recreational users on PRoW (footpath) DRE/63/10 | Medium |
| 9 | Recreational users on Garth Hill | Very High |
| 10 | Road users on Penycoedcae Road | Medium |
| 11 | Road users on Maindy Road | Medium |
| 12 | Recreational users at Myndd Meio | Very High |
| 13 | Recreational users on PRoW (footpath) PTE/FP122/1 | High |
| 14 | Recreational users on Craig yr Allt | Very High |
| 15 | Recreational users on Caerphilly Common | Very High |

Table 6-1: Viewpoint (VP) and Visual Receptor Summary

6.31 From the above table, the sensitivity of the visual receptors is generally higher due to expansive and panoramic views across the landscape from elevated land, most of the receptors are recreational users, for which there is an expectation of views and enjoyment of the landscape.

7.0 RELEVANT PLANNING POLICY

7.1 The following section summarises the policies relevant to landscape and visual matters, with the policies set out in full in **Appendix III**.

Future Wales: The National Plan 2040⁷

- 7.2 Future Wales is the national development framework for Wales. Relevant visions and objectives are:
 - 9. Places that sustainably manage their natural resources and reduce pollution;
 - 10. Places with biodiverse, resilient and connected ecosystems; and
 - II. Places which are decarbonised and climate-resilient.
- 7.3 With reference to **Appendix III**, Policy 17: Renewable and Low Carbon Energy and Associated Infrastructure sets out that the Welsh Government supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. The Plan sets out that 70% of electricity consumption is to be generated from renewable energy by 2030.

Planning Policy Wales (PPW) Edition 12, 2024⁸

7.4 PPW sets out the land use planning policies of the Welsh Government and notes that a 'prosperous Wales' can be achieved through a variety of opportunities, including investment in renewable and low carbon energy sources. Stated 'productive and enterprising linkages' include:

"encouraging policies and proposals which promote low carbon developments and sites for renewable energy, manufacturing, research and development close to areas of deployment of renewable energy."

- 7.5 PPW paragraph 5.77 states that the planning system should:
 - "integrate development with the provision of additional electricity grid network infrastructure;
 - optimise energy storage;
 - facilitate the integration of sustainable building design principles in new development;
 - optimise the location of new developments to allow for efficient use of resources;
 - maximise renewable and low carbon energy generation;
 - maximise the use of local energy sources, such as heat networks;
 - minimise the carbon impact of other energy generation; and

⁷ Welsh Government, https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-thenational-plan-2040.pdf

⁸ Planning Policy Wales, Edition 12, https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf

- move away from the extraction of energy minerals, the burning of which is carbon intensive."
- 7.6 PPW paragraph 5.9.20 states that Planning Authorities should also identify and require suitable ways to avoid, mitigate or compensate adverse impacts of renewable and low carbon energy and that the proposals should take into account a range of factors, with those relevant to the LVIA being:
 - "the impact on the natural and historic environment;
 - cumulative impact; and
 - the impacts of climate change on the location, design, build and operation of renewable and low carbon energy development. In doing so, consider whether measures to adapt to climate change impacts give rise to additional impacts."
- 7.7 In relation to the above, a cumulative assessment of the Proposed Development with Maes Mawr Solar Farm has been included in the LVIA.

Rhondda Cynon Taf Revised Local Development Plan 2022-2037⁹

- 7.8 The Borough Council are preparing a Revised Local Development Plan (LDP) and therefore the LDP 2006-2021 (set out below) remains current.
- 7.9 The Preferred Strategy¹⁰ (2024) sets out the visions and objectives for Rhondda Cynon Taf. Relevant objectives are:
 - I. Mitigate and adapt to the effects of climate change and reduce flood risk, which includes for increasing the production and supply of renewable energy, protecting and enhancing green infrastructure and conserving and enhancing biodiversity rich landscapes;
 - 6. Promote, protect and enhance cultural heritage and the built environment;
 - 8. Protect and enhance the quality and character of the landscape;
 - 9. Protect and enhance biodiversity; and
 - 12. Promote the efficient use of land, soils and minerals.
- 7.10 With reference to **Appendix III**, relevant Strategic Polices (SP) to support the above objectives are:
 - SPI: Climate Character and Carbon, which includes for supporting appropriate renewable energy schemes;
 - SP2: Placemaking and Sustainable Communities;
 - SP4: Biodiversity and the Natural Environment; and

⁹ Rhondda Cynon Taf, Revised Local Development Plan,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/RevisedLocalDevelopmentPlan20222037/R evisedLocalDevelopmentPlan20222037.aspx

¹⁰ Rhondda Cynon Taf, Preferred Strategy, 2024,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/RelatedDocuments/Pdfs/RevisedLDP20222 037PreferredStrategy.pdf

• SP5: Green Infrastructure and Open Space, which includes for retaining SLA, due to "no change within these areas that has resulted in them losing their high quality features for which they were designated."

Rhondda Cynon Taf Local Development Plan 2006-2021, adopted 2011

- 7.11 The LDP sets out an overarching land-use and development strategy, along with a policy framework and site specific allocations for a range of development types to guide decisions on planning applications.
- 7.12 With reference to **Appendix III**, relevant policies are:
 - AW8: Protection and Enhancement of the Natural Environment, which sets out that development will be permitted where there would be no unacceptable impact upon features of landscape importance;
 - AW12: Renewable and Non-Renewable Energy, which permits schemes where there is no unacceptable effect on a range of factors, including landscape importance;
 - SSA 23: Special Landscape Areas, which sets out that development within these areas is expected to conform to the highest standards of design, siting, layout and materials appropriate to the area.

Supplementary Planning Guidance (SPD)

7.13 The following SPD are non-statutory guidance, supporting policies via additional detail or site-specific guidance.

Design and Placemaking SPD, 2011¹²

7.14 The SPD sets out good design measures, which whilst focused on new residential development, includes for identifying the constraints and opportunities of land, the 'vision' for projects and the design development.

Nature Conservation SPD, 2011¹³

7.15 The SPD sets out guidance to support earth science heritage, including the landscape.

¹³ Rhondda Cynon Taf, Nature Conservation,

¹¹ Rhondda Cynon Taf, Local Development Plan,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/Relateddocuments LDP20062021/AdoptedLocalDevelopmentPlan.pdf

¹² Rhondda Cynon Taf, Design and Placemaking,

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/Relateddocuments SupplimentaryplanningGuidanc/DesignandPlacemakingSPG.pdf

https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/Relateddocuments SupplimentaryplanningGuidanc/NatureConservationSPG.pdf

8.0 EMBEDDED MITIGATION

- 8.1 As part of the iterative design process, design measures to avoid or reduce the potential landscape and visual effects of the Proposed Development are incorporated within the PAC drawings and Concept Landscape Plan. These design measures for the ESS equipment are centred around the SLA requirements of design, siting, layout and materials:
 - Siting the ESS equipment centrally within the field, so as to reduce its potential visibility from PRoW to the east of the ESS Site and in longer distance views from elevated land in the north-eastern and south-eastern part of the study area;
 - Offsetting the ESS equipment from the established hedgerows to the north and west of the ESS Site and the established trees along the southern part of the ESS Site, so as to retain this vegetation, with only localised removal for the new access;
 - Rendering the proposed ESS units in a dark green tone, so as to reduce their perceived mass and scale; and
 - Enclosing the proposed sub-station by solid fence, so as to visually screen it and reduce its acoustic perception. The fence would also be rendered dark green, so as to aid its integration within the landscape.
- 8.2 With reference to the following extract of the Concept Landscape Masterplan, the embedded design measures within the layout are:
 - Area 1: Retaining the existing hedgerow to the immediate north of the ESS Site and allowing it to increase in height via a positive management regime, so as to screen views for recreational users along PRoW (footpath) DRE/53/2;
 - Area 2: An area of new hedgerow and tree planting is proposed along the eastern edge of the ESS Site, so as to reduce the visibility of the equipment within views from PRoW to the east and in longer range views from elevated land across the study area;
 - Area 3: Retaining the vegetation along the southern edge of the Site, so as to retain its physical and visual enclosure to the ESS Site, specifically in longer range views from elevated land, including Garth Hill;
 - Area 4: New planting in the western part of the ESS Site, so as to screen views from Pound Farm Lane and in longer distance views from elevated land in the southern part of the study area; and
 - Area 5: Implementing a new wildflower grass mix around the perimeter of the ESS Compound, so as to provide a wider diversity of habitats in comparison to the existing field.



Image 8-1: Extract of the Concept Landscape Masterplan

8.3 As the above measures are included in the PAC drawings and the Concept Landscape Plan, they are accounted for in the following landscape and visual assessment.

9.0 LIKELY LANDSCAPE AND VISUAL EFFECTS

- 9.1 As set out in the introduction, the likely landscape and visual effects of the Proposed Development are predicted for the construction and operational phases (years 1, 5 and 10), based upon the PAC drawings, the Concept Landscape Plan, as well as technical studies, including Highways, Ecology and Arboriculture.
- 9.2 In accordance with the GLVIA 3, the impact (change) and effects of the Proposed Development consider the potential adverse changes, e.g. reduction in existing vegetation, change in land use or channelling of views, as well as the potential beneficial changes, e.g. new planting and improved vegetation cover.
- 9.3 The following section summarises these effects and should be read in combination with AppendicesIV and V, which set out the effects in full.

LANDSCPAE EFFECTS

ESS Site Landscape Character

- 9.4 The construction activity for the ESS would result in a high degree of change to the field, due to being greater than general farming activity, along with the requirements of localised topsoil stripping, localised vegetation removal to construction the access and the unsettled character of the Site as a result of the construction phase. The impact would therefore be high and in relation to the medium sensitivity of the ESS Site, the effect would be major adverse, but temporary.
- 9.5 At year 1, the ESS would result in an obvious change in land use, from the rural character of the field to one of energy storage and renewable infrastructure. The proposed equipment would be offset from the roadside hedgerows and established trees along the southern part of the ESS Site, thereby retaining the functional value of the existing vegetation. The alterations to landform would be limited due to the gently undulating terrain, such that the underlying pattern of low lying landform across the field would be retained. The new planting would be low in height and not fully established, but would increase the opportunities for biodiversity in comparison to the ryegrass field. The impact in winter and summer months would be high and in relation to the medium sensitivity of the ESS Site, the effect would be major adverse, but temporary.
- 9.6 By year 5, the proposed planting would have established, along with the proposed wildflower grassland, such that the vegetation cover would be greater in comparison to the year 1 assessment, as well as its scenic quality, in both winter and summer months. Due to the continued (albeit reversible) change in land use, the impact would remain high and the effects would reflect those at year 1 in winter and summer, at major adverse.

9.7 By year 10, the high level of impact would remain due to the continued change in land use, but with the greater height and establishment of the proposed planting, the increase in the vegetation cover and greater physical and visual enclosure to the field, along with the reversibility of the Proposed Development, the effect would reduce to moderate adverse in winter and summer months.

ESS Cable Corridor

- 9.8 The construction activity would require localised excavation to implement the below ground cable corridor beneath Pound Farm Lane and the A473. The type and scale of the construction activity would be small and as it would be located within the existing road corridors, the roadside vegetation would be retained. The impact would be medium and in relation to the medium sensitivity of this part of the Site, the effect would be moderate adverse.
- 9.9 In the operational phases, there would be no change to the character of the cable corridor route, due to the proposed cable being below ground and the effects would be neutral.

Published Landscape Character Areas

NCA South Wales Valley

- 9.10 With reference to **Appendix IV**, the construction activity would mirror that stated above for the ESS Site and Cable Corridor. In relation to the wider geographic area of the NCA, the extent and scale of the construction activity would be very localised, being adjacent to an existing solar farm and along existing lanes and roads. Therefore, the combination of the very localised extent and the geographic location of the construction activity in developed parts of the NCA would result in no change to the character during the construction phase and a neutral effect.
- 9.11 In operation, the cable corridor would not be perceived, due to being underground. The ESS Site would result in additional renewable development within the NCA, but it would be located adjacent to an existing solar farm, The Proposed Development would retain the stated key characteristics of the NCA, with the very localised removal to the roadside hedgerow not impacting the wider extent of field boundaries and with the change in land use to a grazing field being a change to a common land use. The perception of a contiguous pattern of arable land extending from the valley floor to Maes Bach Farm would remain, with the Proposed Development consolidated between the farm buildings and Maes Bach Solar Farm, where development already defines the more elevated parts of the landscape. The very localised scale and extent of the ESS Site, in combination with the Proposed Development being reversible, would therefore not alter the character of the NCA during the operational phases and the effects are predicted to be neutral in winter and summer months.

Local Landscape Character Areas (LLCA)

LLCA I: Taff Vale (LLCA I)

- 9.12 The ESS Site and most of the Cable Corridor would be located in LLCA 1. The extent of the construction activity would be located across an existing road and a small field within the LLCA, with a very limited amount of removal to the roadside hedgerows. The key vegetation and landform patterns would be retained, with the construction activity located between Maes Bach Farm and Maes Bach Solar Farm, i.e. within a developed part of the LLCA. The perception of the construction activity would also be very localised and the effect is predicted to be minor adverse during the construction phase.
- 9.13 In operation, there would be no perception of the cable corridor, due to it being below ground. The ESS Site would introduce additional renewable energy equipment and land use within the LLCA, located adjacent to Maes Bach Solar Farm, so as to be perceived in this context, as well as the buildings within Maes Bach Farm. The change to the overall character of the LLCA would be limited in both winter and summer conditions and the effects are predicted to be minor adverse at year 1 (winter and summer). The effects would remain minor adverse at year 5 winter, before reducing to negligible adverse in summer, due to the reduced perception of the Proposed Development due to the proposed planting and existing vegetation being in leaf. The effects would remain negligible adverse at year 10, due to the continued change in land use, albeit one which is reversible.

LLCA 3: The A473

9.14 The remainder of the Cable Corridor would be located in LLCA 3: The A473, for which the construction activity would result in minor adverse effects. In operation, with no perception of the Cable Corridor, the effects would be neutral.

Other LLCA

9.15 For the remaining LLCA and with reference to **Appendix IV**, there would be no alteration to their character during the construction and operational phases, due to the Proposed Development not being located in their geographic areas and any perception of the Proposed Development being in the context of the Maes Bach Solar Farm.

Landscape Effects Summary

9.16 From the above and with reference to **Appendix IV**, the following table summarises the predicted effects to the landscape receptors during the construction and operational phases of the Proposed Development.

| Landscape Receptor | Construction | Year I | Year 5 | Year 10 | |
|--|----------------------|-----------------------------------|-----------------------------------|--|--|
| | (winter) | (winter/summer) | (winter /summer) | (winter/summer) | |
| The ESS Site | Major adverse | Major adverse / Major adverse | Major adverse / Major adverse | Moderate adverse / Moderate adverse | |
| The Cable Corridor | Moderate adverse | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |
| Published Landscape Char | acter Areas | | | | |
| NCA South Wales Valley | Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |
| Local Landscape Character Areas | | | | | |
| LLCA I: Taff Vale | Minor adverse | Minor adverse / | Minor adverse / | Negligible adverse / | |
| (covering the ESS Site and part of the Cable Corridor) | | Minor adverse | Negligible adverse | Negligible adverse | |
| LLCA 2: Dryscoed Agricultural | Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |
| LLCA 3: The A473 | Minor adverse | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |
| (covering part of the cable corridor) | | | | | |
| LLCA 4: Garth Hill | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |
| LLCA 5: Celyn Farm Residential | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral | |

Table 9-1: Landscape Effect Summary

- 9.17 From the above table, the higher tiers of adverse landscape effects during the construction phase are focused at the Site level, due to the physical and perceived changes to the landscape features and landscape character. These higher tiers of adverse landscape effects are inevitable due to the construction activity being of a greater scale and duration than general farming, but the effects are temporary.
- 9.18 In operation, the higher tiers of adverse landscape effects are similarly focused at the Site level, due to the obvious change in character from an undeveloped field to ESS equipment, ranging between major adverse and moderate adverse. In relation to the surrounding landscape, the predicted tiers of effects are low, due to the very limited physical and perceived change from the Proposed Development, within the context of the Maes Bach Solar Farm

VISUAL ASSESSMENT

- 9.19 The following section summarises the likely visual effects in relation to the identified viewpoints and should be read in combination with **Appendix V**, which sets out the effects in full.
- 9.20 For road users on Pound Farm Lane, to the north of the ESS Site (Viewpoint I), the construction of the cable corridor would be visible at close range, but a small component of the view, whilst the

construction of the ESS equipment would not be visible due to the intervening landform, such that the effects are predicted to be minor adverse. In operation, there would be no change to the composition of the view, due to the cable corridor being below ground the ESS equipment screened by the intervening landform, with the effects predicted to be neutral.

- 9.21 For recreational users on PRoW (footpath) DRE/50b/2 (Viewpoint 2), there would be close range views of the cable corridor construction, as well as oblique views of the construction activity in the western part of the ESS Site, although seen against a backdrop of the Maes Bach Solar Farm. The construction activity would result in a partial change to the composition of the view and a moderate adverse effect. At year I, the change to the composition of the view would be small, via the small reduction in the visible extent of roadside hedgerows. The density of the intervening hedgerow would screen the remainder of the ESS Site even in winter. In summer, with the intervening vegetation in leaf, the visibility of the new access and reduced extent of hedgerow would reduce in comparison to winter conditions, such that the effects are predicted to range between minor adverse and negligible adverse. By years 5 and 10, the change to the composition of the view would be very subtle, due to the increased height of the hedgerow along the northern edge of the ESS Site largely screening any visibility of the proposed access. The proposed trees would also soften views of the Mae Bach Solar Farm. In summer, with the vegetation in leaf, there would be a reduction in the visibility of the Maes Bach Solar Farm, resulting in a range of negligible adverse to negligible beneficial effects at year 5 and increasing to range between negligible beneficial and minor beneficial by year 10, due to the reduced visibility of the Maes Bach Solar Farm.
- 9.22 For recreational users on PRoW (footpath) DRE/53/2 (Viewpoint 3), the construction activity at the ESS Site would be visible at close range, resulting in a more unsettled composition of the view and activity of a far greater scale than general farming, even when seen against the backdrop of the Maes Bach Solar Farm and a high degree of change to the composition of the view, with a resulting major adverse effect. At year 1 of operation, the lower parts of the ESS equipment would be screened by the density of the intervening hedgerow even in winter, whilst the upper parts of the ESS equipment and the sub-station fencing would be visible, introducing additional structures at close range and a more developed composition to the view, resulting in major adverse effects. In summer, with the hedgerow in leaf, the visibility of the ESS equipment would reduce to moderate adverse at year 1. By years 5 and 10, the ESS equipment would be screened by the increased height of the intervening hedgerow, with the effects ranging between minor adverse and negligible adverse, due to the truncation of the extent of views across the wider landscape, due to the taller height of the hedgerow.
- 9.23 For recreational users on PRoW (footpath) DRE/53/2 (Viewpoint 4), the construction of the ESS equipment would be visible due to the slightly elevated position of the receptor above the field. The construction activity would be a noticeable change to the composition of the view, resulting in a moderate adverse effect. At year 1, the ESS equipment would be visible, resulting in a more developed composition to the view and a moderate adverse effect. By years 5 and 10, the establishment of the

proposed planting along the eastern edge of the ESS Site would reduce the visibility of the ESS equipment in winter and summer conditions, such that the effects are predicted to range between minor adverse and negligible adverse at year 10.

- 9.24 For recreational users on PRoW (footpath) DRE/53/1 (Viewpoint 5), to the east of the ESS Site, the construction activity would be visible, due to gaps in the intervening tree line, although seen in the context of several large scale farm buildings at Maes Bach Farm and Maes Bach Solar Farm, resulting in a moderate adverse effect. At year I of operation, winter, the ESS equipment would be visible, resulting in a more developed composition to the view and a more visually contiguous alignment of development, extending between the solar farm and the farm buildings and a moderate adverse effect in winter. At summer year I, with the intervening trees in leaf, the visibility of the ESS equipment would be reduced, such that there would be an immediate reduction in the visibility of the ESS equipment within the first year of operation, with the effects reducing to minor adverse. By years 5 and 10, the visibility of the ESS equipment would further reduce in winter and summer conditions due to the establishment of the proposed planting along the eastern edge of the ESS Site, with the effects predicted to be negligible adverse.
- 9.25 For road users on Pound Farm Lane (Viewpoint 6), to the south of the ESS Site, the upper parts of tall construction machinery would be visible, although softened by the density of the intervening vegetation and seen in the context of the Maes Bach Solar Farm, such that the change to the composition of the view would be limited, with the effects predicted to be minor adverse. Similarly, at year I winter, the upper parts of the substation fence would be visible, along with the upper parts of the ESS units, although softened by the intervening vegetation and seen in the context of the Maes Bach Solar Farm, such that the change to the composition of the view would be the intervening vegetation and seen in the context of the Maes Bach Solar Farm, such that the change to the composition of the view would be limited, with the effects predicted to be minor adverse. In summer, with the intervening vegetation in leaf, the Proposed Development would not be visible and there would be no change to the composition of the view, such that the effects are predicted to be neutral. By years 5 and 10 the visibility of the ESS equipment would reduce in winter conditions due to the composition of the view would be very limited in winter conditions, with the effects predicted to be negligible adverse, whilst remaining neutral in summer conditions.
- 9.26 Continuing southwards along Pound Farm Lane, for road users (Viewpoint 7), the construction of the proposed access, machinery implementing a small part of the cable corridor and the upper parts of tall construction machinery at the ESS Site would be visible, due to the relatively elevated position of the receptor. The construction activity would form a very small part of the wider view and would be seen in the context of the Maes Bach Solar Farm, resulting in a minor adverse effect. At year I winter, the upper parts of the ESS equipment in the western part of the Site would be visible, due to the elevated position of the receptor, although the perception of their scale and mass would be reduced by their rendered facades. The change to the composition of the view would be small, with
the Proposed Development seen in the context of the Maes Bach Solar Farm, resulting in a minor adverse effect. In summer, at year I, with the intervening vegetation in leaf, the visibility of the Proposed Development would be noticeable reduced, so as to be barely perceptible beyond the Maes Bach Solar Farm, such that the effects are predicted to be negligible adverse. At years 5 and 10 winter, the visibility of the Proposed Development would continue to reduce in winter conditions, due to the establishment of the proposed planting in the western part of the ESS Site, with the effects reducing to negligible adverse, whilst remaining screened in summer conditions, with resulting neutral effects.

- 9.27 For recreational users on PRoW (footpath) DRE/63/10 (Viewpoint 8) neither the construction or operational phases of the Proposed Development would be visible and the effects are predicted to be neutral.
- 9.28 For recreational users on Garth Hill, (Viewpoint 9), the construction of the proposed access and machinery implementing a small part of the cable corridor would be visible, due to the elevated position of the receptor. The construction activity would form a very small part of the wider view and would be seen in the context of the Maes Bach Solar Farm, such that the effects would be minor adverse. In operation, the visibility of the ESS equipment would be reduced by the intervening established trees across the southern part of the ESS Site in winter and even more so in summer, such that the effects are predicted to be negligible adverse at years I and 5. By year 10, the effects are predicted to reduce to neutral in winter and summer conditions, due to the further establishment of the proposed planting.
- 9.29 For road users on Penycoedcae Road (**Viewpoint 10**), neither the construction or operational phases of the Proposed Development would be visible due to the intervening distance and vegetation.
- 9.30 For road users on Maindy Road (**Viewpoint II**), the upper parts of tall machinery within the ESS Site would be visible, but forming a very small change to the composition of the view, such that the effects are predicted to be negligible. In operation, the ESS equipment in the western part of the ESS Site would not be discernible due to the tonal rendering, set against a backcloth of extensive vegetation, such that in combination with the distance from the receptor, there would be no overall change to the composition of the view in winter or summer conditions and the effects are predicted to be neutral.
- 9.31 For recreational users across open access land across Mynydd Meio (Viewpoint 12), neither the construction activity, nor the operational phases of the Proposed Development would be visible due to screening by the more elevated hillock to the immediate north of the ESS Site and the agricultural barns to the east of the ESS Site, such that the effects are predicted to be neutral.
- 9.32 For recreational users on PRoW (footpath) PTE/FP122/1 (Viewpoint 13), there would be channelled, long distance views of the construction activity, due to the elevated position of the receptor, although seen beyond Maes Bach Farm, such that the change to the overall composition of the view would be

small and the effect would be minor adverse. In operation, the ESS equipment would be visible, although the mass and scale of the equipment would be reduced by the tonal rendering. The ESS equipment would be seen in the context of Maes Bach Farm, in a part of the landscape which is already developed and against the back drop of residential land uses in the background of the view. In combination with the distance from the receptor, the change to the composition of the view would be small in winter and summer conditions, with the effects reducing from minor adverse at year I to negligible adverse by year 10 due to the establishment of the proposed planting.

- 9.33 For recreational users on Craig yr Allt (**Viewpoint 14**), views of the construction activity would be softened by the intervening vegetation along the southern edge of the ESS Site. The very small scale of the construction activity in relation to the wider extent of views across the valley and in the context of Maes Bach solar farm would result in a very small change to the composition of the view and a negligible adverse effect. At year 1, the contiguous pattern of arable fields extending up from the valley floor would remain visible from the elevated position of the receptor, due to the ESS equipment being located beyond Maes Bach Farm and seen consolidated between this and the Maes Bach Solar Farm. The position of the ESS equipment would also retain views of the field between the ESS equipment and the farm, with the equipment softened in winter by the intervening vegetation and screened in summer when in leaf, such that there would be no change to the composition of the view at year 1 summer.
- 9.34 For recreational users and visitors to Caerphilly Common (Viewpoint 15), the very small scale of the construction activity in relation to the wider extent of views across the valley and in the context of Maes Bach solar farm would result in a very small change to the composition of the view and negligible effects. In operation, the effects are predicted to decrease from negligible adverse at year 1 to neutral at year 10 due to the establishment of the proposed planting along the eastern edge of the ESS Site, the intervening distance from the receptor and the reduced perception of the ESS equipment due to its tonal rendering.

Visual Summary

9.35 With reference to **Appendix V**, the following table summarises the visual effects during the construction and operational phases of the Proposed Development.

| VP | Visual Receptor | Construction | Year I | Year 5 | Year 10 |
|----|--|---------------------|---------------------------------------|--|--|
| | | (winter) | (winter/summer) | (winter/summer) | (winter/summer) |
| I | Road users on Pound Farm Lane | Minor adverse | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral |
| 2 | Recreational users on PRoW (footpath) DRE/50b/2 | Moderate adverse | Minor adverse / Negligible adverse | Negligible adverse / Negligible beneficial | Negligible beneficial / Minor beneficial |

Table 9-2: Visual Effects Summary

| VP | Visual Receptor | Construction | Year I | Year 5 | Year 10 |
|----|--|-----------------------|---|---|---|
| | | (winter) | (winter/summer) | (winter/summer) | (winter/summer) |
| 3 | Recreational users on PRoW (footpath) DRE/53/2 | Major adverse | Major adverse / Moderate adverse | Minor adverse / Negligible adverse | Minor adverse / Negligible adverse |
| 4 | Recreational users on PRoW (footpath) DRE/53/2 | Moderate adverse | Moderate adverse / Moderate adverse | Moderate adverse / Minor adverse | Minor adverse / Negligible adverse |
| 5 | Recreational users on PRoW (footpath) DRE/53/1 | Moderate adverse | Moderate adverse / Minor adverse | Minor adverse / Negligible adverse | Negligible adverse / Negligible adverse |
| 6 | Road users on Pound Farm Lane | Minor adverse | Minor adverse / Neutral | Negligible adverse / Neutral | Negligible adverse / Neutral |
| 7 | Road users on Pound Farm Lane | Minor adverse | Minor adverse / Negligible adverse | Negligible adverse / Neutral | Negligible adverse / Neutral |
| 8 | Recreational users on PRoW (footpath) DRE/63/10 | Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral |
| 9 | Recreational users on Garth Hill | Minor adverse | Negligible adverse / Negligible adverse | Negligible adverse / Negligible adverse | Neutral / Neutral |
| 10 | Road users on Penycoedcae Road | Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral |
| 11 | Road users on Maindy Road | Negligible adverse | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral |
| 12 | Recreational users at Myndd Meio | Neutral | Neutral / Neutral | Neutral / Neutral | Neutral / Neutral |
| 13 | Recreational users on PRoW (footpath) PTE/FP122/1 | Minor adverse | Minor adverse / Minor adverse | Minor adverse / Negligible adverse | Negligible adverse / Negligible adverse |
| 14 | Recreational users on Craig yr Allt | Negligible adverse | Negligible adverse / Neutral | Negligible adverse / Neutral | Neutral / Neutral |
| 15 | Recreational users on Caerphilly Common | Negligible adverse | Negligible adverse / Negligible adverse | Negligible adverse / Neutral | Neutral / Neutral |

- 9.36 From the above table, the higher tiers of visual effects during the construction phase relate to visual receptors in close and immediate proximity to the ESS Site and Cable Corridor, due to the construction activity being a noticeable or pronounced change from general farming activity. At distance from the construction activity, the predicted effects are substantially lower, due to the relatively small scale of the construction activity within panoramic views from elevated land, or that the intervening vegetation softens and screens the activity, even in winter.
- 9.37 In operation, there would similarly be higher tiers of adverse effects for recreational users and road users immediate adjacent to the ESS Site, due to the equipment and sub-station being a noticeable change in comparison to the undeveloped field. However, the effects are reduced immediately in summer months due to the roadside hedgerows and existing vegetation within the ESS Site being in leaf and reducing the visibility of the ESS equipment. For longer distance views, the predicted tiers of effects are lower due to the limited visibility of the ESS equipment due to the height of the vegetation

along the southern part of the ESS Site, the intervening screening from vegetation and that the ESS Site is seen in the context of Maes Bach Farm buildings and Maes Bach Solar Farm. In all instances, the predicted effects educe across the assessment phases due to the establishment of the proposed planting such that by year 10, the visual effects range between neutral and minor adverse, such that they are of 'lesser importance'.

LANDMAP

- 9.38 In relation to the Cultural Landscape Aspect, the Proposed Development would not alter the key characteristics of upland and moorland landscape, nor any areas of ecological value. The Proposed Development would be located in the Special Landscape Area, but adjacent to an existing solar farm, such that it would be perceived in this context. The proposed planting would provide increased opportunities for biodiversity and in combination with the reversible duration of the Proposed Development, there would be no change to the Cultural Landscape and a neutral effect in the construction and operational phases.
- 9.39 In relation to the Historic Landscape Aspect, the Proposed Development would retain the overall field pattern due to remaining within the defined vegetated boundaries of the ESS Site and the change in land use would be very small in relation to the wider LANDMAP area. The change in land use would be localised and temporary, such that there would be no change to the Historic Landscape, resulting in a neutral effect at the construction and operational phases of the Proposed Development.
- 9.40 In relation to the Landscape Habitats Aspect, the Proposed Development would increase the vegetation cover across the ESS Site and retain the key vegetation structure. The Proposed Development would respond positively to the stated guidelines of the appropriate management and therefore there would be no change this LANDMAP Aspect, with the effects predicted to be neutral during the construction and operational phases of the Proposed Development.
- 9.41 The ESS Site and Cable Corridor are within an area of 'moderate' visual sensory value, due to the range of land uses, which includes arable and urban features. The visibility of the Proposed Development would be limited, mainly to within close proximity of the ESS Site, in which it would be seen in the context of the Maes Bach Solar Farm. The mitigation measures of rendering the ESS units, enclosing the sub-station and new planting would mitigate the visual effects, as demonstrated by the visual assessment, such that there would be no change and no effect to this LANDMAP Aspect during the construction and operational phases of the Proposed Development.

Special Landscape Area (SLA)

9.42 The construction phase would result in localised alteration to landform and vegetation removal, along with the presence of construction activity of a greater scale than farming across the Site. However, the extent of this change would be very localised in relation to the wider extent of the SLA. The

impacts would be very low and the effect to the SLA during the construction phase is assessed as negligible adverse.

9.43 In operation, with the Proposed Development perceived in the context of the Maes Bach Solar Farm, and consolidated to a part of the SLA in which there is an existing renewable land use, there would be no alteration to the character of the SLA and no effect.

RESPONSE TO POLICY

9.44 The following section sets out the Proposed Developments response to policies relevant to landscape and visual matters.

Future Wales: The National Plan 2040

9.45 The Proposed Development would respond positively to the visions and objectives for places that sustainably manage natural resources, biodiversity and are decarbonised. The Proposed Development would also respond positively to Policy 17: Renewable and Low Carbon Energy and Associated Infrastructure and supporting the target of 70% of electricity consumption is to be generated from renewable energy by 2030.

Planning Policy Wales (PPW) Edition 12, 2024

9.46 In respect of PPW paragraph 5.9.20, the Proposed Development has assessed the impact of the Proposed Development and set out mitigation measures to avoid or reduce the potential adverse impacts of low carbon energy. Due to this, the residual landscape and visual effects of the Proposed Development are predicted to be very low and of 'lesser importance'.

Rhondda Cynon Taf Revised Local Development Plan 2022-2037

- 9.47 The Proposed Development would respond positively to the stated objectives of the Preferred Strategy by mitigating and adapting to climate change via increasing the production and supply of renewable energy, as well as enhancing green infrastructure and opportunities for biodiversity, via the proposed planting.
- 9.48 In respect of Policy SP5: Green Infrastructure and Open Space, the Proposed Development would not impact any of the high quality features within the Special Landscape Area for which it was designated during its operational phases.

Rhondda Cynon Taf Local Development Plan 2006-2021, adopted 2011

9.49 In respect of Policy AW8: Protection and Enhancement of the Natural Environment, the Proposed Development would accord with the policy requirements, as the predicted landscape and visual effects are low, such that there would be no unacceptable impact upon features of landscape importance.

- 9.50 Similarly, with the effects of the Proposed Development being low and of 'lesser importance', along with the proposed planting increasing the vegetation cover and opportunities for biodiversity, there would be no unacceptable effect on the landscape, in accordance with Policy AW12: Renewable and Non-Renewable Energy.
- 9.51 In respect of SSA 23: Special Landscape Areas, the Proposed Development achieves high standards of design via the tonal rendering of equipment, siting the compound to reduce its visibility and implementing new planting to increase the vegetation cover and reduce the perception of the change in land use.

10.0 CUMULATUVE EFFECTS

10.1 The LVIA includes a cumulative assessment of the Proposed Development in combination with the Maes Mawr Solar Farm¹⁴ (ref: DNS/3282038), which was approved in December 2023 ('the cumulative scheme'). With reference to the following image, the cumulative scheme is located to the west of the ESS Site, on the opposite side of Pound Farm Lane, and to the north of the ESS Site, beyond the hillock which borders the farm access track.



Image 10-1: Location of the Maes Mawr Solar Farm, with the centre of the ESS Site illustrated by the red dot.

- 10.2 The cumulative assessment uses the same LVIA methodology as per the assessment of the Proposed Development, as well as the same landscape and visual receptors.
- 10.3 The difference with the cumulative assessment is that it considers the cumulative scheme and the Proposed Development as being present in the landscape or people's views at the same time.
- 10.4 As an example, if a visual receptor has a view of the Proposed Development and the cumulative scheme, then the change to their view would be greater in comparison to a view of only the Proposed Development. Therefore, the cumulative effect would be greater than in comparison to the predicted effect for only the Proposed Development.

¹⁴ Welsh Government, Maes Mawr Solar, https://planningcasework.service.gov.wales/case

- 10.5 The cumulative assessment assumes that the cumulative scheme incorporates mitigation, e.g. new native planting, to mitigate potential impacts.
- 10.6 The cumulative assessment does not assess the cumulative schemes specifically, as this is covered by its respective planning applications.

Cumulative Landscape Effects

Published Landscape Character Areas

- 10.7 The Proposed Development and the cumulative scheme would be located in the same National Landscape Character Area 37: South Wales Valleys. However, due to the both the Proposed Development and the cumulative scheme being located in close proximity to one another, and in turn in close proximity to Maes Bach Solar Farm, both schemes would be located in a part of the NLCA where renewable energy equipment is present. In relation to the relatively small extent and perception of the Proposed Development and the cumulative scheme in relation to the wider geographic area of the NLCA, the impacts would be very localised. The combined construction phase is assessed as resulting in a very low magnitude of impact and a resulting negligible adverse effect. This is higher than the predicted neutral effect for the Proposed Development only, and is due to the greater scale of the cumulative scheme.
- 10.8 In operation, the cumulative impact would be a greater extent of renewable energy equipment and structures, as well as an evident change in land use to both sides of Pound Farm Lane. The perception would be of a continuous tract of renewable land uses across the cumulative scheme and Maes Bach Solar Farm, with the Proposed Development consolidated between these scheme and representing a far smaller change. The impact to the NLCA during operation would be very low and the effect is predicted to be negligible adverse. This is higher than the neutral effect predicted for the Proposed Development only and is due to the cumulative scheme.

Local Landscape Character Areas

10.9 At the local scale, part of the cumulative scheme and the Proposed Development would be located in LLCA I: Taff Vale, which covers land to the east of Pound Farm Lane. The combined construction activity would result in a major adverse effect during the construction phase, in comparison to the minor adverse effect predicted for only the Proposed Development. The is due to the greater extent of construction machinery, excavation of landform and increased unsettled character of the landscape. In operation, the combined extent of new renewable land uses across LLCA I would be greater, with the cumulative scheme and the Proposed Development perceived as an extension to the Maes Bach solar farm. The effect at years I and 5 would be major adverse, in comparison to the minor adverse effect predicted for only the Proposed Development. By year 10, with the establishment of the proposed planting across the Proposed Development and the effects would reduce to moderate adverse.

This is higher than the predicted negligible adverse for only the Proposed Development, due to the greater scale and extent of the cumulative scheme.

- 10.10 The cumulative scheme would also be partly located in LLCA 2: Dryscoed Agricultural (LLCA 2), which covers land to the west of Pound Farm Lane. The effects during the construction phase and operational phases would therefore range between major adverse and moderate adverse, which is higher than the predicted neutral effects for the Proposed Development only. This is because the Proposed Development is not located in LLCA 2, such that it would not result in any physical change to the landscape features or character.
- 10.11 For the remaining LLCA's the effects would remain as predicted for the Proposed Development, as the cumulative scheme and Proposed Development would be perceived in the context of the Maes Bach Solar Farm, which already forms part of the setting to the wider landscape.

Cumulative Visual Effects

10.12 The following table lists the visual receptors whom would have views of both the Proposed Development and the cumulative scheme, along with the predicted tiers of cumulative effects during the construction and operational phases.

| VP | Visual Receptor | Construction | Year I | Year 5 | Year 10 |
|----|--|---|---|--|---|
| | | (winter) | (winter/summer) | (winter/summer) | (winter/summer) |
| I | Road users on Pound Farm Lane – close range views of the construction of the cumulative scheme and the cable corridor for the Proposed Development. In operation, changes to the composition of the view would relate to the cumulative scheme only. | Moderate adverse. Higher than the Minor adverse for the Proposed Development only. | Moderate adverse / Moderate adverse. Higher than the neutral effects predicted for the Proposed Development only. | Moderate adverse / Minor adverse. Higher than the neutral effects predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the neutral effects predicted for the Proposed Development only. |
| 4 | Recreational users on PRoW (footpath) DRE/53/2 – increased views of taller construction machinery relating to the cumulative scheme on the opposite side of Pound Lane Farm, however the effects are predicted to remain the same as for the Proposed Development due to the closer proximity of the construction activity. In operation, the effects would relate to the Proposed Development only and therefore no cumulative effects. | Moderate adverse | Moderate adverse / Moderate adverse | Moderate adverse / Minor adverse | Minor adverse / Negligible adverse |
| 7 | Road users on Pound Farm Lane – increased visibility of construction activity and solar panels across the cumulative scheme site in operation due to the elevated position of the receptor. The cumulative scheme would be seen | Moderate adverse Higher than the Minor adverse predicted for | Moderate adverse / Moderate adverse Higher than the Minor adverse / Negligible adverse predicted for the | Moderate adverse / Moderate adverse Higher than the Negligible adverse / Neutral | Moderate adverse / Minor adverse High than the Negligible adverse / Neutral predicted for the |

Table 10-1: Cumulative Visual Effects

| VP | Visual Receptor | Construction | Year I | Year 5 | Year 10 |
|----|---|---|--|--|---|
| | | (winter) | (winter/summer) | (winter/summer) | (winter/summer) |
| | as a continuation of the Maes Bach Solar Farm. The Proposed Development would remain a smaller change to the composition of the view, due to being located between the two solar schemes. | the Proposed Development only. | Proposed Development only. | predicted for the Proposed Development only. | Proposed Development only. |
| 9 | Recreational users on Garth Hill – due to the elevated position of the receptor, there would be views of the cumulative scheme and the Proposed Development, with the cumulative development being more noticeable than the Proposed Development due to being located in fields, but remaining a very small part of a wider view. | Moderate adverse Higher than the Minor adverse predicted for the Proposed Development only. | Minor adverse / Minor adverse High than the Negligible adverse / Negligible adverse predicted for the Proposed Development only. | Minor adverse / Minor adverse High than the Negligible adverse / Negligible adverse predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the predicted neutral effects for the Proposed Development only. |
| 11 | Road users on Maindy Road – the cumulative scheme would be visible due to extending across fields to the west of Pound Farm Lane, which are visible from the receptor, but form a small part of the wider view. | Minor adverse Higher than the Negligible adverse predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Neutral effects predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Neutral effects predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the Neutral effects predicted for the Proposed Development only. |
| 12 | Recreational users at Myndd Meio – due to the elevated position of the receptor, the cumulative scheme to the north of the ESS Site would be visible, although forming a small part of the wider view. | Minor adverse Higher than the Neutral effect predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Neutral effects predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Neutral effects predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the Neutral effects predicted for the Proposed Development only. |
| 14 | Recreational users on Craig yr Allt - due to the elevated position of the receptor, the cumulative scheme to the north of the ESS Site would be visible, although forming a small part of the wider view. | Minor adverse Higher than the Negligible adverse effect predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Negligible adverse and Neutral effects predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Negligible adverse and Neutral effects predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the Neutral effects predicted for the Proposed Development only. |
| 15 | Recreational users on Caerphilly Common - due to the elevated position of the receptor, the cumulative scheme to the north of the ESS Site would be visible, although forming a small part of the wider view | Minor adverse Higher than the Negligible adverse effect predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Negligible adverse and Neutral effects predicted for the Proposed Development only. | Minor adverse / Minor adverse Higher than the Negligible adverse and Neutral effects predicted for the Proposed Development only. | Minor adverse / Negligible adverse Higher than the Neutral effects predicted for the Proposed Development only. |

Cumulative LANDMAP Effects

10.13 The Proposed Development and the cumulative scheme would be located in the same LANDMAP Aspect Areas. For all of these areas, the greater scale and extent of the cumulative scheme would result in a minor adverse effects during the construction and operational phases, in comparison to the neutral effects predicted for the Proposed Development only.

Cumulative Special Landscape Area (SLA) Effects

- 10.14 The Proposed Development and the cumulative scheme would be located in the SLA. The combined construction activity would result in a minor adverse effect, in comparison to the negligible adverse effect predicted for the Proposed Development only.
- 10.15 In operation, the cumulative impact would result in an increased perception of renewable energy within the SLA, with the cumulative scheme perceived as an extension to the Maes Bach Solar Farm. The cumulative magnitude of impact is assessed as low at year 1 resulting in a minor adverse effect in comparison to the neutral effect predicted for the Proposed Development only. By year 10, with the establishment of the proposed planting, the effect would reduce to negligible adverse, which is higher than the neutral effect predicted for only the Proposed Development.

Cumulative Summary

- 10.16 The Maes Mawr Solar Farm would increase the extent and scale of renewable solar energy across land to the east of Pound Farm Lane in comparison to the existing Maes Bach Solar Farm. In addition, the Maes Mawr Solar Farm would also extend to the west of Pound Farm Lane. The Proposed Development would be consolidated between the two schemes, so as to be perceived as part of the 'wider' solar arrays and renewable character of this area of land.
- 10.17 Due to the greater scale and extent of the Maes Mawr Solar Farm, along with its greater visibility, the predicted tiers of adverse landscape and visual effects during the construction and operational phases would be higher than predicted for only the Proposed Development.
- 10.18 The key landscape features of landform and vegetation patterns would be retained, with both scheme increasing the vegetation cover and opportunities for biodiversity. Therefore the cumulative effects would reduce across the operational phases of the Proposed Development and the Maes Mawr Solar Farm, with the pertinent matter being that in landscape and visual terms, the effects are reversible and an inevitable result of the change in land use for renewable infrastructure.

11.0 SUMMARY AND CONCLUSION

Baseline

- 11.1 With reference to Figure I, the Site ('the red line'), covers the proposed location for the energy storage units, sub-station and associated equipment ('the ESS Site') and the route of the underground cable connection, along the A473 and Pound Farm Lane ('the Cable Corridor').
- 11.2 The ESS Site covers part of a grass field, to the west of Maes Bach Farm, bound by roadside hedgerows, a relatively high hillock and Maes Bach Solar Farm. The southern edge of the ESS Site consists of a row of established oak trees, up to 15m in height (twice the height of the proposed sub-station). With reference to on-line mapping, none of the vegetation within the ESS Site is ancient woodland, nor is it covered by any Tree Preservation Orders.
- 11.3 The Site is not covered by any statutory landscape designations (e.g. National Park), nor is the Site within, or adjacent to, a Conservation Area. The Site is within Special Landscape Character Area (SLA) Isaf, Garth and Nantgarw Western Slopes. However, whilst the ESS Site is farmland, this is a common feature of the SLA, with the ESS Site located between Maes Bach Solar Farm and the approved location of Maes Mawr Solar Farm, such that the ESS Site is not an integral part of the SLA farmland. The ESS Site is also located across a plateau, rather than forming part of the gentle valley slopes which form the key characteristics of the SLA. The ESS Site is not publicly accessible and is therefore not common land. Due to this, the ESS Site is not fully representative of the stated distinctive landscape of the SLA.
- 11.4 With reference to Figure 2, the Site is situated within a complex topography, due to numerous valleys which form a varied arrangement of undulating landform, hills and notable elevated areas of land. The ESS Site forms part of a tract of lower lying undulating land at the base of Garth Hill, which forms a localised plateau to the east of Pound Farm Lane, across which Maes Bach Farm and part of Maes Bach Solar Farm are also located, beyond which the landform transitions to the steeper valley sides. The exception is to the immediate north of the ESS Site, where a localised hillock extends up to 16m in height above the ESS Site, physically and visually enclosing the ESS Site from the wider landscape to the north.
- 11.5 With reference to Figure I, the surrounding landscape is well vegetated, particularly across the valley sides and lower slopes by the combination of woodlands and established field boundaries consisting of hedgerows and trees. The extent of vegetation cover across the developed valley floors and larger scale residential areas is generally limited, likewise across the more elevated land within the study area, where the vegetation cover is mainly grasses, gorse and heather.
- 11.6 The ESS Site is part of a landscape characterised by a variety of land uses, with built development mainly concentrated across lower lying land and the valley floors. In terms of renewable infrastructure, the ESS Site is adjacent to Maes Bach solar farm and the local road network, in a part of the study

area where the main land use is agriculture, characterised by small to medium scale fields, often divided by established hedgerows and trees.

- 11.7 With reference to Figures 4A and 4B, the visibility of the ESS Site is less than suggested by the ZTVs, due to the difference between the extent of vegetation across the study area and that sourced from on-line data. The main differences relate to land to the south-west of the ESS Site, where the density of the intervening vegetation negates views of the ESS Site from the few areas of publicly accessible land.
- 11.8 The main visibility of the ESS Site from along Pound Farm Lane and PRoW (footpath) DRE/53/2, which are close range locations bordering the ESS Site. From both of these locations, the ESS Site is seen in the context of Maes Bach Farm and Maes Bach Solar Farm, i.e. a developed part of the landscape. There are also views of the ESS Site at close range from PRoW (footpath) DRE/53/1, to the east of the ESS Site, as the route extends across Maes Bach Farm.
- 11.9 From the wider landscape to the east, the ESS Site is visible from more elevated parts of the study area, including Craig yr Allt, where the ESS Site is seen in the context of Maes Bach Solar Farm and Maes Bach Farm, forming part of the lower plateau at the base of Garth Hill and above a range of land uses across the valley floor. The ESS Site is not seen as part of the arable and undeveloped land extending across the valley sides, due to being located beyond Maes Bach Farm.
- 11.10 From the south of the ESS Site, the ESS Site is visible from more elevated parts of Pound Farm Lane, to the south of the ESS Site and Garth Hill, where the ESS Site forms a very small part of the composition of the view, with the field being predominantly screened by the established trees along the southern edge of the ESS Site. Within all of these views, the ESS Site is seen in the context of Maes Bach Solar Farm.

LANDMAP

- 11.11 With reference to the on-line data sets for the Welsh Landscape (LANDMAP), the ESS Site is in an area of High Cultural Landscape, but this relates to areas of ecological designation and expanses of moorland, such that the ESS Site is not fully representative of these cultural aspects. The ESS Site is in an area of Moderate Historic Landscape, due in part do the enclosed fieldscape pattern, for which the ESS Site is representative.
- 11.12 The ESS Site is in an area of Moderate Landscape Habitat, due in part to the improved grassland, hedges and trees, for which the ESS Site is representative. The ESS Site is in an area of Moderate Visual Sensory, due to the balance between rural and developed areas, for which relevant guidelines are to limit future urban development.

11.13 Apart from the Cultural Landscape assessment, the ESS Site is in an area of Moderate LANDMAP classification, which equates to a local level 'importance'; rather than a regional, county or national 'importance'.

Primary Mitigation

- 11.14 As part of the iterative design process, design measures to avoid or reduce the potential landscape and visual effects of the Proposed Development are incorporated within the PCA drawings and the Concept Landscape Plan.
- 11.15 These design measures for the ESS equipment are centred around the SLA requirements of design, siting, layout and materials by:
 - Siting the ESS equipment centrally within the field, so as to reduce its potential visibility from PRoW to the east of the ESS Site and in longer distance views from elevated land in the north-eastern and south-eastern part of the study area;
 - Offsetting the ESS equipment from the established hedgerows to the north and west of the ESS Site and the established trees along the southern part of the ESS Site, so as to retain this vegetation, with only localised removal for the new access;
 - Rendering the proposed ESS units in a dark green tone, so as to reduce their perceived mass and scale; and
 - Enclosing the proposed sub-station by solid fence, so as to visually screen it and reduce its acoustic perception. The fence would also be rendered dark green, so as to aid its integration within the landscape.

Likely Landscape and Visual Effects

Landscape Effects

- 11.16 The higher tiers of adverse landscape effects during the construction phase are focused at the Site level, due to the physical and perceived changes to the landscape features and landscape character. These higher tiers of adverse landscape effects are inevitable due to the construction activity being of a greater scale and duration than general farming, but the effects are temporary and range between major adverse and moderate adverse.
- 11.17 In operation, the higher tiers of adverse landscape effects are similarly focused at the Site level, due to the obvious change in character from an undeveloped field to ESS equipment, ranging between major adverse and moderate adverse. In relation to the surrounding landscape, the predicted tiers of effects are low, ranging between minor adverse and neutral, due to the very limited physical and perceived change from the Proposed Development, within the context of the Maes Bach Solar Farm.

Visual Effects

- 11.18 The higher tiers of visual effects during the construction phase relate to visual receptors in close and immediate proximity to the ESS Site and Cable Corridor, due to the construction activity being a noticeable or pronounced change from general farming activity, with resulting major and moderate adverse effects. At distance from the construction activity, the predicted effects are substantially lower, ranging between minor adverse and negligible adverse, due to the relatively small scale of the construction activity within panoramic views from elevated land, or that the intervening vegetation softens and screens the activity, even in winter.
- 11.19 In operation, there would similarly be higher tiers of adverse effects for recreational users and road users immediate adjacent to the ESS Site, due to the equipment and sub-station being a noticeable change in comparison to the undeveloped field, resulting in moderate adverse effects. However, the effects are reduced immediately in summer months due to the roadside hedgerows and existing vegetation within the ESS Site being in leaf and reducing the visibility of the ESS equipment. For longer distance views, the predicted tiers of effects are lower due to the limited visibility of the ESS equipment due to the height of the vegetation along the southern part of the ESS Site, the intervening screening from vegetation and that the ESS Site is seen in the context of Maes Bach Farm buildings and Maes Bach Solar Farm.

Cumulative Effects

- 11.20 The Maes Mawr Solar Farm would increase the extent and scale of renewable solar energy across land to the east of Pound Farm Lane in comparison to the existing Maes Bach Solar Farm. In addition, the Maes Mawr Solar Farm would also extent to the west of Pound Farm Lane. The Proposed Development would be consolidated between the two schemes, so as to be perceived as part of the 'wider' solar arrays and renewable character of this area of land.
- 11.21 Due to the greater scale and extent of the Maes Mawr Solar Farm, along with its greater visibility, the predicted tiers of adverse landscape and visual effects during the construction and operational phases would be higher than predicted for only the Proposed Development.
- 11.22 The key landscape features of landform and vegetation patterns would be retained, with both schemes increasing the vegetation cover and opportunities for biodiversity. Therefore the cumulative effects would reduce across the operational phases of the Proposed Development and the Maes Mawr Solar Farm, with the pertinent matter being that in landscape and visual terms, the effects are reversible and an inevitable result of the change in land use for renewable infrastructure.

Special Landscape Area

11.23 The construction phase would result in localised alteration to landform and vegetation removal, along with the presence of construction activity of a greater scale than farming across the Site. However,

the extent of this change would be very localised in relation to the wider extent of the SLA. The impacts would be very low and the effect to the SLA during the construction phase is assessed as negligible adverse.

11.24 In operation, with the Proposed Development perceived in the context of the Maes Bach Solar Farm, and consolidated to a part of the SLA in which there is an existing renewable land use, there would be no alteration to the character of the SLA and no effect.

Conclusion

- 11.25 In respect of the Rhondda Cynon Taf Revised Local Development Plan, the Proposed Development would respond positively to the stated objectives of the Preferred Strategy by mitigating and adapting to climate change via increasing the production and supply of renewable energy, as well as enhancing green infrastructure and opportunities for biodiversity, via the proposed planting.
- 11.26 As the Proposed Development would not impact any of the high quality features of the Special Landscape Area during its operational phases, the Proposed Development would accord with Policy SP5: Green Infrastructure and Open Space.
- 11.27 Similarly, in respect of SSA 23: Special Landscape Areas, the Proposed Development achieves high standards of design via the tonal rendering of equipment, siting the compound to reduce its visibility and implementing new planting to increase the vegetation cover and reduce the perception of the change in land use.
- 11.28 The Proposed Development would be perceived as part of the existing renewable landscape of the Maes Bach Solar Farm, as well as the approved Maes Mawr Solar Farm, which will result in the Proposed Development being consolidated between these two solar farms.
- 11.29 Whilst the Proposed Development is predicted to result in adverse landscape and visual effects, these are predominantly low tiers of effects and in all instances, the predicted effects educe across the assessment phases due to the establishment of the proposed planting such that the landscape and visual effects are considered to be of 'lesser importance'.

12.0 LVIA APPENDIX I: LVIA METHODOLOGY

- 12.1 The method of landscape and visual assessment for the Proposed Development has been devised to address the specific issues raised by a development of this scale and nature. The methodology draws upon the following established best practice guidance:
 - Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, (GLVIA 3), (Landscape Institute and Institute of Environmental Management and Assessment) 2013.
 - Landscape Institute Assessing Value outside of national designations (2021).
 - Landscape Institute Guidance Note 06/19 2019: Visual Representation of Development Proposals.
 - Landscape Institute Notes and Clarifications on aspects of the 3rd Edition.
 - Using LANDMAP in LVIA GN46.

Assessment Process

- 12.2 This methodology identifies potential landscape character and visual receptors within the study area in order to establish the baseline conditions. The approach to this assessment is based on GLVIA 3 and is outlined below:
 - The sensitivity of the receptor is derived from the value and susceptibility of the receptor.
 - The potential magnitude of impact is described as High, Medium, Low, Very Low or None based criterion.
 - The assessment of effects is derived through a combination of sensitivity of the receptor and the magnitude of impact associated with the Proposed Development, defined as Major, Moderate, Minor, Negligible or Neutral; and
 - Effects of major and moderate are significant. Effects of minor, negligible and neutral and not significant.

Landscape Character Assessment Methodology

The Nature of the Landscape Receptor (Sensitivity)

12.3 The sensitivity of a landscape receptor is defined via a combination of their landscape value and susceptibility.

Landscape Value

12.4 The value of the landscape receptor is based upon the consideration of any landscape designations and the criteria outlined in GLVIA 3 Box 5.1 along with consideration of LI Technical Note assessing landscape value outside of designated landscapes:

- Quality (condition).
- Scenic quality;
- Rarity;
- Representativeness;
- Conservation Interests;
- Recreation value;
- Perceptual aspects; and
- Associations and functionality.
- 12.5 From the consideration of these factors, an assessment of the landscape value is based upon the criteria outlined in the following table.

Table 12-1: Landscape Value Criteria

| Value | Criteria |
|-----------|---|
| Very High | The receptor may be internationally designated or exhibit the most of the key features of a nationally designated landscape. |
| High | The receptor is likely to be highly valued for one or more of its attributes and may be protected by a statutory landscape designation. The landscape receptor may contain elements/features that could be described as unique; or are nationally scarce; or mature vegetation with provenance such as ancient woodland. Mature landscape features which are characteristic of and contribute to a sense of place and illustrates time-depth in a landscape and if replaceable, could not be replaced other than in the long term. |
| Medium | The receptor is likely to have a positive landscape character but could include some areas of alteration/degradation/or erosion of features; and/or perceptual/aesthetic aspects. The receptor may have some vulnerability to change; and/or features/elements that are locally commonplace; unusual locally; or mature vegetation that is in moderate/poor condition or readily replicated. The receptor is likely to be valued at a district or local level only. |
| Low | The receptor is likely to be undesignated and with little recognised value. Areas which are relatively commonplace in character with few/no notable features and/or landscape elements/features that make a contribution to local distinctiveness. |
| Very Low | The receptor is likely to be a detracting feature, damaged or eroded or is considered not to contribute positively to the landscape. |

Landscape Susceptibility

- 12.6 GLVIA 3 defines landscape susceptibility as "the ability of a defined landscape receptor to accommodate the specific Proposed Development without undue negative consequences." (within the GLVIA 3 glossary) and also as "the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies." (GLVIA pages 88 and 89).
- 12.7 The following table sets out the criteria for landscape susceptibility.

| Susceptibility | Criteria |
|----------------|--|
| Very High | The landscape is likely to have a very strong pattern / texture or unique and/or rare and intact and/or with a no or very limited ability to accommodate change. |
| High | The landscape is likely to have a strong pattern / texture or is a simple but very distinctive landscape and essentially intact and/or with a small ability to accommodate change. |
| Medium | The landscape is likely to have a moderate pattern / texture or is simple but distinctive and mostly intact and/or reasonably tolerant of change. |
| Low | The landscape is likely to have a weak pattern / texture and or is simple but not distinctive and may already be partially degraded with common/ indistinct features and minimal variation in the landscape pattern and/or tolerant of substantial change. |
| Very Low | The landscape is likely to have a damaged or a substantially modified pattern / texture and/or able to accommodate change. |

Table 12-2: Landscape Susceptibility Criteria

Landscape Sensitivity

12.8 The following table sets out the criteria for landscape sensitivity, resulting from the combination of the landscape value and landscape susceptibility.

Table 12-3: Landscape Sensitivity

| Sensitivity | Criteria |
|-------------|--|
| Very High | A designated landscape that is highly valued and is likely to be fully representative of the designations, such that is susceptibility to very small changes only. |
| High | A valued landscape, whether through landscape designations or distinctive components and characteristics, susceptible to small changes. |
| Medium | Landscape with some value (including designated landscapes), but of relatively common components and characteristics, reasonably tolerant of changes. |
| Low | Landscape of limited value, relatively inconsequential components and characteristics, unlikely to be designated, the nature of which is potentially tolerant of substantial change. |
| Very Low | Very low or no value, a degraded landscape or landscape with very few or no natural or original features remaining and not designated, such that it is tolerant of change. |

Landscape Nature of Effect (Magnitude of Impact)

12.9 The magnitude of impact is determined by considering the following aspects of the Proposed Development to derive an overall magnitude of change, as set out in the following table.

Table 12-4: Landscape Magnitude of Impact

| Landscape Impact | Criteria |
|---------------------|---|
| High | The total or major loss or alteration of key characteristics or the addition of new features or components that would substantially alter the character or setting of the area. Change may be permanent or temporary. |
| Medium | The partial loss or alteration of characteristics or the addition of new features or components that would alter the character or setting of the area. Change may be permanent or temporary. |
| Low | The limited loss or alteration of components or the addition of new features or components that reflect the character or setting of the area. Change may be permanent or temporary. |
| Very Low | Virtually imperceptible loss or alteration or addition of new features or components that overall retain the character or setting of the area. Change may be permanent or temporary. |
| None | No change to the character or setting of the area. Change may be permanent or temporary. |

Visual Appraisal Methodology

The Nature of the Visual Receptor (Sensitivity)

12.10 In line with GLVIA 3, visual sensitivity is a combination of the value of the view, combined with the susceptibility of the viewer to the particular or specific change arising from the Proposed Development.

Visual Value

12.11 The following table sets out the criteria and descriptions for visual value.

Table 12-5: Visual Value

| Value | Criteria |
|-----------|---|
| Very High | A view which is recognised as 'iconic' and/or a specific visitor attraction or fully representative of a designated landscape. |
| High | A recognised high-quality view, likely to be well frequented and/or promoted as a beauty spot/visitor destination; a view with strong cultural associations (recognised in art, literature or other media); a view which relates to the experience of other features, for example heritage assets in which landscape or visual factors are a consideration; and a view which is likely to be an important part of or primary reason for the receptor being present at the location. |
| Medium | A view, whilst it may be valued locally, is not widely recognised for its quality or has low visitor numbers. The view has may have cultural associations. An attractive view which is however unlikely to be the receptor's primary reason for being there. |
| Low | An ordinary, but not necessarily unattractive view, with no recognised quality which is unlikely to be visited specifically to experience the views available. Although the view may be appreciated by receptors, it is typically incidental to the receptor's reason for being there. |
| Very Low | A poor quality or degraded view which is unvalued or discordant and is unlikely to be the receptor's reason for being there. A view which detracts from the receptors experience of being there. |

Visual Susceptibility to Change

12.12 The following table sets out the relevant criteria and descriptions.

| Susceptibility | Criteria |
|----------------|--|
| Very High | Visitors to iconic view locations. |
| High | Residents at home; people engaged in outdoor recreation, whose attention/interest is likely to be focused on the landscape or particular views, including strategic/ popular public rights of way; visitors to heritage assets or other attractions, where views of the surroundings are an important contributor to the experience; communities where views contribute to the landscape setting enjoyed by residents and travellers on identified scenic routes which people take to experience or enjoy the view. |
| Medium | Travellers on road, rail, or other transport routes who anticipate some enjoyment of landscape as part of the journey but where the attention is not primarily focused on the landscape; users of Public Rights of Way or where the attention is not focused on the landscape; and schools and other institutional buildings and their outdoor areas, play areas. |
| Low | Travellers on road, rail or other transport routes not focused on the landscape/particular views e.g., on motorways and "A" road or commuter routes; and people engaged in outdoor sport/recreation which does not involve/depend upon appreciation of views of the landscape. |
| Very Low | People at their place of work whose attention may be focused on their work/activity and not their surroundings. |

Table 12-6: Visual Susceptibility

Visual Sensitivity

12.13 From the consideration of the visual value and visual susceptibility, the visual sensitivity of a receptor is classified as per the following table.

Table 12-7: Visual Sensitivity

| Sensitivity | Criteria |
|-------------|--|
| Very High | Activity specifically focused on a designated or iconic view. |
| High | Activity resulting in a particular interest or appreciation of the view (e.g. residents or people engaged in outdoor recreation whose attention is focused on the landscape) and/or a high value of existing view (e.g. a designated landscape, unspoilt countryside or conservation area designation). |
| Medium | Activity resulting in a general interest or appreciation of the view (e.g., residents or people engaged in outdoor recreation that does not focus on an appreciation of the landscape, residents) and/or a medium value of existing view (e.g., suburban residential areas or intensively farmed countryside). |
| Low | Activity where interest or appreciation of the view is secondary to the activity (e.g., people at work or motorists travelling through the area) and/or low value of existing views (e.g., featureless agricultural landscape, poor quality urban fringe). |
| Very Low | Activity where interest or appreciation of the view is inconsequential (e.g., people at work with limited views out, or drivers of vehicles in cutting) and/or very low value of existing view (e.g., Industrial areas or derelict land). |

Visual Nature of Effect (Magnitude of Impact)

12.14 The following factors are considered to determine an overall visual magnitude as set out in the following table.

| Visual Impact | Criteria |
|---------------|--|
| High | Extensive change to the composition of the existing view (e.g., widespread loss of characteristic features or the widespread addition of new features within the view) and/or high degree of exposure to view (e.g., close, direct or open views). Change may be permanent or temporary. |
| Medium | Partial change to the composition of the existing view (e.g., loss of some characteristic features or the addition of new features within the view) and/or medium degree of exposure to the view (e.g. middle-distance or partially screened views). Change may be permanent or temporary. |
| Low | Subtle change to existing view (e.g., limited loss of characteristic features or the addition of new features within the view) and/or low degree of exposure to view (e.g., long-distance, substantially screened or glimpsed views). Change may be permanent or temporary. |
| Very Low | Barely perceptible change to the existing view and/or very brief exposure to view. Change may be permanent or temporary. |
| None | No change to the view. |

Table 12-8: Visual Magnitude of Impact

Classification of Landscape and Visual Effects

- 12.15 The overall significance of landscape and visual effects has been derived by considering the combination of the sensitivity of the receptors and the magnitude of the Proposed Development. A guide to these combinations to determine importance is set out below.
- 12.16 Where the guide allows for a choice (e.g. major or moderate) a reasoned explanation is provided in the assessment narrative for the single effect, i.e. major.

| Sensitivity of Recentor | Magnitude of Impact | | | | | |
|----------------------------|------------------------|----------------------|--------------------------|--------------------------|---------|--|
| orneceptor | High | Medium | Low | Very Low | None | |
| Very High | Major | Major | Major or Moderate | Moderate or Minor | Neutral | |
| High | Major or Moderate | Major or Moderate | Moderate or Minor | Minor or Negligible | Neutral | |
| Medium | Major or Moderate | Moderate or Minor | Minor or Negligible | Negligible | Neutral | |
| Low | Moderate or Minor | Minor | Minor or Negligible | Negligible or Neutral | Neutral | |
| Very Low | Minor or Negligible | Negligible | Negligible or Neutral | Neutral | Neutral | |

Table 12-9: Classification Guide for the Importance of Landscape and Visual Effects

- 12.17 Major or moderate effects are important, with minor, negligible and neutral effects being less important.
- 12.18 A description of the landscape and visual importance of effects is set out in the following table.

| Effect | Landscape Effect | Visual Effect |
|-----------------------|---|--|
| Major beneficial | Where the Proposed Development substantially improves the scale, landform and pattern of the landscape and/or enriches the quality or characteristic features. | Where the Proposed Development results in a pronounced improvement to the existing view |
| Moderate beneficial | Where the Proposed Development largely improves the characteristic of the scale, landform and pattern of the landscape, | Where the Proposed Development results in a notable improvement to the existing view. |
| Minor beneficial | and/or quality or characteristic features. Where the Proposed Development partially improves the scale, landform and pattern of the landscape, and/or quality or characteristic features | Where the Proposed Development causes a partial improvement to the existing view. |
| Negligible beneficial | Where the Proposed Development causes a very slight improvement to the existing landscape. | Where the Proposed Development causes a barely perceptible improvement to the existing view |
| Neutral | No change to the landscape character or landscape features. | No change to the view. |
| Negligible adverse | Where the Proposed Development causes a very slight deterioration to the existing landscape. | Where the Proposed Development causes a barely perceptible deterioration to the existing view |
| Minor adverse | Where the Proposed Development partially deteriorates the scale, landform and pattern of the landscape, and/or quality or characteristic features. | Where the Proposed Development causes a partial deterioration to the existing view. |
| Moderate adverse | Where the Proposed Development largely deteriorates the characteristic of the scale, landform and pattern of the landscape, and/or quality or characteristic features. | Where the Proposed Development results in a notable deterioration to the existing view. |
| Major adverse | Where the Proposed Development substantially deteriorates the scale, landform and pattern of the landscape and/or quality or characteristic features. | Where the Proposed Development results in a pronounced deterioration to the aesthetic quality or composition of the existing view. |

| Table 12-10: Landscape and Visual Importance of Effect | Table | 12-10: | Landscape an | d Visual | Importance | of | Effects |
|--|-------|--------|--------------|----------|------------|----|---------|
|--|-------|--------|--------------|----------|------------|----|---------|

EFAIL ISAF, GARTH AND NANTGARW WESTERN SLOPES

LOCATION and BOUNDARIES:

On the southern edge of RCT, adjacent to Garth Hill, from the edge of Treforest Industrial Estate in the east to Efail Isaf in west. Line of proposed Church Village bypass defines the north east edge. Comprising two distinct parts – larger western part is rolling plateau, eastern part is Taff Vale sides and floor.

STRATEGIC CRITERIA:

| NEED: | |
|---------------|---|
| LANDMAP | Taff valley floor and top of valleys sides = less important values |
| | Remainder of area = moderately important values |
| Prominence | Eastern part is prominent wooded valley slopes seen from A470 |
| | and backdrop to Treforest Industrial Estate. |
| 'Unspoilt' | Western part is farmland generally undisturbed by industrialisation |
| Vulnerability | Western part is vulnerable to spread of development relating to Efail |
| | Isaf and Church Village bypass |
| | Buffer zone between Garth Hill ridge and Church Village/Efail Isaf |
| Setting | Western part is setting for prominent Garth Hill SLA (Cardiff) |

COHERENCE:

Two inter-linked landscape types. Mainly rolling farmland of coherent character, plus distinct wooded slopes and valley floor to east.

CONSENSUS:

Includes existing SLA Adjacent to proposed Garth Hill SLA (Cardiff)

PRIMARY LANDSCAPE QUALITIES & FEATURES

- Attractive farmland on rolling plateau, with irregular fields mainly of improved grassland, large hedges, scattered farms and winding lanes
- This farmland forms the foreground in views from popular Garth Hill to the south
- Wooded slopes to Taff Vale are important part of views from A470 and Treforest Industrial Estate.
- These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales.
- Mix of broadleaf and coniferous woodlands

KEY POLICIES & MANAGEMENT:

- Maintain farmland character of plateau
- Restrict spread of development around Efail Isaf
- Management to conserve wooded slopes
- Conserve hedges and small woods

OTHER COMMENTS:

Existing SLA has been extended to Church Village bypass to protect farmland from indiscriminate development, exact alignment to be confirmed.

| Aspect | A.A. | Location/comments | Overall |
|--------|------|-----------------------|------------|
| | no. | | evaluation |
| VS | 572 | All of SLA and wider | Mod |
| LH | 101 | Farmed plateau | Mod |
| | 096 | Wooded slopes of Taff | High |
| GL | 032 | Plateau | Mod |
| | 015 | Taff valley | Mod |
| HL | 994 | Throughout | - |
| CL | 056 | All SLA and wider | High |

EFAIL ISAF, GARTH AND NANTGARW WESTERN SLOPES LANDMAP DATA

13.0 LVIA APPENDIX II: PUBLISHED LANDSCAPE CHARACTER EXTRACTS



National Landscape Character 31/03/2014

NLCA37

SOUTH WALES VALLEYS



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Cymoedd y De – disgrifiad cryno

Mae llawer o gymoedd dwfn, trefoledig yn brathu i fynydd-dir eang. Ynghyd â'r etifeddiaeth ddiwydiannol, a hunaniaeth bendant ei phobl, mae ardal Cymoedd y De wedi esgor ar rai o ddelweddau cenedlaethol mwyaf adnabyddus ac eiconig Cymru.

Mae datblygiad strimynnog yn llenwi llawer o waelodion a llethrau isaf y cymoedd. Ochr yn ochr â'u cymeriad trefol a diwydiannol, ceir dir bryniog dramatig, gyda llethrau serth, gweunydd agored neu goedwigoedd. Mae rhwydweithiau o reilffyrdd a ffyrdd yn cydgysylltu pentrefi'r cymoedd. Mae natur y tir yn cyfyngu ar dramwyo rhwng y naill gwm a'r llall, ac nid oes ond ychydig fylchau uchel rhyngddynt. Mae twrw a phrysurdeb llawer o gymoedd yn gwrthgyferbynnu â chymeriad cymharol anghysbell a gwyllt y llwyfandiroedd uchel cyfagos. Darparodd daeareg a dyddodion mwynol yr ardal yr adnoddau a sbardunodd ymlediad cyflym datblygu diwydiannol yn y 19eg ganrif. O fedru cludo ar reilffyrdd, creodd y diwydiannau glo, dur a haearn newydd seilwaith eang o adeiladau mawrion, ffwrneisiau, tyrau, simneiau, traphontydd, tomennydd gwastraff a lefelydd. Canlyniad cartrefu'r gweithwyr yw'r rhesi hirion ac eiconig o dai teras sy'n canlyn ochrau'r bryniau: ac yn sgîl y gweithwyr, daeth capeli, siopau, ysgolion a chyfleusterau eraill, gan greu cymunedau newydd, trefol eu natur. Canlyniad arall bywyd yno, a'r amgylchedd garw, fu delwedd cymdeithas wydn, radicalaidd ei gwleidyddiaeth, a hoffai chwarae rygbi.

Canlyniad dirywiad diwydiannol ddiwedd yr 20fed ganrif fu cau, symud ymaith, gadael neu ailddatblygu llawer o safleoedd diwydiannol blaenorol. Mae'r newidiadau hyn yn parhau heddiw, fel y mae'r newidiadau cymdeithasol canlyniadol ym mywyd a hunaniaeth y cymunedau. Gwelir yr ardal, bellach, yn rhan o "ranbarth dinas" ehangach a chynyddol ôlddiwydiannol, y fwyaf yng Nghymru. Mae delwedd eiconig newydd yn aneglur, ar brydiau, ond y mae gweithgareddau wedi'u seilio ar yr etifeddiaeth, mewn amgylchedd tynerach a gwyrddach, yn dechrau dod i'r amlwg fel rhan o hyn.

Summary Description

Many deep, urbanised valleys dissect an extensive upland area. Combined with industrial heritage and the distinct identity of its people, the South Wales Valleys provide some of Wales' most widely known and iconic national images.

Extensive ribbon development fills many valley bottoms and lower slopes. Their urban and industrial character is juxtaposed with dramatic upland settings with steep hillsides, open moors or forests. Networks of railways and roads connect valley settlements. Topography constrains passage between valleys, and there are only a limited number of high passes between valleys. The noise and business of many valleys contrast with the relatively remote and wild qualities of adjacent hill plateaux.

Underlying geology and mineral deposits provided the resources that fuelled a rapid spread of industrial development in the C19th. Once rail transport became possible, new coal, steel and iron industries created an extensive infrastructure of large buildings, furnaces, towers, chimneys, viaducts, spoil heaps and levels. Housing for workers resulted in the extensive and iconic rows of terraced houses that run along hillsides. Their needs in turn brought chapels, shops, schools and other facilities to create new settlements with an urban character. The way of life and harsh environment resulted in the image of a tough, rugby playing and radically minded society. But the decline of industries in the late C20th resulted in the closure, removal, abandonment or redevelopment of many former industrial sites. These changes continue today, as do the consequential social changes to the way of life and community identity. The area is now seen as part of a wider, increasingly post-industrial, 'city region', the largest in Wales. A new iconic image is at times unclear, but heritage-based activities set within a softer, greener environment are emerging as part of this.

While greenness is returning to some former industrial landscapes many of the new woodlands are coniferous. Waterways are slowly welcoming back fish, and mammals such as otters. The importance of wildlife conservation being undertaken hand-in-hand with economic regeneration is being recognised as one of the keys to the sustained revitalisation of this most iconic Welsh 'bro', in the Heads of the Valleys and Valleys Regional Park initiatives.

Key Characteristics

Extensive Upland plateaux – typically wild and windswept, often with unenclosed tracts, running roughly north-south as 'fingers' parallel between intervening deep valleys.

Numerous steep-sided valleys - typically aligned in parallel, flowing in southerly directions, shaped by southward flowing glaciers, leaving behind distinctive corrie ('cwm') and crag features. Major rivers include the Tawe, Taff and Rhymney.

Ribbon urban and industrial areas in valleys – in places extending up valley sides and to valley heads. The area is sometimes regarded as being part of a 'city region'. Middle and eastern valleys tend to be the most heavily and continuously developed, e.g Rhondda Valley. The uplands by comparison have little or no settlement.

Extensive remains of heavy industry – with a mix of derelict, preserved and largely redeveloped areas, notably for coal mining. Preserved as heritage (World heritage Site) at Blaenafon this typically includes old railway alignments, buildings and former tips.

Contrast of urban valley activity next to quiet uplands – e.g. busy roads, new developments, traffic noise, night lighting, verses the adjacent wilder, remoter, quieter uplands.

Large blocks of coniferous plantation and deciduous woodland fringes – covering many steep hillsides and hilltops, most notably in the middle to western portion of the area, providing a softer contemporary landscape where there was once industry.

Heather, rough grassland and steep bracken slopes – dominate many plateaux and are grazed mainly by sheep. Much is common land.

Improved pastures on some lower valley sides - grazed by sheep and some dairy cattle.

Field boundaries - dry stone walls mark the boundary of common land while fields on lower slopes are bounded by dense hawthorn hedges, interspersed with swathes of broadleaved woodland.

Transport routes restricted to valleys – the intervening topography makes valley to valley travel difficult, except at heads and bottoms of valleys. Occasionally there are roads that climb steeply over passes with dramatic views and 'hair pin' bends.

Iconic cultural identify – many popular images of a tough, rugby-playing, religious, radically-minded society still remain associated with the South Wales Valleys, however today's post-industrial, internet-connected reality is somewhat different.

Visual and Sensory profile

The South Wales Valleys is one of Wales' more widely known iconic images, combining the wilder and often inclement upland setting with the heavily industrialised and busy valleys. Active mines and industry are now generally an image of the past, however the legacy remains extensively apparent today and together with the steep topography of the valley sides, has a defining influence on landscape character. Levels and old railway alignments, the generally reclaimed but sometimes still perceptible physical footprints of mine spoil heaps, the often intensively urbanised valley floors with old industrial buildings, and lower valley sides with their distinctive long rows of workers terraces, retain the traditional image.

Yet today a new image is gradually but fundamentally changing the old one. Modern road improvements and bypasses bristle with street lighting, spreading the urban influence beyond the old settlement envelopes and altering the character experienced when travelling. In many valleys the legacy of slow travel through the ribbon development continues today, but in some places and notably along the A470 north-south corridor and along the A465 "Heads of the Valleys" east-west corridor road, travel is now much quicker.

For those with cars, the area has become far more easily accessed and the once very separate valleys are now just a few minutes drive apart. The orientation of valleys and the remaining legacy of railways and roads focus travel towards Wales's two largest cities, Cardiff and Swansea, which lie in neighbouring areas to the south, offering the combination of upland valley living and city working. The noise of industry and railways has typically changed to that of road traffic. Many former brownfield sites have been redesigned and redeveloped for new housing, industry and retail. These modern features of the mid and late C20th provide an entirely contemporary character, tending not to style their architecture or pattern of urban design using the traditions established in the C19th. The results tend to lack local distinctiveness, however a 'Valleys' sense of place still remains strong because of the enduring historic and dramatic upland landscape setting.

It is a landscape of contrasts. The valleys contain the extensive ribbon development, which snakes along the valley floors and lower valley sides, and sometimes with settlements precariously extending over intervening slopes and spurs. The windswept upland plateaux that separate the valleys could not be more different. Devoid of settlement, the uplands engender a strong sense of openness and remoteness, although in places compromised by proximity to industry and people, for example reclaimed spoil heaps, fly tipping, abandoned cars, 'horsiculture' and associated ramshackle sheds or allotments, pressure of people accessing the area for recreation in an unmanaged way, and occasional pylon lines, telecommunications masts and occasional wind turbine developments. But the open plateaux afford extensive views across the valleys, southwards to the Severn Estuary and northwards to the Brecon Beacons. At times, views from plateau to plateau conceal the intervening valleys and thus visually connect more with the wider uplands of Wales.

The middle to western valleys are dominated by the extensive coniferous plantations whereas the eastern valleys, although generally smaller, are more intimate. On many valley sides, there are distinctive 'ffridd' and 'rhos pasture' mosaics of small fields, hedgerows, boundary walls, wet flushes and marshland, interspersed with small stands of trees, copses and woodlands. It is the vestige of the former agricultural landscape that once dominated before the expansion of coal mining and the iron industries. The far western valleys, (those west of the Neath Valley) have slightly gentler intervening hills and long, unfenced lanes use the ridges as convenient routes. This affects experience of the area too, as ridgeline routes are uncommon elsewhere.

Many formar spoil tips have been reclaimed, with varying degrees of integration into the intrinsic natural topography and upland setting. In some areas much new tree planting results in a landscape today that is much softer and more enclosed than that depicted in historic images. Individual valleys differ markedly in appearance: Neath and Dulais are green and broad by comparison with the crammed settlements of the Swansea and the two Rhonddas; Afan is steep and mountainous, covered in conifers, while the Taff and Ebbw Vales are convoluted in both terrain and settlement.



The new landscape: Trefforest Industrial Estate, occupying the flat land in the valley bottom, and anchored into its setting by maturing woodlands and thick hedgerows. © Luke Maggs



Blaengwynfi, with traditional hillside terraces and new forestry on mountain sides. © Luke Maggs



Urban terraced settlement along valleys and valley sides, with many houses having been individually modified with render, new windows or roofs, extensions and colour. ©LUC



Ebbw Vale from the western side of the valley. Contrast of urban, ex-industrial valleys undergoing transition, with the enduring open moors on the adjacent hills. ©LUC



From Mynydd Machen, looking towards a prominent hilltop spoil tip. Most spoil tips have been removed, regraded or planted over with trees. ©LUC



Heavy industries that once dominated the South Wales Valleys are largely gone, however their iconic remains are now the cultural heritage that informs today's character. Here we see the remains of Ynyscedwyn Ironworks at Ystradgynlais. © Luke Maggs



Pen Pych table top. There may be industrial remains and urban settlement about, but the dramatic topography, open moors and steep wooded valley sides provide many of the kinds of appealing scenic qualities that are more widely known in upland landscapes elsewhere in Wales. © Luke Mags



Gelli Gaer Common, one of the long, open roads that run along the gentler plateaux tops of the area west of the Neath Valley. © Richard Kelly



Terraced houses and old spoil heaps amidst the upland landscape: the traditional image as now preserved at Blaenavon (World Heritage Site). © John Briggs



From near the adjacent Brecon Beacons, looking down one of the upland plateaux that separate the industrialised valleys. Nantyglo is in the valley to the left, Ebbw Vale is in the valley to the right. © John Briggs



Brynmawr, one of the 'heads of the Valleys' settlements, with much C20th housing estate expansion. © John Briggs

Geological Landscape influences

The South Wales Valleys incorporates a large part of the southern-most uplands in Wales and is framed by the Brecon Beacons and Black Mountains to the north and the lowland vale landscapes to the south, east and west. The deeply incised valleys are a distinctive feature of the landscape. In the eastern sector the area is drained by a series of south and south-eastward flowing rivers including the Ebbw, Sirhowy, Rhymney and Taff, whilst the central region about the Rhondda is drained by the Rhondda Fawr and Rhondda Fach which are confluent with the Taff at Pontypridd. In contrast, drainage in the west is dominated by south-westward flowing rivers, including the Tawe, Neath and Afan. Ground elevations in the upland areas are highly variable, but in the north-east reach up to 581m on Coity Mountain and 574m on Cefn Coch. Farther west the ground reaches a maximum altitude of 600m on Garn Fach and 568m on Werfa at the head of the Ogmore Valley.

The bedrock geology is dominated by a thick sequence of Carboniferous sedimentary rocks. They are preserved in and around the South Wales Coalfield Basin, a structurally complex, WNW-trending trough-shaped structure that extends westwards into Pembrokeshire. The Lower Carboniferous sequence is dominated by a variety of marine,

limestone-dominated formations, together with some mudstones and ironstones, which form a narrow belt around the basin between Thornhill, Rudry, Risca and Pontypool, and north of Merthyr Tydfil, where the strata dip gently towards the south. There is a succeeding Upper Carboniferous sequence including sandstones, and marine mudstones and a succeeding 'Westphalian' sequence dominated by sandstones including the Pennant sandstones. The lower part of the succession forms the South Wales Coal Measures Group, and is dominated by mudstones, siltstones and coals arranged in repeating units.

The gently southward-dipping Pennant sandstones form an erosion-resistant cap to the upland plateaux of the South Wales Valleys, as well as a spectacular escarpment along their northern limit. Within the syncline are numerous minor folds, including the Pontypridd and Maesteg anticlines. Two of the most distinctive structures of the coalfield are the Neath and Swansea Valley disturbances which comprise NE-striking zones of folded and faulted strata that trend into the area from Devonian outcrops to the north and east. Both structures have a strong topographical expression, controlling the course of both the Neath and Swansea valleys, and are believed to root into major fractures in the underlying basement. The coalfield is also transected by a dense network of steep, dominantly NNW-striking cross-faults that frequently caused major problems during the extraction of coal. Some of these faults have a strong topographical influence as, for example, in the case of the Merthyr Church Fault, which controls the orientation of the Afon Taf Fawr in the vicinity of Merthyr Tydfil.

The area has been shaped by glaciation, where ice that accumulated in the Brecon Beacons and adjacent high ground spread southwards through the Pennant Sandstone escarpment and entered the coalfield, where glaciers incised deep U-shaped valleys. This southward advance was locally impeded by topography. For example, when the ice-sheet met the escarpment at Craig-y-Llyn (SN 910 039) it broke into two major lobes, one advancing south into the coalfield through the Cynon and Taff valleys, and the other westsouth-west down the Neath Valley. Recessional halt moraines were formed on the valley floors as the ice melted. For example, in the Neath Valley at Tonnan and Cline, an impounded glacial lake stretched up the valley to Cwmgwrach. Throughout the area the principal glacial deposit is till (boulder clay) and most till occurs in the northern parts of the valleys, where it can reach a thickness of up to 30m. It passes down valley into outwash sands and gravels, which formed through the action of melt waters and created important landscape components of some valleys. A good example of a kame terrace is developed in the Afan Valley at Pontrhydyfen. Between about 13,000 and 11,500 years ago, small glaciers re-occupied the upland cirgues along the north-facing Pennant Sandstone escarpment. These glaciers formed concentric ridges of moraine, often backed by marshy hollows and small lakes, as in the case of Llyn Fawr and Llyn Fach beneath Craig y Llyn.

Glacial deposits left on the valley floors have been progressively re-worked and redeposited as alluvial silts and sands. River terraces occur intermittently, for example along the Taf Fawr, Mellte, Neath and Tawe, whilst alluvial fans have formed where steeply graded tributaries enter the more gently graded main valleys. Landslips form an important component of the landscape throughout the coalfield and occur on the glacially oversteepened flanks of the valleys where thick Pennant sandstones overlie weak and impermeable mudstones and rock masses were subject to failure and collapse. Whilst most mass movement took place during deglaciation, when the support of glacier ice was removed, some major landslips are recent, for example that at Bournville (SO 207 068) was initiated in 1893 and at East Pentwyn (SO 206 075) in 1954.

Landscape Habitats influences

The Valleys are characterised by upland areas incised by a number of valleys, with contrasting habitat to match. The bedrock geology has given rise to a variety of soil types. Basinal and blanket peats developed throughout the South Wales Valleys and provide an important record of post-glacial vegetation and climatic conditions. Loamy soils with a wet peaty surface characterise the sandstone uplands; well drained loamy soils are found on valley sides; while coarse loams subject to seasonal waterlogging are located on lower slopes and on valley floors.

Each valley has both unique and common features, such as broadly southerly flowing rivers fed by a myriad of smaller, faster flowing tributaries from the surrounding uplands. On the lower slopes of the valleys livestock-grazed, improved grassland bounded by hawthorn rich hedgerows is prevalent, together with linear stands of deciduous woodland – some of considerable ecological value, for example, Cwm Du Woods in the Llynfi Valley and Merddog Woods in the Ebbw Valley, which are SSSIs.

Further up the valley slopes, "fridd" habitat occurs, in which there is a distinctive mosaic of rough grazed fields, bracken, rhos pasture, scattered scrub and small pockets of woodland characterising the transition between the lower slopes and upland areas and important for a considerable number of species. At the tops of the valley slopes there is a gradation to more upland habitats, such as moorland with acid grassland and heath. There is also some contrast along the length of the valleys with their more southerly ends being more lowland in character and the heads of the valleys to the north displaying glacial features such as cirques (cymoedd) and crags, which support valuable communities. Particularly important examples are found in the Rhondda, for example, the rare arctic-alpine habitats at Craig-y-Llyn SSSI.

In between the valleys, areas of extensive plateaux are dominated by moorland vegetation of heather, blanket bog and acidic grassland formed on the wet peaty surface that overlies the generally loamy soils in the area. These moorland areas are largely grassy in nature and are generally grazed by sheep. Large areas of heath-dominated moorland are relatively scarce, but one such area of particular ecological value is The Blorenge, a mountain near Blaenafon.

Also present within the open moorland and hillsides are considerable blocks of coniferous plantation, particularly noticeable and extensive in the uplands to the north of Bridgend and Port Talbot, often of lower ecological importance and much has been planted in the C20th, some over reclaimed industrial workings.

Along the southern edge of the area, the land is lower lying with less steep and deep valleys, with the areas between the valleys being largely dominated by improved grassland. Deciduous woodland areas scattered throughout the area provide some ecological interest, as do the hedgerows that bound the fields. The two most notable woodland areas are associated with the more lowland valley slopes, being the oak woodlands at Park Mill and the beech woodlands just north of Cardiff, both of which are SAC and SSSIs. Some areas of semi-improved and marshy grassland are also present between the valleys, some of which are of considerable ecological value, most notably Llantrisant Common and Aberbargoed Grasslands
Historic Landscape influences

The Valleys reflect their coal mining and iron extraction and smelting heritage. The iron industry provided the spur for the rapid industrialisation of the whole area from c.1800. The foundation for all of this is the particular geology and land-form that provided all the materials needed for iron making in relatively accessible form. The linked exploitation of these materials and the transport systems leading to and from major works structures shaped the industrial landscape.

Long rows of former 19th century miners' terraces of stone, brick and coloured render are particularly distinctive, extending in some areas up very steep slopes and seen against a backdrop of bracken or conifers higher up the valley sides. Although the terraced house is identified as the most distinctive ingredient of settlement, in practice there is considerable variety in settlement type, including informal 'squatter' developments, planned company settlements, expanded early nuclei (Pontypool) and the developed industrial town built by many agencies but acquiring a coherent social landscape nonetheless (Blaenavon). Settlements developed either directly associated with particular industrial enterprises, or as service towns for a wider hinterland (Pontypridd). These varied histories contribute to considerable variety in present character both between and within valleys.

An often overlooked feature of the enormous manpower and economic energy of 200 years of toil are the canals dug to carry iron ore and coal from inland workings. The most prominent in terms of survival and landscape influence in this area are the Glamorgan from Merthyr to Cardiff, the Neath and Tennant Canals and that in the Swansea Valley.

Blaenavon is designated as a World Heritage Site as being one of the best surviving examples in the region of a valley head industrial community, with features from the C18th iron industry as well as the extensive coal mining activity that took place in the 19th century.

The upland plateaux are largely free from modern development aside from minor roads which cross the open commons. As a result, archaeological evidence of ancient human occupation and activity is often well preserved. Notable examples are Gelli-gaer Common near Ystrad Mynach, and Margam Mountain. The former area contains a rich diversity of archaeological sites, including Bronze Age burial and ritual monuments, a Roman road and military installations, and Capel Gwladys – an early church site. Later features include Mediaeval deserted settlements, an earthwork castle (Twyn Castle), field systems and platform houses. Margam Mountain stands above the east-west Roman road, and is distinguished by not only possessing extensive prehistoric and Mediaeval archaeological remains over a very large area of high hillside and moorland, but also as having been grazing land for the livestock of Margam Abbey.

Cultural Landscape influences

The Valleys, are internationally recognised for the rich industrial heritage of the C19th. Massive development followed the discovery of steam coal in 1855. This stimulated a socalled 'coal rush' which, for example, turned the Rhondda into the most productive coal mining area in Britain. The population exploded from a sparse agrarian society into a teeming mass of immigrant workers from rural areas, from Ireland, West Wales, Somerset, Gwynedd and the Midlands. From under 1000 in 1851, the population rose to nearly 163,000 by 1921, occupying an almost continuous conurbation for miles – albeit with jealously guarded identities in individually named settlements.

Elsewhere, every valley from the eastern Lwyd and Ebbw Vale to the far west Gwendraeth there sprang up the characteristic images of rows of terraced company houses. The iconic headframes and coal mine winding gear, public buildings, chapels and Working Men's Institutes and other infrastructure, all squeezed into the previously rural landscape of the valleys to house the massive in-migration of workers. This continued through the C20th with extensive post-war council housing estates, and latterly private estates. The Valleys and their Working Men's Institutes produced many radical, self-educated politicians, for example Aneurin Bevan, visionary founder of the National Health Service, and Neil Kinnock of Islwyn. Their radicalism was largely founded on the appalling conditions they had to work and live in.

But the industrial decline of the 1980s, the loss of 'macho' employment, and the psychological devastation of the failure of the year-long Miners' Strike in 1984 have, for many, led to cultural changes that previously would have been hard to imagine by their once-proud communities. The Strike was followed by wholesale unemployment, and although regenerative efforts continue to abound, not all are successful, and not all touch all the people. The iconic coal tips have been systematically flattened following the tragedy of Aberfan, and the once ever-present pithead winding gears have mostly gone. Those that survive best tend to form features of tourist sites, notably with Blaenavon regenerating itself as a World Heritage Site. Despite efforts to find new uses for old buildings, some of which are architecturally magnificent, the majority continue to decay. The same applies to the proliferation of multi-denominational chapels, and the Institutes, originally the social and educational as well as spiritual heart of Valleys communities.

Regeneration and more recent estates, along with new small and large-scale commercial and industrial development tend to be linked to the modern road network. Although there is still an extensive passenger railway branch line network, with plans to improve, regeneration tends to be based around car use and opportunities for much longer distance travel than traditionally. The employment opportunities elsewhere, notably in Cardiff, result in crowded trains and commuting residents clogging up M4 interchanges twice each day.

In recent years, telecommunication masts, pylons and wind turbines have appeared across the plateaux in an upland landscape otherwise devoid of development. A remarkable feature in what are recognized as deprived communities, is the incidence of satellite dishes on the roof tops and gable ends of individual dwellings in workers' terraced housing. A prominent but temporary regeneration event was the Ebbw Vale National Garden Festival in 1992, one of a series across Britain. The site has now become a popular retail centre and in recent times. The derelict Ebbw Vale Steelworks was demolished in late 2005 for the development of socially and economically mixed housing and infrastructure. The Cynon Valley is notable for the plan to create a long, linear riverside park, while much of the historic heart of Merthyr Tydfil has been lost to residential estates of non-vernacular design and materials. Similarly, vacant lots in the linear conurbations of the Ogwr and Rhondda valleys have now been transformed into low-cost housing estates for those who descend the valley roads to the ribbon-development of business and light industrial parks situated close to junctions on the M4. In the mid-west, the dead-end, and once economically and administratively important, valley of Glyncorrwg is enjoying an economic renaissance as a leisure destination for mountain biking and fishing, with a newly built visitor centre and 'extreme' trails.

The linking of these new ventures with the rich synthesis of history and culture that permeates the area's landscapes and the promotion of much that remains untouched and attractive, is an important aspect in the regeneration this large and remarkable area.



Blaenavon, traditional terraces. © John Briggs

14.0 LVIA APPENDIX III: RELEVANT POLICY

14.1 The following policies are relevant to landscape and visual maters.

Future Wales The National Plan 2040

14.2 Policy 17 states:

"The Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs.

In determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. In Pre-Assessed Areas for Wind Energy the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large-scale wind energy development (including repowering) in these areas, subject to the criteria in policy 18.

Applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment.

Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities.

New strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities.

The Welsh Government will work with stakeholders, including National Grid and Distribution Network Operators, to transition to a multi-vector grid network and reduce the barriers to the implementation of new grid infrastructure."

Rhondda Cynon Taff Local Development Plan Preferred Strategy

14.3 Strategic Policy I: Climate Change and Carbon states:

"Development proposals must demonstrate climate consideration, aim to reduce carbon emissions and where possible mitigate against the causes of climate change. All allocations for development in the Revised LDP will be located in sustainable locations. This has been determined in accordance with the Candidate Site Methodology, which itself accords with national planning policy. Sustainable locations are places, which would reduce the need to travel and have reduced dependence on private vehicles. This would therefore contribute to the reduction in future carbon emissions.

All other new development proposals throughout the plan period will be expected to be in sustainable locations. The design of new development should also be more carbon considerate. Development proposals should:

- Promote construction methods and materials that would seek to achieve carbon neutral buildings.
- Incorporate low or renewable sources of energy and technologies.
- Maximise the opportunities for Electric vehicle charging.
- Seek to embrace the circular economy, ensuring resource efficiency, local materials and sustainable construction methods to avoid unnecessary wastage.

Natural assets play a large part in tackling climate change. The Revised LDP will seek to:

- Protect green infrastructure and the multifunctional role it can play in reducing carbon emissions e.g. the management of peat bogs, protection of carbon storing semi-natural habitats and soils, appropriate forms of planting, protection of trees and natural regeneration of woodland.
- Some green infrastructure can also contribute to urban well-being e.g. provide cooling in times of extreme heat."
- 14.4 SP4 Biodiversity and the Natural Environment includes:

"RCT is an area of biodiverse and varied landscapes, supporting a range of priority habitats and species. The Revised LDP will seek to maintain and enhance these qualities and features and leave the natural environment in a more biodiverse and resilient condition. Our biodiversity landscape is protected by Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI) and Sites of Importance for Nature Conservation (SINC) designations. As set out in PPW, SAC and SSSI designations are the responsibility of NRW. SINC's are a Local Planning Authority designation...

All Development:

- All future development must evidence effective biodiversity mitigation and enhancement.
- On SINC, there will be a requirement for effective mitigation to be delivered on site. Only in cases where biodiversity delivery will be demonstrably more effective, and where local biodiversity connectivity, area and function are not compromised, will off-site provision be considered.
- Where mitigation or enhancement is demonstrably not achievable onsite, but where the mitigation and enhancement of habitat or species impacts incurred by development can be effectively delivered, off-site provision may be considered."
- 14.5 Green Infrastructure and Open Space states:

"Special Landscape Areas It has been determined that the Special Landscape Areas (SLA) that were comprehensively identified in the current LDP will remain in place in the RLDP. The annual monitoring of the LDP has indicated that no change has occurred within these landscapes that has resulted in them losing their high quality features for which they were designated. The Deposit Stage of the RLDP will review the current SLA policies to ensure that they will continue to appropriately protect and enhance the quality and character of these landscapes."

Rhondda Cynon Taff Local Development Plan

14.6 Policy AW8: Protection and Enhancement of the Natural Environment states:

"Rhondda Cynon Taf's distinctive natural heritage will be preserved and enhanced by protecting it from inappropriate development. Development proposals will only be permitted where:

1. They would not cause harm to the features of a Site of Importance for Nature Conservation (SINC) or Regionally Important Geological Site (RIGS) or other locally designated sites, unless it can be demonstrated that:

- a) The proposal is directly necessary for the positive management of the site; or
- b) The proposal would not unacceptably impact on the features of the site for which it has been designated; or
- c) The development could not reasonably be located elsewhere and the benefits of the proposed development clearly outweigh the nature conservation value of the site.

2. There would be no unacceptable impact upon features of importance to landscape or nature conservation, including ecological networks, the quality of natural resources such as air, water and soil, and the natural drainage of surface water. All development proposals, including those in built up areas, that may affect protected and priority species will be required to demonstrate what measures are proposed for the protection and management of the species and the mitigation and compensation of potential impacts. Development proposals must be accompanied by appropriate ecological surveys and appraisals, as requested by the Council. Development proposals that contribute to the management or development of Ecological Networks will be supported."

14.7 Policy AW12: renewable and Non-Renewable Energy states:

"Development proposals which promote the provision of renewable and nonrenewable energy such as schemes for energy from biomass, hydro-electricity, anaerobic digestion, on-shore oil and gas and small / medium sized wind turbines, will be permitted where it can be demonstrated that there is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage, landscape importance, public health and residential amenity. Development proposals should be designed to minimise resource use during construction, operation and maintenance."

14.8 Policy SSA 23: Special Landscape Areas states:

"Special Landscape Areas are identified at the following locations:

- i) Llanharry Surrounds;
- ii) Talygarn Surrounds;
- iii) Ely Valley at Miskin;
- iv) Coed-yr-Hendy and Mwyndy;
- v) Llantrisant Surrounds;
- vi) Mynydd y Glyn and Nant Muchudd Basin;
- vii) Mynydd Hugh and Llantrisant Forest;
- viii) Efail Isaf, Garth and Nantgarw Western Slopes;

- ix) Craig yr Allt;
- x) Taff Vale Eastern Slopes, and
- xi) Treforest Western Slopes.

Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area."

15.0 LVIA APPENDIX IV: LIKELY LANDSCAPE EFFECTS

15.1 The following table sets out the likely landscape effects of the Proposed Development.

Table 15-1: Likely Landscape Effects

| Landscape Receptor | Sensitivity | Assessment Narrative | Impact | Effect |
|------------------------|--|---|---|---|
| The ESS Site | ValueThe ESS Site is within a Special Landscape Area and is representative of the stated small to medium scale grass field land use within the LANDMAP classifications. The perception of the ESS Site is of an area of land adjacent to existing buildings and the Maes Bach solar farm, such that there is some alteration to the inherent rural setting and relationship with the ESS Site, such that the value is assessed as medium.SusceptibilityThe hedgerows and established trees along the southern edge of the ESS Site are less able to accommodate change, considered against the open character of the remainder of the ESS Site, such that the susceptibility is medium.SensitivityThe combination of the medium value and medium susceptibility results in a medium sensitivity to the Proposed Development. | ConstructionThe construction activity would result in localised alteration to landform, via the excavation for ESS equipment foundations, as well as the presence of construction machinery and activity of a greater scale than general farming. The existing vegetation would be retained across the ESS Site overall via best practice measures, with localised removal of part of the hedgerow on the western edge of the ESS Site to enable the construction of the new access. The construction activity, movement and unsettled character resulting from the ESS equipment in varying stages of completion would result in a high magnitude of impact.Year IAt year 1, the ESS equipment would result in a change in land use and an evident change in character at the Site, from one of energy storage, a sub-station and access, in comparison to the undeveloped character of the exiting field. New planting would be low in height in both winter and summer seasons, such that the impact would be high.Year 5The assessment would reflect that at year 1, due to the continued change in land use and that whilst the new planting was taller in height, the evident change in character would remain.Year 10By year 10, the proposed tree planting would be taller in height that at year 1 and the proposed wildflower grass mix would be an integrated sward, providing increased opportunities for biodiversity and an improved landscape structure, in both winter and summer conditions. Therefore, whilst the magnitude would remain high, the effects are predicted to reduce in winter and summer seasons in comparison to the year 1 assessment due to the more settled state and character of the FSS Size | Construction (winter): High Year I (winter/summer): High/High Year 5 (winter/summer): High/High Year 10 (winter/summer): High/High | Construction (winter): Major adverse Year I (winter/summer): Major adverse / Major adverse Year 5 (winter/summer): Major adverse / Major adverse Year 10 (winter/summer): Moderate adverse / Moderate adverse |
| The Cable Corridor | ValuePart of the ESS Site is within a Special Landscape Area, whilst the remainder is not within a designated landscape and forms part of the townscape. The value is therefore assessed as low.SusceptibilityThe roadside hedgerows and established trees along the route are less able to accommodate change; however the road corridor is able to accommodate change as an engineered feature, such that the susceptibility is low.SensitivityThe combination of the low value and low susceptibility results in a low sensitivity to the Proposed Development. | Construction The construction activity would be located along existing lanes and roads, with localised excavation requiring a relatively small amount of construction equipment. With the activity being located within the road surface, the roadside vegetation would be retained. Year 1 At year 1, with the cable corridor below ground, there would be no perception of the cable route, and no change in the character of the lanes and roads. Year 5 The assessment would reflect that at year 1. Year 10 The assessment would reflect that at year 1. | Construction (winter): Medium Year I (winter/summer): None/None Year 5 (winter/summer): None/None Year 10 (winter/summer): None/None | Construction (winter): Moderate adverse Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral |
| Published Landscape Ch | aracter Assessments | 1 | 1 | |
| NCA South Wales Valley | ValueThere is a cultural value to the NCA, along with recreational value, local landscape designations and the perceptual aspects of a landscape changing from an industrial past to one of an increasing urban influence, such that the value is assessed as high.SusceptibilityAs the NCA is characterised by a varied range of land uses, along with varied landform and vegetation patterns the susceptibility is assessed as medium.Sensitivity | ConstructionThe construction activity would mirror that stated above for the ESS Site and Cable Corridor. In relation to the wider geographic area of the NCA, the extent and scale of the construction activity would be very localised, being located in part adjacent to an existing solar farm and along existing lanes and roads. Therefore, the combination of the very localised extent and the geographic location of the construction activity in developed parts of the NCA would result in no change to the character of the NCA during the construction phase.Year IAt year I, the cable corridor would not be perceived, due to being underground. The ESS Site would result in additional renewable development within the NCA, but it would be located adjacent to an existing solar farm, in a part of the NCA where the local character of more elevated land above the developed valley floor is already defined by renewable land | Construction (winter): None Year I (winter/summer): None/None Year 5 (winter/summer): None/None Year 10 (winter/summer): None/None | Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral |

| Landscape Receptor | Sensitivity | Assessment Narrative | Impact | Effect |
|--|---|--|---|--|
| | The combination of the high value and medium susceptibility results in a high sensitivity to the Proposed Development. | uses and varying degrees of 'openness' and the overall character is defined by the published study as landscape of 'contrasts'. The Proposed Development would retain the stated key characteristics of the NCA, with the very localised removal to the roadside hedgerow not impacting the wider extent of field boundaries, the change in land use to a grazing field being a change to a common land use type. The very localised scale and extent of the ESS Site, in combination with the Proposed Development being reversible, would therefore not alter the character of the NCA. | | |
| | | Year 5 | | |
| | | The assessment would reflect that at year 1. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 1. | | |
| Local Landscape Charac | ter Areas | | | |
| LLCA I: Taff Vale | Value | Construction | Construction (winter): Low | Construction (winter): |
| (covering the ESS Site and part of the Cable Corridor) | As an area of land within the Special Landscape Area, with a recreational and functional value, the value is high. <u>Susceptibility</u> As an area of rising and undulating landform, along with a generally high degree of woodland, the susceptibility is high. Sensitivity | The construction activity would be located in the LLCA and reflect the impacts stated above at the ESS Site and for the Cable Corridor. The extent of the construction activity would be located across an existing road and a small field within the LLCA, with a very limited amount of removal to the roadside hedgerows. The key vegetation and landform patterns would be retained, with the construction activity located between Maes Bach Farm and Maes Bach solar farm, i.e. within a developed part of the LLCA. The perception of the construction activity would also be very localised. | Year I (winter/summer): Low/Low Year 5 (winter/summer): Low/Low Year 10 (winter/summer): Very Low/Very Low | Minor adverse Year I (winter/summer): Minor adverse / Minor adverse Year 5 (winter/summer): Minor adverse / Negligible adverse |
| | The combination of the high value and high susceptibility results in | Year I | | Year 10 (winter/summer): |
| | a high sensitivity to the Proposed Development. | At year I, there would be no perception of the cable corridor, due to it being below ground. The ESS Site would introduce additional renewable energy equipment and land use within the LLCA, located adjacent to Maes Bach solar farm, so as to be perceived in this context, as well as the buildings within Maes Bach farm. The change to the overall character of the LLCA would be limited in both winter and summer conditions. | | Negligible adverse / Negligible adverse |
| | | Year 5 | | |
| | | The assessment would reflect that at year I. | | |
| | | Year 10 | | |
| | | By year 10, with the establishment of the proposed planting, the perception of the Proposed Development would reduce, even in winter conditions, such that the impact would reduce in comparison to the year 1 assessment. | | |
| LLCA 2: Dryscoed | Value | Construction | Construction (winter): None | Construction (winter): |
| Agricultural | As an area of land within the Special Landscape Area, with a recreational and functional value, the value is high. | The construction activity would not be located in the LLCA and the intervening distance, landform and vegetation would negate any perception of the activity, such that there would | Year I (winter/summer): None/None | Year I (winter/summer): |
| | Susceptibility | be no change to the character of the LLCA during construction. | Year 5 (winter/summer): None/None | Neutral / Neutral |
| | As an area of undulating landform, with a coherent pattern of | Year I | fear 10 (winter/summer): None/None | Year 5 (winter/summer): Neutral / Neutral |
| | arable land use, the susceptibility is high. | At year I, there would be no change to the character of the LLCA, due to the intervening distance, landform and vegetation between the LLCA and the ESS Site. | | Year 10 (winter/summer): |
| | The combination of the high value and high susceptibility results in | Year 5 | | Neutral / Neutral |
| | a high sensitivity to the Proposed Development. | The assessment would reflect that at year 1. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 1. | | |
| LLCA 3: The A473 | Value | Construction | Construction (winter): Low | Construction (winter): |
| (covering part of the | As a main road with lighting columns, the LLCA is considered not | The construction activity would be located in the LLCA, resulting in alteration to | Year I (winter/summer): None/None | Yoon L (winter/summer): |
| | Susceptibility | of vehicles and urban character to the LLCA, the impact would be low. | Year 5 (winter/summer): None/None | Neutral / Neutral |
| | As an engineered features, the susceptibility is very low. | Year I | Year 10 (winter/summer): None/None | Year 5 (winter/summer): |
| | Sensitivity | At year 1, with the cable corridor below ground, there would be no change in the character of the LLCA. | | Year 10 (winter/summer): |
| | The combination of the very low value and very low susceptibility | Year 5 | | Neutral / Neutral |
| | results in a very low sensitivity to the Proposed Development. | The assessment would reflect that at year 1. | | |
| | | Year 10 | | |

| Landscape Receptor | Sensitivity | Assessment Narrative | Impact | Effect |
|-----------------------------------|--|--|---|--|
| | | The assessment would reflect that at year 1. | | |
| LLCA 4: Garth Hill | ValueAs an area of land within the Special Landscape Area, with a recreational and functional value, the value is high.SusceptibilityAs an area of notably rising landform the susceptibility is very high.SensitivityThe combination of the high value and very high susceptibility results in a very high sensitivity to the Proposed Development. | ConstructionThe construction activity would not be located in the LLCA and therefore there would be no physical change to the landscape features. The construction activity for the ESS Site and part of the Cable Corridor would be perceived from the LLCA, but at distance and in the context of a varied setting to the LLCA and in the context of the Maes Bach solar farm. Therefore, there would be no change to the character of the LLCA. Year 1At year 1, there would be no physical change to the character of the LLCA due to the Proposed Development being located in a different geographic area. The Proposed Development would be perceived in winter months and to a far lesser degree in summer months, but in the immediate context of Maes Bach solar farm. In combination with the distance and the varied character of the LLCA in operation, in winter or summer months.Year 5 The assessment would reflect that at year 1.Year 10 The assessment would reflect that at year 1. | Construction (winter): None Year I (winter/summer): None/None Year 5 (winter/summer): None/None Year 10 (winter/summer): None/None | Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year I0 (winter/summer): Neutral / Neutral |
| LLCA 5: Celyn Farm Residential | ValueAs a developed area, the LLCA there are few features of landscape value and the value is assessed as low.SusceptibilityAs a developed area the susceptibility is low.SensitivityThe combination of the low value and low susceptibility results in a low sensitivity to the Proposed Development. | Construction The construction activity would not be located in the LLCA and the intervening distance, landform and vegetation would negate any perception of the activity, such that there would be no change to the character of the LLCA during construction. Year I At year I, there would be no change to the character of the LLCA, due to the intervening distance, landform and vegetation between the LLCA and the ESS Site. Year 5 The assessment would reflect that at year 1. Year 10 The assessment would reflect that at year 1. | Construction (winter): None Year I (winter/summer): None/None Year 5 (winter/summer): None/None Year 10 (winter/summer): None/None | Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral |

16.0 LVIA APPENDIX V: LIKELY VISUAL EFFECTS

16.1 The following table sets out the likely visual effects of the Proposed Development.

Table 16-1: Likely Visual Effects

| Visual Receptor | Sensitivity | Assessment Narrative | Impact | E |
|------------------------------|---|--|---|--------|
| I. Road users on Pound | Value | Construction | Construction (winter): Low | С |
| Farm Lane | The view is attractive and covers part of the | The construction associated with the cable corridor would be visible at close | Year I (winter/summer): None/None | Y |
| | Special Landscape Area but is unlikely to be the reason for the receptor being present and | range, representing a scale of machinery and activity greater than general farming activity within the composition of the view. The construction at the ESS | Year 5 (winter/summer): None/None | Y |
| | the value is medium. | Site would not be visible, due to the intervening elevated land. | Year 10 (winter/summer): None/None | Y |
| | Susceptibility | Year I | | |
| | As road users the susceptibility is medium. Sensitivity | At year I, with the cable corridor below ground and the ESS Site not visible due to the intervening landform, there would be no change to the composition | | |
| | The combination of the medium value and | of the view. | | |
| | medium susceptibility results in a medium sensitivity to the Proposed Development. | The assessment would reflect that at year 1. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 1. | | |
| 2. Recreational users on | Value | Construction | Construction (winter): Medium | С |
| PRoW (footpath) DRE/50b/2 | The view is attractive and covers part of the | There would be close range views of the cable corridor construction, as well as | Year I (winter/summer): Low/Negligible | Y |
| | Special Landscape Area but is unlikely to be the reason for the receptor being present and the value is medium. | oblique views of the construction activity in the western part of the ESS Site, although seen against a backdrop of the Maes Bach solar farm. The construction activity would result in a partial change to the composition of the view. | Year 5 (winter/summer): Negligible/ Negligible | a Y |
| | Susceptibility | Year I | Year 10 (winter/summer): Negligible/Low | b |
| | As a recreational users, the susceptibility is | At year 1, the change to the composition of the view would be small, via the | | b b |
| | Sensitivity | intervening hedgerow would screen the remainder of the ESS Site even in | | |
| | The combination of the medium value and high susceptibility results in a high sensitivity to | winter. In summer, with the intervening vegetation in leaf, the visibility of the new access and reduced extent of hedgerow would reduce in comparison to winter conditions, as well as being seen in the context of Pound Farm Lane and Maes Bach solar farm | | |
| | the Proposed Development. | Year 5 | | |
| | | Compared to the year I assessment, the change to the composition of the view would be very subtle, due to the increased height of the hedgerow along the northern edge of the ESS Site largely screening any visibility of the access and the proposed trees softening views of the Mae Bach solar farm. In summer, with the vegetation in leaf, there would be a reduction in the visibility of the Maes Bach solar farm, resulting in a beneficial change to the composition of the view. | | |
| | | Year 10 | | |
| | | By year 10, with the establishment of the proposed planting, there would be a reduction in the visibility of the Maes Bach solar farm in both winter and summer conditions, resulting in a beneficial change tot eh composition of the view, with the new planting seen against the backdrop of the established trees in the middle ground of the view. | | |
| 3. Recreational users on | Value | Construction | Construction (winter): High | С |
| PRoW (footpath) DRE/53/2 | The view is attractive and covers part of the | The construction at the ESS Site would be visible at close range, resulting in a | Year I (winter/summer): High/High | Y |
| | Special Landscape Area but is unlikely to be the reason for the receptor being present and the value is medium. | more unsettled composition of the view and activity of a far greater scale than general farming, even when seen against the backdrop of the Maes Bach solar farm. | Year 5 (winter/summer): Medium/Low | a Y |
| | Susceptibility | Year I | real to (whiter/summer). Low/Low | a |
| | As recreational users the susceptibility is high. | At year I winter, the lower parts of the ESS equipment would be screened by | | Y a |
| | Sensitivity | the density of the intervening hedgerow, whilst the upper parts of the ESS equipment and the sub-station fencing would be visible, introducing additional structures at close range and a more developed composition to the view, seen against the back-drop of the Maes Bach solar farm. In summer, with the | | |

ffect

Construction (winter): Minor adverse Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral

fear 10 (winter/summer): Neutral / Neutral

Construction (winter): Moderate adverse Year I (winter/summer): Minor adverse / Negligible adverse

Year 5 (winter/summer): Negligible adverse / Negligible beneficial

Year 10 (winter/summer): Negligible beneficial / Minor peneficial

Construction (winter): Major adverse

Year I (winter/summer): Major adverse / Moderate Idverse

Year 5 (winter/summer): Minor adverse / Negligible Idverse

(ear 10 (winter/summer): Minor adverse / Negligible adverse

| Visual Receptor | Sensitivity | Assessment Narrative | Impact | Eff |
|---|---|--|--|-------------------------------|
| | The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development. | hedgerow in leaf, the visibility of the ESS equipment would reduce, but still represent a noticeable change to the composition of the view. Year 5 By year 5, with the increased height of the intervening hedgerow, the visibility of the ESS equipment would be substantially reduced, even in winter. The change to the composition of the view would be via a reduction in the extent of views southwards from the PRoW. In summer, the ESS equipment would not be visible, with the adverse effect due to the truncation of the view. Year 10 The assessment would reflect that at year 5, due to the retained height of the existing hedgerow adjacent to the receptor. | | |
| 4. Recreational users on PRoW (footpath) DRE/53/2 | Yalue The view is attractive and covers part of the Special Landscape Area but is unlikely to be the reason for the receptor being present and the value is medium. Susceptibility As recreational users the susceptibility is high. Sensitivity The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development. | ConstructionThe construction of the ESS equipment would be visible due to the slightly elevated position of the receptor. The construction activity would be a noticeable change to the composition of the view, but the effect is reduced from major adverse due to the intervening field and that views would remain across the wider landscape to Garth Hill.Year 1At year 1, the ESS equipment would be visible, resulting in a more developed composition to the view. The intervening field would enable views to remain across the wider landscape, with views towards Garth Hill becoming more channelled in extent in both winter and summer conditions, as the elevated position of the receptor would limit any screening by the intervening vegetation.Year 5By year 5, the establishment of the proposed planting along the eastern edge of the ESS would reduce the visibility of the ESS equipment in winter and summer conditions, with the new planting seen against the backdrop of the established trees along the southern edge of the ESS Site, which already truncate longer distance views westwards.Year 10By year 10, the visibility of the ESS equipment would reduce further, due to the establishment of the proposed planting along the eastern edge of the ESS Site. This would largely soften views in winter and largely screen views in summer | Construction (winter): High Year 1 (winter/summer): High Year 5 (winter/summer): Moderate/Low Year 10 (winter/summer): Low/Very Low | Cc Ye adv Ye adv |
| 5. Recreational users on PRoW (footpath) DRE/53/1 | Yalue The view is ordinary and incidental to the receptor being present, such that the value is low. Susceptibility As recreational users the susceptibility is high. Sensitivity The combination of the low value and high susceptibility results in a medium sensitivity to the Proposed Development. | ConstructionConstructionThe construction activity would be visible, due to gaps in the intervening treeline, although seen in the context of several large scale farm buildings at MaesBach farm and Maes Bach solar farm, but representing a noticeable change fromthe settled composition of fields.Year IYear I winter, the ESS equipment would be visible, consolidated within thecomposition of the view between the Maes Bach solar farm and farm buildingswithin the Maes Bach farm. The result would be a more developed compositionto the view and a more visually contiguous alignment of equipment andstructure, but the overall extent of the view is short due to the rising landformto the north of the ESS site. In summer, with the intervening trees in leaf, thevisibility of the ESS equipment would be reduced.Year 5By year 5, the visibility of the ESS equipment would be reduced by theincreased height of the proposed planting along the eastern edge of the ESS Sitein both winter and summer conditions.Year 10By year 10, the increased height of the proposed planting would largely softenthe ESS equipment in winter and screen it in summer, along with the interveningvegetation, with a resulting slight reduction in the extent of visible sky retainingan adverse effect in summer. | Construction (winter): Medium Year 1 (winter/summer): Medium/Medium Year 5 (winter/summer): Low/Very Low Year 10 (winter/summer): Low/Vey Low | Ccc Ye ad' Ye ad' |

ffect

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onstruction (winter): Moderate adverse
ear I (winter/summer): Moderate adverse / Moderate
lverse
ear 5 (winter/summer): Moderate adverse / Minor
lverse
ear 10 (winter/summer): Minor adverse / Negligible
lverse
onstruction (winter): Moderate adverse
ear I (winter/summer): Moderate adverse / Minor
dverse
ear 5 (winter/summer): Minor adverse / Negligible
lverse
ear 10 (winter/summer): Negligible adverse / Negligible
verse
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| 6. Road users on Pound Farm Lane | Value | | | |
|-------------------------------------|---|--|--|-------------|
| Farm Lane | | Construction | Construction (winter): Low | 0 |
| Farm Lane | The view is ordinary and incidental to the | The upper parts of tall construction machinery would be visible, although | Year I (winter/summer): Low/None | 1 |
| | receptor being present, such that the value is low. | softened by the density of the intervening vegetation and seen in the context of the Maes Bach solar farm, such that the change to the composition of the view | Year 5 (winter/summer): Very Low/None | 1 |
| | Susceptibility | would be limited. | Year 10 (winter/summer): Very | 1 |
| | As road users the susceptibility is medium. | <u>Year I</u> | Low//None | |
| | <u>Sensitivity</u> | At year I winter, the upper parts of the substation fencing would be visible, | | |
| | The combination of the low value and medium susceptibility results in a medium sensitivity to the Proposed Development. | intervening vegetation and seen in the context of the Maes Bach solar farm, such that the change to the composition of the view would be limited. In summer, with the intervening vegetation in leaf, the Proposed Development would not be visible and there would be no change to the composition of the view. | | |
| | | Year 5 | | |
| | | With the establishment of the proposed planting, the visibility of the ESS equipment would be reduced in winter, whilst remaining screened in summer due to the intervening vegetation. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 5. | | |
| 7. Road users on Pound | Value | Construction | Construction (winter): Low | 1 |
| Farm Lane | The view is attractive and covers part of the | The construction of the proposed access and machinery implementing a small | Year I (winter/summer): Low/Very Low | 1 |
| | Special Landscape Area but is unlikely to be the reason for the receptor being present and | part of the cable corridor would be visible, along with the upper parts of tall construction machinery due to the relatively elevated position of the receptor. | Year 5 (winter/summer): Very Low/None | a |
| | the value is medium. | The construction activity would form a very small part of the wider view and | Year 10 (winter/summer): Very | |
| | Susceptibility | Yoar I | Low//None | |
| | As road users the susceptibility is medium. | At year I winter the upper parts of the ESS equipment in the western part of | | |
| | Sensitivity The combination of the medium value and medium susceptibility results in a medium sensitivity to the Proposed Development. | the Site would be visible, due to the elevated position of the receptor, although the perception of their scale and mass would be reduced by their rendered facades. The change to the composition of the view would be small, with the Proposed Development seen in the context of the Maes Bach solar farm. In summer, with the intervening vegetation in leaf, the visibility of the Proposed Development would be reduced, so as to be barely perceptible beyond the Maes Bach solar farm. | | |
| | | <u>Year 5</u> | | |
| | | With the establishment of the proposed planting, the visibility of the ESS equipment would be reduced in winter and would be screened in summer. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 5. | | |
| 8. Recreational users on | Value | Construction | Construction (winter): None | 0 |
| DRE/63/10 | The view is ordinary and incidental to the receptor being present, such that the value is | The construction activity would not be visible due to the intervening landform, | Year I (winter/summer): None/None | 1 |
| | low. | Year I | Year 5 (winter/summer): None/None | 1 |
| | Susceptibility | The Proposed Development would not be visible due to the distance from the | Year 10 (winter/summer): None/None | 1 |
| | As recreational users the susceptibility is high. | ESS Site and intervening features. | | |
| | <u>Sensitivity</u> | <u>Year 5</u> | | |
| | The combination of the low value and high susceptibility results in a medium sensitivity to the Proposed Development. | The assessment would reflect that at year 1. <u>Year 10</u> | | |
| | | The assessment would reflect that at year 1. | | |
| 9. Recreational users on | Value | Construction | Construction (winter): Very Low | (|
| Garth Hill | The view is likely to be a specific visitor | The construction of the proposed access and machinery implementing a small | Year I (winter/summer): Very low/Very | |
| | Autraction and the value is very high. Susceptibility As recreational users the susceptibility is high. | construction machinery due to the elevated position of the receptor. The construction activity would form a very small part of the wider view and would be seen in the context of the Maes Bach solar farm. | Year 5 (winter/summer): Very Low/Very Low | a l a |

Effect Construction (winter): Minor adverse Year I (winter/summer): Minor adverse / Neutral Year 5 (winter/summer): Negligible adverse / Neutral Year 10 (winter/summer): Negligible adverse / Neutral Construction (winter): Minor adverse Year I (winter/summer): Minor adverse / Negligible adverse Year 5 (winter/summer): Negligible adverse / Neutral Year 10 (winter/summer): Negligible adverse / Neutral Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral

Construction (winter): Minor adverse Year I (winter/summer): Negligible adverse / Negligible adverse Year 5 (winter/summer): Negligible adverse / Negligible adverse

| Visual Receptor | Sensitivity | Assessment Narrative | Impact | E |
|---------------------------|---|--|------------------------------------|---|
| | <u>Sensitivity</u> | Year I | Year 10 (winter/summer): None/None | Y |
| | The combination of the very high value and high susceptibility results in a very high sensitivity to the Proposed Development. | At year 1 winter, the upper parts of the ESS equipment would be visible, due to the elevated position of the receptor, although the perception of their scale and mass would be reduced by their rendered facades. The change to the composition of the view would be very small, with the Proposed Development seen in the context of the Maes Bach solar farm. In summer, with the vegetation along the southern edge of the ESS Site in leaf, the visibility of the Proposed Development would be reduced, so as to be barely perceptible beyond the Maes Bach solar farm. | | |
| | | The assessment would reflect that at year I due to the elevated position of the receptor. | | |
| | | Year 10 | | |
| | | By year 10, with the increased height of the proposed planting in winter and summer conditions, the Proposed Development would be visible and therefore would be no change to the composition of the view. | | |
| 10. Road users on | Value | Construction | Construction (winter): None | |
| Penycoedcae Road | The view is ordinary and incidental to the | The construction activity would not be visible due to the intervening landform, | Year I (winter/summer): None/None | Y |
| | low. | Vegetation and distance from the ESS Site. | Year 5 (winter/summer): None/None | Y |
| | Susceptibility As road users the susceptibility is medium. | The Proposed Development would not be visible due to the distance from the ESS Site and intervening features. | Year 10 (winter/summer): None/None | Y |
| | Sensitivity | Year 5 | | |
| | The combination of the low value and medium susceptibility results in a medium sensitivity | The assessment would reflect that at year 1. | | |
| | to the Proposed Development. | The assessment would reflect that at year 1. | | |
| II. Road users on Maindy | Value | Construction | Construction (winter): Very low | 0 |
| Koad | The view is ordinary and incidental to the | The upper parts of tall machinery within the ESS Site would be visible, but | Year I (winter/summer): None/None | Y |
| | low. | forming a very small change to the composition of the view. | Year 5 (winter/summer): None/None | Y |
| | Susceptibility | The ESS equipment in the western part of the ESS Site would not be discorpible. | Year 10 (winter/summer): None/None | ۱ |
| | As road users the susceptibility is medium. <u>Sensitivity</u> | due to the overall mass and scale of the equipment reduced by their tonal rendering, so as to be seen against a backcloth of extensive vegetation, such that in combination with the distance from the receptor, there would be no | | |
| | The combination of the low value and medium susceptibility results in a medium sensitivity | change to the composition of the view in winter or summer conditions. | | |
| | to the Proposed Development. | The second secon | | |
| | | The assessment would reflect that at year 1. | | |
| | | The assessment would reflect that at year 1. | | |
| 12. Recreational users at | Value | Construction | Construction (winter): None | 0 |
| Myndd Meio | The view is likely to be a specific visitor | The construction activity would not be visible due to the intervening landform, | Year I (winter/summer): None/None | Y |
| | attraction and the value is very high. | ESS Site. | Year 5 (winter/summer): None/None | Y |
| | <u>Susceptibility</u> | Year I | Year 10 (winter/summer): None/None | Y |
| | Sensitivity | The Proposed Development would not be visible due to the distance from the ESS Site and intervening features. | | |
| | The combination of the very high value and high | Year 5 | | |
| | to the Proposed Development. | The assessment would reflect that at year 1. | | |
| | | Year 10 | | |
| | | The assessment would reflect that at year 1. | | |
| | | 1 | | |

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Effect

Year 10 (winter/summer): Neutral/Neutral

Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral

Year 10 (winter/summer): Neutral / Neutral

Construction (winter): Negligible adverse Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral

Construction (winter): Neutral Year I (winter/summer): Neutral / Neutral Year 5 (winter/summer): Neutral / Neutral Year 10 (winter/summer): Neutral / Neutral

| Visual Receptor | Sensitivity | Assessment Narrative | Impact | I |
|--------------------------------|--|--|---------------------------------------|---|
| 13. Recreational users on | Value | Construction | Construction (winter): Low | 6 |
| PRoW (footpath) PTE/FPI22/I | The view is unlikely to be the reason for the | The construction at the ESS Site would be visible, due to the elevated position | Year I (winter/summer): Low/Low | · |
| | medium. | that the change to the overall composition of the view would be small. | Year 5 (winter/summer): Low/Very Low | |
| | Susceptibility | <u>Year I</u> | Year 10 (winter/summer): Vey Low/Very | |
| | As a recreational user the susceptibility is high. Sensitivity The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development. | At year 1, winter, the ESS equipment would be visible, although the mass and scale of the equipment would be reduced by the tonal rendering. The ESS equipment would be seen in the context of Maes Bach Farm, in a part of the landscape which is already developed and against the back drop of residential land uses in the background of the view. In combination with the distance from the receptor, the change to the composition of the view would be small in winter and summer conditions. | | 1 |
| | | Year 5 | | |
| | | The assessment would reflect that at year 1 in winter, whilst in summer the establishment of the proposed planting on the eastern edge of the ESS Site would reduce the visibility. | | |
| | | Year 10 | | |
| | | With the establishment of the proposed planting, the visibility of the ESS equipment would reduce in winter and summer conditions. | | |
| 14. Recreational users on | Value | Construction | Construction (winter): Very Low | 0 |
| Craig yr Allt | The view is likely to be a specific visitor | The construction activity would be softened by the intervening vegetation along the southern edge of the FSS Site. The very small scale of the construction | Year I (winter/summer): Very Low/None | 1 |
| | Susceptibility | activity in relation to the wider extent of views across the valley and in the | Year 5 (winter/summer): Very Low/None | |
| | As recreational users the susceptibility is high. | composition of the view. | Year 10 (winter/summer): None/None | |
| | <u>Sensitivity</u> | <u>Year I</u> | | |
| | The combination of the very high value and high susceptibility results in a very high sensitivity to the Proposed Development. | At year 1, the contiguous pattern of arable fields extending up from the valley floor would remain visible from the elevated position of the receptor, due to the ESS equipment being located beyond Maes Bach farm and seen consolidated between this and the Maes Bach solar farm. The position of the ESS equipment would also retain views of the field between the ESS equipment and the farm, with the equipment softened in winter by the intervening vegetation and screened in summer when it is in leaf, such that there would be no change to the composition of the view. | | |
| | | Year 5 | | |
| | | The assessment would reflect that at year I due to the elevated position of the receptor. | | |
| | | Year 10 | | |
| | | By year 10, the visibility of the ESS equipment would be reduced by the establishment of the proposed planting on the eastern side of the ESS Site in winter, thereby resulting in no change to the composition of the view. | | |
| 15. Recreational users on | Value | Construction | Construction (winter): Very Low | 0 |
| Caerphilly Common | The view is likely to be a specific visitor attraction and the value is very high. | The very small scale of the construction activity in relation to the wider extent of views across the valley and in the context of Maes Bach solar farm would | Year I (winter/summer): Very Low/None | |
| | Susceptibility | result in a very small change to the composition of the view. | Year 5 (winter/summer): Very Low/None | , |
| | As recreational users the susceptibility is high. | Year I | Year 10 (winter/summer): None/None | |
| | Sensitivity The combination of the very high value and high susceptibility results in a very high sensitivity to the Proposed Development. | At year I, the contiguous pattern of arable fields extending up from the valley floor would remain visible from the elevated position of the receptor, due to the ESS equipment being located beyond Maes Bach farm and seen consolidated between this and the Maes Bach solar farm. The position of the ESS equipment would also retain views of the field between the ESS equipment and the farm. | | |
| | | Year 5 | | |
| | | The assessment would reflect that at year I due to the elevated position of the receptor. | | |
| | | Year 10 | | |

Effect

Construction (winter): Minor adverse Year I (winter/summer): Minor adverse / Minor adverse Year 5 (winter/summer): Minor adverse / Negligible adverse Year 10 (winter/summer): Negligible adverse / Negligible adverse. Construction (winter): Negligible adverse Year I (winter/summer): Negligible adverse / Neutral Year 5 (winter/summer): Negligible adverse / Neutral Year 10 (winter/summer): Neutral / Neutral Construction (winter): Negligible adverse Year I (winter/summer): Negligible adverse / Negligible adverse Year 5 (winter/summer): Negligible adverse / Neutral Year 10 (winter/summer): Neutral / Neutral

| Visual Receptor | Sensitivity | Assessment Narrative | Impact | E |
|-----------------|-------------|--|--------|---|
| | | By year 10, the visibility of the ESS equipment would be reduced by the establishment of the proposed planting on the eastern side of the ESS Site in winter, thereby resulting in no change to the composition of the view. | | |

ffect