BINN FARM SOLAR AND BESS, PERTH & KINROSS

APPENDIX C:

LANDSCAPE AND VISUAL APPRAISAL

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DOCUMENT HISTORY

Preparation and Quality Control

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CONTENTS

1 Introduction

TGP Landscape Architects Ltd, a Landscape Institute-registered Practice, have been commissioned by SLR Consulting Limited, on behalf of Trio Power Ltd (c/o BLC Energy Ltd), to prepare the Landscape and Visual Appraisal (LVA) to identify the predicted landscape and visual effects of proposed Solar and Battery Energy Storage System (BESS) with associated infrastructure (the 'Proposed Development') on land (the 'Site') 890 m east of The Byre, Balvaird Farm, Strathmiglo, Cupar; approximately 4 km northwest of Strathmiglo.

The LVA is augmented by supporting text and graphics within the appendices. This includes the following figures within **Annex C**:

- Figure 1 – Zone of Theoretical Visibility with Viewpoints;
- Figure 2 – Landscape Character Types;
- Figure 3 – Landscape Designations and Visual Receptors;
- Figure 4 – Residential Receptors (1 km); and
- Figure 5 – Cumulative Development.

The LVA is supplemented by a Landscape Enhancement and Mitigation Plan (LEMP) which is provided in **Annex D**. The LEMP is an embedded element of Proposed Development and is appraised accordingly within the LVA.

1.0 Scope of the LVA

The LVA seeks to identify the potential landscape and visual effects that would occur as a result of the Proposed Development, and is organised in the following sections:

- Guidance and Methodology – outlines the general methodology, with reference to established guidance (full version in **Annex A**);
- Planning Policy Context;
- Baseline Description – including the fabric, character and quality of the local landscape. This includes the special characteristics of landscape planning designations, and a description of the main visual receptors within the Study Area;
- Proposed Development and Mitigation – describes the aspects of the Proposed Development which have the potential to result in landscape or visual effects, and the measures incorporated into the project design to mitigate these potential effects;
- ZTV and Viewpoint Analysis – analysis of the geographic extents of visibility and the potential magnitude of change at a selection of viewpoints;
- Construction Stage Effects – assesses the effects of the Proposed Development during the temporary construction stage;
- Landscape Effects – assesses the effects of the Proposed Development on the landscape fabric, landscape character and quality of the landscape designations within the Study Area;
- Visual Effects – assesses the effects arising from the Proposed Development on the visual amenity of the receptors within the Study Area;
- Cumulative Effects – considers the combined effects of the Proposed Development in combination with other notable elements of infrastructure; and
- Conclusions – a summary of the LVA results.

1.1 Study Area

A 3 km radius Study Area from the Proposed Development has been adopted for the assessment of landscape and visual effects. This has been informed by analysis of Zone of Theoretical Visibility (ZTV) maps and an early appraisal of potential effects for a Proposed Development of this scale. Any notable landscape or visual effects would be confined within this geographical area.

2 Guidance and Methodology

2.1 Guidance

The methodology presented here is based on the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3); Institute of Environmental Management and Appraisal and the Landscape Institute, 2013;
- Landscape Character Assessment: Guidance for England and Scotland; Prepared on behalf of the Countryside Agency and NatureScot, Land Use Consultants, 2002;
- Landscape Sensitivity Assessment Guidance; NatureScot, 2022; and
- Visual Representation of Development Proposals; Landscape Institute Technical Guidance Note 06 (2019).

In addition, reference has been made to other published guidance and the LVA has drawn on the following relevant baseline information:

- National Landscape Character Assessment (web-based interactive map), NatureScot, 2019;
- Ordnance Survey Land ranger (1:50 000) and Explorer (1:25 000) maps;
- Field surveys; and
- Aerial photography.

2.2 Methodology

The LVA aims to identify and evaluate the potential landscape and visual effects arising from the Proposed Development. Wherever possible, identified effects are quantified, albeit the nature of landscape and visual appraisal requires interpretation by professional judgement. In order to provide a level of consistency to the appraisal, the prediction of magnitude and appraisal of the residual landscape and visual effects have been based on pre-defined criteria.

GLVIA3 states in paragraph 2.23 that, "*Professional judgement is a very important part of the LVIA.*" and "*In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others.*" (Paragraph 2.24).

Landscape and Visual Appraisals are distinct, though linked procedures. The appraisal of the landscape recognises the potential changes in the physical components of the landscape and associated changes in its character and how it is experienced, which may in turn affect the perceived value ascribed to the landscape.

Visual effects relate to changes in the composition of existing views as a result of changes to the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity.

Level of Effect

The level of any identified landscape or visual effect is assessed in terms of being Major, Moderate, Minor or Negligible. Intermediate correlations are also possible and depend upon professional judgement, e.g. Major/Moderate. These categories are based on the juxtaposition of landscape or visual sensitivity with the predicted magnitude of change, as set out in **Table 1**.

Table 1: Landscape & Visual Effects Matrix

Receptor Sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	Negligible
	High	Major	Major/Moderate	Moderate	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
	Low	Moderate	Moderate/Minor	Minor	Negligible

This juxtaposition is not used as a prescriptive tool, rather it allows for the exercise of professional judgement. Thus, in some instances a particular parameter may be considered as having a determining effect on the analysis. Where the landscape or visual effect has been classified as Major or Major/Moderate this is considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered. The complete appraisal methodology is set out in **Annex A**.

3 Assumptions

The following assumptions have been made in respect to the LVA:

- The Site – refers to the land located within the red line boundary (as shown in **Figures 1-5**).
- The Proposed Development – comprises: the Solar array; Proposed BESS Compound with Battery Units and Power Conversion System (PCS) Units; Proposed DNO Switchroom; 2no Welfare Units; Pump House & 2no Water Tanks; Private Substation; Perimeter fencing, CCTV cameras and security lighting; 4 m wide Access Road and Vehicular access points; and Landscaping and biodiversity enhancement measures.
- The Proposed Development would have an operational period of up to 40 years. For the purposes of the LVA, the Proposed Development is regarded as being 'long-term'. The construction stage would be temporary, approximately 8-12 months in duration.
- The landscape proposals form an integral component of the Proposed Development.
- Viewpoints included in the assessment are from publicly accessible locations.
- Visual effects are assessed on the basis of good visibility. Visual effects can be expected to vary e.g. poor visibility at times of low cloud, rainfall and dusk. At these times a reduction in

visual clarity, colour and contrast would be experienced. Reduced visibility would limit the extent of view, particularly from mid to long distance views. Consequently, the assessment of effects is based on the worst-case scenario, where the Proposed Development would be most visible.

4 Consultation

The following viewpoint locations listed in **Table 2**, alongside the rationale for their selection, were determined from desk-based analysis and field study. Per GLVIA3 guidance, these have been chosen based upon receptor type; the ZTV overlay; location in relation to the Proposed Development (distance/elevation/orientation); and public accessibility. **Figure 1** illustrates their locations.

Perth & Kinross Council (PKC) were consulted regarding proposed Viewpoint locations and wider scope of the LVA on 24th June 2025 via email following their pre-application site visit of 13th June. An email response, dated 24th June 2025, from PKC stated that the proposed Viewpoints appear acceptable.

Table 2: Viewpoint Locations

Viewpoint	Rationale
1. Balvaird Castle.	View northeast from a Scheduled Monument and visitor attraction within 1 km of the Site. Representative of tourist / recreational receptors. The setting of the historic asset is subject to separate Historical Impact Assessment included in the planning application.
2. Leden Urquhart Road near Pittuncarty.	View northwest from minor road. Representative of views experienced by roadway users, residential receptors, and recreational walkers within 1 km.
3. Track Near Easter Catochil.	View south-southwest from the access track to residential property. Representative of views experienced by recreational walkers linking to wider Core Path network and local residential receptor within 1 km.
4. A91 at Gateside	View north from A91 road in close proximity to residential properties of Strathbraan and Old Schoolhouse, along with residences on Bower Park, all within 2 km.
Discounted Viewpoints	
*Track at Binn Hill**	*View south-southeast from track above Binn Farm, near summit / mast access to Binn Hill. Representative of recreational walkers on undesignated path within 2 km.*

*Viewpoint discounted following fieldwork due to unlikely access as a recreational destination given

the Binn Ecopark waste facility operations that extend across the surrounding area.

5 Planning Policy Context

The following section identifies the planning policy and other planning guidance material specifically relevant to the LVA. This includes consideration of the following:

- *National Planning Framework 4,* Scottish Government, 2023[1];
- *Local Development Plan (LDP2),* PKC, 2019[2];

5.1 National Planning Framework 4 (NPF4)

NPF4 is the national spatial strategy for Scotland and sets out the spatial principles, regional priorities, national developments, and national planning policy. Relevant NPF4 policies relating to the Proposed Development are:

- Policy 1: Tackling the Climate and Nature Crises

  This policy is to encourage, promote and facilitate development that addresses the global climate emergency and nature crisis.
- Policy 3: Biodiversity

  This policy is to ensure that development proposals protect biodiversity, reverse biodiversity loss, deliver positive effects, and strengthen nature networks.
- Policy 4: Natural Places

  This policy seeks to ensure that new development protects, restores and enhances natural assets making best use of nature-based solutions.
- Policy 11: Energy

  This policy is to encourage, promote and facilitate all forms of renewable energy development. This includes energy generation, storage, new and replacement transmission and distribution infrastructure and emerging low-carbon and zero emissions technologies including hydrogen and carbon capture utilisation and storage (CCUS).

5.2 Local Development Plan (LDP2)

The 2019 adopted Local Development Plan (LDP2) sets out the policies and proposals for the development and use of land across Perth and Kinross. The policies in the LDP2, along with Supplementary Guidance (SG), are used to determine planning applications and give guidance on where development can and cannot take place; what type of development is allowed; how it should be designed; and how environmental and cultural assets will be protected.

Land at Binn Farm is identified for waste management uses within LDP2, with potential for expansion, both in terms of physical size and also the range of uses and types of processes undertaken at the site.

Relevant landscape policies related to the Proposed Development from LDP2 are:

- Policy 1: Placemaking;

[1] Scot Gov, NPF4: https://www.gov.scot/publications/national-planning-framework-4/
[2] PKC, LDP2: https://www.pkc.gov.uk/ldp2

- Policy 15: Public Access;
- Policy 26: Scheduled Monuments and Archaeology;
- Policy 31: Other Historic Environment Assets;
- Policy 33: Renewable and Low-Carbon Energy;
- Policy 38: Environment and Conservation;
- Policy 39: Landscape;
- Policy 41 Biodiversity;
- Policy 42 Green Infrastructure;
- Policy 50: Prime Agricultural Land; and
- Policy 51: Soils.

5.3 Supplementary Guidance (SG)

Supplementary Guidance documents are statutory and form part of the Local Development Plan. Along with Non-Statutory Guidance they support the content of LDP2 and inform applicants on expectations within planning applications.

Statutory Guidance

- *Adopted Landscape Supplementary Guidance, 2020*[3];
- *Draft Renewable & Low Carbon Energy Guidance, 2019*[4];

Non-Statutory Guidance

- *Planning for Nature: Development Management and Wildlife Guide, April 2022*[5]*; and*
- *Planning & Biodiversity – Local Nature Conservation Sites*[6]*.*

6 Baseline Description

6.1 Local Landscape Context

Figure 1 illustrates the Site location at Balvaird Farm, within upland fringe agricultural land on the western ridge and southwestern face of Beins Law, approx. 890 m east of The Byre residential property, and 870 m to the southeast of the Binn Ecopark recycling and resource management facility.

While rural in location, the Binn Ecopark facility is an existing large-scale waste management complex that exerts a notable characterising influence across the local landscape to the north of the Site. The facility comprises an array of existing buildings; structures; storage areas; and associated infrastructure elements / access including:

- Main Office Building
- Maintenance and Engineering Buildings
- Operations Centre
- Dry Mixed Recycling Facility

[3] PKC, Adopted Landscape SG: https://www.pkc.gov.uk/ldp2landscape
[4] PKC, Renewable & Low Carbon Energy SG: https://www.pkc.gov.uk/ldp2renewables
[5] PKC, Planning & Biodiversity SG: https://www.pkc.gov.uk/ldp2biodiversity
[6] PKC, Planning & Biodiversity SG: https://www.pkc.gov.uk/ldp2naturesites

- SRF and RDF Facility
- Main Waste Reception
- Trade Waste Reception
- Soil and Aggregate Recycling Facility
- Wood Recycling Operation
- Anaerobic Digestion & In-vessel Composting Facilities
- Windrow Composting
- Landfill Site (closed)
- 4no Wind Turbines (115m Tip Height)

The Proposed Development area comprises agricultural grassland, managed for livestock grazing. To the immediate east lies the upper extents / all-terrain tracks of The Scottish Off Road Driving Centre which traverse Beins Law hill.

Topography of the Site is locally undulating with small craggy mounds of exposed rock, located on a ridge which sees elevation in the east at approx. 245 m AOD, falling to approx. 205 m in the south and 230 m AOD in the west. An area of Larch plantation woodland is found along the Site's northeastern boundary.

The variety in landform, characterised by the dipslope landscape of peaks and troughs, sees land fall to the north towards Binn Burn (300 m north) before rising again to Binn Hill (277 m AOD, approx. 1.5 km north). The coniferous woodland-blanketed Dumbarrow Hill rises to 260 m AOD, approx. 1.5 km east-northeast. Beins Law hill rises to its summit of 268 m AOD approximately 100 m from the eastern boundary of the Site.

While the Site and local landscape is predominantly rural countryside, it is influenced by the facility and operations at Binn Ecopark (to the north), and to a lesser extent, the operations at the adjacent 4x4 centre (to the east).

Another notable commercial land use which is common within the landscape adjacent to the Site and further afield is commercial forestry, which blankets many surrounding hills from small-scale pockets to large-scale plantations.

6.2 Soils and Peat

As identified through the Scottish Government *National Scale Land Capability for Agriculture* online mapping resource[7], the majority of The Site is classed 5.1 (*Land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yields*).

The southwestern extent is class 4.1 (*Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal*).

Carbon and Peatland 2016 mapping identifies The Site as Class 0 (*Mineral Soil*). Peatland habitats are not typically found on such soils.

[7] ScotGov, Scotland's Soils, Mapping: https://map.environment.gov.scot/Soil_maps/?layer=1#

6.3 Landscape Character

In 2019, NatureScot updated its programme of Landscape Character Assessment (LCA), creating digital mapping of the 30 regional LCA studies. This mapping identifies and describes distinct Landscape Character Types (LCTs); comprising areas of consistent and recognisable landscape character.

Figure 2 shows the LCTs within the Study Area. The Site is in an elevated location in a transitional zone between the different landscape character types of LCT 382 – Lowland Hill Ranges[8] and LCT 390 – Lowland Basins[9]. To the east / northeast is LCT 182 – Upland Hills, while further south lies LCT 186 – Lowland Hills and Valleys. Key characteristics of these LCTs are as follows:

Lowland Hill Ranges LCT

Physical Influences

- *Comprise hard volcanic rocks which appear as relatively uniform ridgelines orientated southwest to northeast;*
- *Recognisable shapes, peaks and slopes, and ridge profiles, the presence of which is emphasised by their location set within low lying agricultural landscape to the north and south; and*
- *Often distinctive and conspicuous scarp and dipslopes.*

Land Cover

- *Dominated by grass moorland and upland pasture; and*
- *Some areas of extensive forestry.*

Influence of Human Activity

- *Occasional vertical features such as navigational and telecom masts, follies, and wind turbines which appear prominent in these elevated locations; and*
- *Popular use for informal recreation by nearby large centres of population.*

Aesthetic and Perceptual Factors

- *Generally open medium scale landscapes of almost conical summits;*
- *Sweeping patchwork of regular but not geometric patterns on the dipslopes.*
- *A sense of relative tranquillity;*
- *Importance as a backdrop to many settlements in the surrounding low-lying agricultural landscapes; and*
- *Views within, across and up to this character type.*

Lowland Basins LCT

Physical Influences

- *Broad basins formed where sandstones have been eroded away leaving harder enclosing rocks; and*
- *Flat, relatively low-lying landform with strong horizontal composition.*

Land Cover

[8] NatureScot, LCA, LCT 382: https://www.nature.scot/sites/default/files/LCA/LCT%20382%20-%20Lowland%20Hill%20Ranges%20-%20final%20pdf.pdf
[9] NatureScot, LCA, LCT 390: https://www.nature.scot/sites/default/files/LCA/LCT%20390%20-%20Lowland%20Basins%20-%20final%20pdf.pdf

- *A range of natural and planted woodland with Scots pine growing in the drier areas and birch, willow and alder in wetter areas;*
- *Open, large scale, regular, tended pattern of fields on fringes of waterbodies; and*
- *Rich natural heritage, particularly migratory and wading birds.*

Influence of Human Activity

- *Historic sites and associations; and*
- *Surrounding areas of marsh were drained and improved to provide the basis of the landscape that we see today.*

Aesthetic and Perceptual Factors

- *Characteristically an open, large scale, flat rather angular and often diverse landscape;*
- *Diverse, calm, settled and (away from main roads and other discordant elements) the quiet, calm and balanced ambience; and*
- *Views are wide and panoramic across the basins along strong visual links to adjacent landscape types.*

<u>Lowland Hills and Valleys LCT</u>

Physical Influences

- *Variety and subtlety of landform; and*
- *Valleys with ridges of low, rounded hills rising on average up to 100 metres to 150 metres.*

Land Cover

- *Generally dominated by open, regular farmland patterns of medium scale fields of arable and grasslands;*
- *Extensive areas of forestry, shelter planting, roadside planting and policies linked to large estates; and*
- *Dominant linear and point features of forests and tree groups, individual trees or local buildings.*

Influence of Human Activity

- *Variable pattern of post and wire fences and mostly tall hedges with hedgerow trees;*
- *Regular, often linear, pattern of the distribution of steadings and larger settlements and towns, all of which are generally well related to the landscape;*
- *Towns in valleys enclosed by the landform of low hills which form a rural backdrop;*
- *Network of roads often well related to landform; and*
- *To the north and east of Dunfermline, is a much more industrialised landscape, including large areas of previously worked open-cast mines, the Mossmorran Chemical Works, wind farms at Little Raith and Westfield, and other industrial works.*

Aesthetic and Perceptual Factors

- *The landscape of the Lowland Hills and Valleys is typically of a medium or large scale;*
- *A generally tended, safe, quiet, balanced and calm landscape, but also a busy, random, disturbed and noisy one in the more urban, industrialised areas; and*
- *Variety of interrelated middle and long distance views of, from and across the low hills.*

<u>Upland Hills LCT</u>

Physical Influences

- *Elevated, massive, pronounced, dramatic physical landform.*

- *Open, large scale, rolling hills.*
- *Burns and evidence of active natural systems and processes, such as weathering and erosion.*

Land Cover

- *Upland semi-natural land cover and pasture with peaks, knolls and ridges.*
- *Grasses, bracken, sedge and rush communities with pockets of heather.*

Influence of Human Activity

- *Regular evidence of ancient human settlement with many historical and archaeological features visible, such as cairns, forts and field systems.*
- *Stone dykes, burns and occasional minor roads flowing over and along the contours.*
- *Lack of present day settlements and man-made features, except for areas of forestry.*

Aesthetic and Perceptual Factors

- *Distinctive and conspicuous shapes, silhouettes, slopes and skylines.*
- *Varied texture and mainly green/brown colour patchwork.*
- *Vast scale, exposure, openness, peacefulness, simplicity.*
- *Extensive, panoramic and elevated views across substantial distances and many other landscape types.*

6.4 Landscape Designations

Landscape designations are considered in the determination of the sensitivity of landscape and visual receptors as they provide an indication of value ascribed to the landscape or visual resource.

With reference to **Figure 3**, no International-level or National-level Landscape Designations cover The Site, or are within the 3 km Study Area.

The Site is located within the Ochil Hills Local Landscape Area (LLA). The Loch Leven and Lomond LLA is located to the south, with a minor area to the southwest of Strathmiglo within the Study Area.

Pockets and more expansive parcels of Semi-natural and Ancient Woodland (AW) are found in the vicinity, which is a characteristic of the Landscape Character Types. Within the Study Area these are notably:

- Glen Wood (AW), 500 m northeast;
- Sawmill / Tuflundie Wood (AW), 1.4 km northeast;
- Binn Wood (AW), 1.6 km northwest and 2.5 km north-northwest;
- Pottiehill Wood (AW), 2.3 km northwest; and
- Castle Law wood (AW), 2.6 km north.

No woodland would be lost or impacted through the Proposed Development.

There are no further landscape designations within the 3 km Study Area.

6.5 Visual Baseline and Receptors

The following section describes the visual receptors within the Study Area. Residential receptors within dispersed dwellings and farmsteads are identified and assessed to 1 km. Given the scale of development footprint and the low level of the solar and BESS infrastructure within the surrounding

landscape, this is deemed to be the most appropriate zone of potential notable impact. Similarly, the identification and assessment of recreational routes is focused on those that extend within 2 km of the Site.

Local Residents

With reference to **Figure 1**, Gateside represents the only settlement within the 3 km Study Area. This settlement is located outside the ZTV and is not considered further.

Other residences within the Study Area are limited to dispersed dwellings and farmsteads. As shown in **Figure 4**, those located within 1 km of the Site comprise:

- Gamekeepers Cottage, 140 m to the north,
- The Byres, 410 m to the west,
- Balvaird House, 420 m to the west,
- Leden Urquhart Cottage and Leden Urquhart Farm Cottage, 480 m south-southwest,
- Properties at Glentarkie Steading, 550 m to the east,
- Easter Catochil, 550 m to the north-northeast,
- Leden Urquhart, 560 m to the south,
- MacGregor House, 560 m to the west,
- Glentarkie Cottage, 570 m to the east-southeast,
- Balvaird Cottages, 660 m to the west,
- Rosiebank, 750 m to the southeast,
- East Cottage and West Cottage, 770 m to the east-southeast,
- Pittuncarty, 780 m to the southeast,
- Catochil Farm, 860 m to the north,
- Catochil Farm Cottage, 910 m to the north, and
- Glen Cottage, 930 m to the northeast.

All other dispersed dwellings and small-scale groupings are located at greater distances and/or outside the influence of the ZTV. It is determined that impacts (both through construction and residually during operation) on these receptors would not be notable.

Recreational Receptors

Figure 3 shows recreational routes, outdoor destinations, and tourist amenities / attractions within 2 km. These are listed below in order of increasing distance from Proposed Development:

- Balvaird Castle, 500 m to the west-southwest (subject to separate Heritage Impact Assessment (HIA)),
- Core Path ABNY/26, 910 m to the northeast at closest point,
- Core Paths ABNY/107 and ABNY/111, 1.35 km northeast at closest point,
- Core Path ABNY/22, 1.5 km northeast at closest point, and
- The Bein Inn Hotel & Restaurant, 1.8 km west-northwest.

Road and Rail Users

There are no rail routes within the 3km Study Area.

Roads within the Study Area identified with zones of potential visibility comprise the following routes:

- Leden Urquhart Road, 240 m south of The Site at closest point,
- A912, 400 m south of the Balvaird Castle junction, 1.2 km to the west-southwest, and
- A91, west of Gateside, 2.7 km to the south.

7 Proposed Development, Mitigation, and Enhancement

This section describes those elements of the Proposed Development with the potential to cause landscape and visual effects within the Study Area.

7.1 Proposed Development Description

The location of the Site is illustrated in **Figure 1**. The Proposed Development would involve localised areas of ground clearance to facilitate construction, and the introduction of the following key elements:

- Solar array;
- Proposed BESS Compound with:
  - Battery Units and Power Conversion System (PCS) Units;
  - Proposed DNO Substation;
  - Private Substation;
  - Welfare Unit;
  - Storage Units;
  - Pump House & 2no Water Tanks;
- Secondary Welfare Unit;
- Secondary Private Substation;
- Spare Container;
- CCTV cameras and security lighting;
- 4m wide Access Road and Vehicular access points; and
- Landscaping and biodiversity enhancement measures.

The LVA takes account of each of these elements and makes reference to them within the appraisal where relevant.

7.2 Landscape Design and Mitigation

Site Location

The initial Site selection provides for an appropriately open and south-facing location, in close proximity to the Binn Ecopark, set back from sensitive residential receptors and active travel routes.

Solar Panel Units are 2.7 m in height. The Private Substation and DNO Substation are the tallest elements of the BESS development at 2.7 m high. These are located at the BESS compound within the northwest corner of the Site, adjacent to woodland which provides a suitable backdrop to views from the south and screening of views from the north.

Design

The solar array development is designed and aligned per operational function for maximum solar exposure. This layout allows for minimal disturbance by internal access tracks, and avoids any visually prominent physical intrusions of exposed rock and steep slopes.

Due to the exposed nature of the semi-upland site and footprint of development, it is not feasible nor practical to implement an extensive perimeter structured landscape screen in the form of woodland or hedgerow. Such boundary treatment would be incongruous with the wider landscape framework.

Instead, by optimising the solar array to reflect the existing field pattern, the scale of development is suited to the scale of the receiving landscape.

Furthermore, by reducing more intensive agricultural grazing regimes within the Site and allowing for a grassland management strategy that favours a species-rich meadow establishment between rows of the array, biodiversity would be enhanced, which is of betterment to the Site and wider landscape.

The Proposed Development has been designed to achieve the following landscape objectives:

- Buildings, structures, and palisade fencing would be finished in a recessive colour (RAL 6003 Olive Green, or similar approved) to assist with blending into the natural landscape.
- Suitable species-rich seeding is proposed within the solar array and BESS area. This would boost species within the Site and be of benefit to the wider area. Ground preparation and sowing would be undertaken at the first available season and would establish thereafter through appropriate maintenance and reduced livestock grazing.
- Suitable species-rich seeding and woodland / scrub mixes are proposed on the perimeter of solar areas. This to boost biodiversity and increase habitat connectivity.

Given the unsuitability for extensive mitigation woodland planting in and around the Site, assessment takes a 'worst case scenario' where appraisal of landscape and visual effects is based on the initial appearance of the Site immediately after completion of construction (prior to establishment of bio-diverse groundcover).

8 ZTV and Viewpoint Analysis

The potential landscape and visual effects arising from the Proposed Development have been analysed in two ways:

- Zone of Theoretical Visibility (ZTV) map analysis, to provide a general overview of the geographical extent of visibility of the Proposed Development within the Study Area; and
- Analysis of the potential effects at key viewpoints.

8.1 Zone of Theoretical Visibility Analysis

Theoretical visibility mapping of the Proposed Development is illustrated in **Figure 1**. The ZTV has been prepared on the basis of 'bare earth' (excluding the screening effects of surrounding buildings or woodland / vegetation) and illustrates the maximum overall visibility of the proposed development.

Initial study of ZTV mapping highlights the variation in topography within the Study Area, clearly

showing the topography of the uplands and the surrounding hills, with the extent of potential visibility illustrated in a northeast – southwest orientation. Potential visibility within the Ochil Hills LLA is sporadic, with pockets of ZTV coverage predominantly within 1 km to the north and south, extending northwest and southwest to 3 km, and 2 km east on upland slopes.

Given this undulating landform, coupled with the screening effects of woodland, there would be a very minor alteration to characteristics of the Ochil Hills LLA through partial visibility of the Site and Proposed Development from limited publicly accessible locations. Restricted to the eastern extent of this LLA which is influenced by the existing activities at the Ecopark, the character and composition of the Ochil Hills LLA, although locally slightly altered, will be similar to the baseline existing situation.

From the northern extent of the Loch Leven and Lomond Hills LLA, any view of the Proposed Development from distances beyond 3 km would have negligible adverse impact on the perception of the hills from this lowland and upland LLA.

8.2 Viewpoint Analysis

Viewpoint analysis has been carried out on a selection of key viewpoints to assess the likely level of effects arising from Proposed Development. Following consultation with PKC, and with reference to the geographical extent of visibility illustrated within the ZTV and through field assessment of viable accessibility, a total of four viewpoints have been selected as being representative of a range of views from publicly accessible locations within the Study Area from various orientations, distances, and elevations (see **Figure 1**). As indicated within **Table 2**, a fifth viewpoint, originally presented in pre-application discussions, was discounted through limited parking and public access within the Binn Ecopark Recycling Facility.

Three of the Viewpoints are illustrated as Photomontage, illustrating the form and appearance of the Proposed Development at completion. Viewpoint 4 is illustrated as a photosheet with wireline overlay. All visuals are presented in **Annex D**.

<u>Viewpoint 1: View northeast from Balvaird Castle</u>

This viewpoint is located 705 m southwest of the Proposed Development, adjacent to the public entrance path into the grounds of Balvaird Castle.

From within the Lowland Hill Ranges / Lowland Basins LCT, and within the Ochil Hills SLA, the view is representative of recreational visitors to the castle and its grounds (considered to be of High sensitivity). The potential effects on the setting and value of the receptor as a heritage asset are discussed in the application Heritage Impact Assessment (HIA).

Existing View

From this position looking towards the Site, the nature of the dipslope landscape is apparent, with gentle undulations in the local landscape rising to craggy knolls which are blanketed with gorse scrub. Tree cover is limited, with sporadic mature trees associated with the castle grounds, and further pockets of dark coniferous plantation seen on crests of hills. Lower areas of the landscape comprise

agriculturally improved land, with grassland on smaller-scale slopes for livestock grazing, and larger expanses improved for arable crop rotation. Degraded stone walling defines the grounds of the castle, while wider field boundaries predominantly comprise post and wire fencing. Within the agricultural landscape, telegraph poles are evidenced, while the rotational blades of an operational wind turbine at Binn Wind Farm are seen above the gentle crest of hill.

Predicted View

Within the middle distance, in the context of the lower valley land at the base of the craggy knolls, the southern extent of the development array would be visible on the gentle face of the slope.

Effects on Visual Amenity

The appearance of the array within the landscape represents the addition of a new manmade element into the predominantly rural environment. This would increase the presence and perception of renewable energy infrastructure within what is a relatively intimate and enclosed visual setting. Based on the partial change in character and composition of the existing rural view, the magnitude of change would be Moderate, resulting in a Major/Moderate level of effect. This is assessed as being adverse and notable.

Landscape Effects

The Proposed Development would result in the alteration of a small area of agricultural pasture / arable land, which is the predominant land use within the view and area, and the introduction of new elements of built form. The visible extent and scale of the array would be limited to a relatively localised area within the context of the wider surrounding landscape, which would retain its existing rural characteristics. On balance, this would result in a Moderate magnitude of change, and a Moderate level of effect, which is considered adverse and notable.

<u>Viewpoint 2: View northwest from Leden Urquhart Road near Pittuncarty</u>

The viewpoint is located on the minor country road, which provides access to local residences and farm steadings. It is primarily utilised by road users (of Medium sensitivity), along with countryside access for occasional cyclists and walkers. It is located 663 m to the southeast of the Proposed Development.

While much of the direction of travel is at an oblique angle to the Site, the viewpoint presents a static location on the route with uninterrupted and direct views towards development.

Existing View

The view encapsulates the character of the LCT, with the peak and gentle slope of Beins Law and its ridge profile, and the presence of the low-lying agricultural landscape. The dipslope landscape presents a patchwork of grassland, arable fields, pockets of woodland and scrub, and occasional mature field boundary trees. This landscape gently rises to an undramatic and simple skyline defined by the ridge which is broken by sporadic mature trees.

Predicted View

The Proposed Development would be seen on the southern face and ridge of Beins Law, viewed

beyond the lower elevation tree cover and extending up and over the crest of the ridge.

Effects on Visual Amenity

The Proposed Development would be partially visible in the middle distance, beyond rolling farmland in the foreground and intervening parcels of tree cover. The array would extend across parts of the horizon, and represent a new element of built form that would contrast with the more rural characteristics of the existing landscape. However, the visible extent of the array would account for a relatively narrow vertical field of view. On balance, the magnitude of change would be Moderate and the resultant level of effect would be Moderate. This is assessed as adverse and notable in this instance based on the location of the array on the skyline.

Landscape Effects

From this vantage point, Proposed Development would result in local alteration of the agricultural / grazing characteristic of the baseline upland fringe that is prominent and recognizable in the view. This would introduce a man-made feature into the rural setting, uncharacteristic with those baseline natural attributes of the receiving landscape such as expansive scrub or coniferous woodland which are seen blanketing the uplands within the wider landscape. However, the Proposed Development would account for a relatively limited extent of the landscape, which would retain its existing characteristics across the wider surrounding areas. On balance, the magnitude of change would be Moderate, with the resultant level of effect deemed Moderate, adverse, and notable in this instance based on the limited presence of infrastructure within the surrounding landscape at this viewpoint.

<u>Viewpoint 3: View south-southwest from track near Easter Catochil</u>

Located on a residential access track 679 m to the north of the Proposed Development, the viewpoint is representative of views experienced by recreational walkers linking to the wider Council Core Path network, along with views from a nearby local residential receptor (of High sensitivity in both cases).

Existing View

From within the Lowland Hill Range LCT, the vantage point allows for semi-expansive views within the LCT which encapsulate the conspicuous scarp and dipslopes, with the variations in grazing, arable, and forestry land use. Glimpsed views of wider upland LCTs are possible, guided through lowland valleys or above the crests of hills / ridges.

Predicted View

The Proposed Development would be experienced on the upper extent of the opposite Beins Law ridge, with the solar array extending over the skyline. The BESS infrastructure would be fully screened by the existing stance of Larch woodland.

Effects on Visual Amenity

The scale and extent of array seen within the view results in a partial change in character and composition of the baseline view, by dint of its location on the opposite slope of hill ridge and elevation relative to the viewer. However, the Proposed development would remain partly screened and account for a relatively limited vertical field of view. Accordingly, the magnitude of change is deemed

to be Moderate, resulting in a Major/Moderate level of effect, adverse, and notable.

Landscape Effects

The Proposed Development, in the form of new solar array infrastructure, would result in a recognizable new character feature to the upland agricultural landscape. Based upon its relatively prominent location on the skyline, in combination with the close proximity and open nature of the landscape, would result in a Moderate magnitude of landscape change. The resultant level of effect would be Moderate, adverse, and notable.

Viewpoint 4: View north from A91 at Gateside (Photosheet with wireline overlay)

The viewpoint is located at the western edge of the village of Gateside, from a vantage point on the southern side of the A91. It is located within the Lowland Hills and Valleys LCT.

The direction of travel / view for road users is at an oblique angle to The Site; however, the static view is further representative of residential receptors in close proximity.

Existing View

From the Lowland Hills and Valley LCT looking towards the Lowland Hill Ranges in the north, the view from the lower-elevation roadway corridor across medium-scale arable fields is of the gentle line of small hills, predominantly blanketed with woodland (both deciduous and evergreen plantation).

Predicted View

The woodland-topped hills which define the northern edge of the agricultural valley provide significant screening of the larger Lowland Hill Ranges beyond. Any glimpsed view of the upper extents of Proposed Development would be barely perceptible. As such, the composition and character of the view would be substantially unaltered, approximating to little or no change.

Effects on Visual Amenity

Given intervening distance, topography, and landcover, the magnitude of change on visual receptors in this location is deemed to be Negligible at most. The resultant level of effect would be Negligible, adverse, and not notable.

Landscape Effects

The perception of the Proposed Development within the uplands landscape from this location would be barely distinguishable, approximating to no change. Magnitude of change would be Negligible at most, with a Negligible level of effect (not notable).

9 Construction Stage Effects

Whilst it is the operational stage of the Proposed Development that would give rise to residual (long-term) landscape and visual effects, temporary effects at the construction stage would also occur based on the following operations:

- Erection of temporary perimeter fencing;
- Installation of temporary construction compound (including office and welfare facilities);

- Creation of temporary laydown area;
- Site clearance and earthworks, notably for the creation of a platform for BESS structures;
- Minor excavation works for solar panel frame foundations;
- Increased vehicular movement to, from, and within the Site;
- Gradual introduction of array frames and panels / proposed buildings & infrastructure; and
- Reinstatement works, including the removal of the temporary accommodation.

The works detailed above would give rise to some landscape and visual effects when viewed from close-proximity or elevated locations due to the contrast of these elements / activities with the more rural characteristics of the local landscape, although adverse effects would be tempered by the presence of existing built form and human activity in the nearby area (Binn Ecopark waste recycling facilities and associated wind turbines). Effects would mainly arise through the gradual introduction of proposed infrastructure, while mobile plant and personnel operations would be temporary in nature and duration.

The detailed construction programme is not known at this stage, albeit is anticipated to be of approximately 8-12 months duration. The associated overall effects of construction would be temporary, and limited in extent and duration.

Construction effects associated with other parts of Proposed Development would primarily be limited to localised excavation works for cable routes. The influence of these operations would be localised, of relatively short duration, and would be reinstated rapidly following completion. As such, effects would be limited and are not considered further.

9.1 Construction Stage Landscape Effects

Minor site levelling works for BESS and internal access tracks, along with the gradual introduction / movement of materials in order to create platforms for containers & buildings and minimal foundations for array structures would coincide with a short-term, temporary increase in vehicle movements / human activity to, from, and within the Site, alongside temporary elements such as laydown areas, construction compound, site office, and welfare facilities.

The retention of existing woodland on the northwest boundary of the Site would be ensured in accordance with protection measures as outlined by *BS5837 (2012): Trees in Relation to Design, Demolition and Construction*. This would see the introduction of temporary fencing to safeguard root protect areas.

In terms of landscape fabric, the Site is considered to be of Medium sensitivity to the Proposed Development. This is due to the presence of energy infrastructure (4no wind turbines) and the Ecopark waste / recycling complex within the local countryside, and the limited presence of features of distinct landscape value within the Site. On balance, the magnitude of change associated with the construction operations would be Moderate, and the resultant level of effect on landscape fabric being Moderate. This is assessed as being notable, adverse, and temporary.

In terms of landscape character, this area of the Lowland Hill Ranges and Lowland Basins LCTs is

dynamic with the existing Binn Ecopark recognised within the PKC LDP with scope for expansion of operations. The influence of this is felt locally, as well as further afield from surrounding LCTs. The construction stage effects would be focused in close proximity to the Binn Ecopark and its operations. The undulating nature of the receiving and adjacent LCTs would restrict the influence of the construction activities over the wider landscape. As a result, the effects (including indirect effects) would be predominantly localised to <1 km.

In summary, the Site and its setting within the Lowland Hill Ranges and Lowland Basins LCTs within the Study Area is assessed as being of Medium sensitivity to the Proposed Development. The magnitude of change on local landscape character during the construction stage would be Slight, resulting in a Moderate/Minor level of effect. These effects would be focused across the local landscape, predominantly to the north, east, and west of the Site. Effects across wider parts of the LCTs to the east and south would be limited, and not notable.

9.2 Construction Phase Effects on Visual Amenity

Visual effects of activities during the construction phase would be temporary, intermittent, and more notable within the local area to 1 km of the Site. This is based on the containing effect of surrounding topography.

Residential Receptors

Within this localised area potentially impacted residential properties (of High sensitivity) are identified below. Locations of properties are illustrated within **Figure 4**. Given their proximity to development, the following impacts of construction can be expected:

- Gamekeepers Cottage, is located 140 m to the north of the Site and sits at approximately 207 m AOD, approx. 22 m below the northern boundary elevation of the Proposed Development Site.

  Main access activity and BESS compound construction would not be evident in views, with wider construction activities predominantly screened by the rising topography in the direction of the northeastern extent of The Site.

  Direct views in an elevated aspect to the crest of hill ridge would encompass new boundary fencing and the gradual appearance of the array infrastructure on the upper extent of the ridge. The magnitude of change would be Slight, with a Moderate (adverse) and notable level of effect.
- The Byres and Balvaird House, are located 410 m and 420 m respectively, to the west of the Site, and sit at approximately 214 m AOD, approx. 20 m below the eastern boundary elevation.

  Primary (front) views from The Byres are orientated west away from the Site and associated construction activities, while garden views to the east are predominantly screened / buffered by mature garden trees.

  Main / front and garden views from Balvaird House are orientated south / southeast away from development.

Construction vehicle / plant & personnel movements to and from the Site would be screened by existing agricultural sheds between these properties and the access road located approx. 250 m east. Construction operations would present a magnitude of change assessed as Slight, and level of effect deemed Moderate (adverse) and notable.

- Leden Urquhart Cottage & Leden Urquhart Farm Cottage, are located 480 m south-southwest of the Site, and sit at approx. 192 m AOD. This is 13 m above the southwest corner of the Site.

  Primary / front views are orientated southwest away from the Proposed Development, while rear / garden views are predominantly screened by mature garden hedgerow and tree cover. Any glimpsed view of site construction activities within views to the north-northeast from the garden / driveway curtilage of Leden Urquhart Cottage would result in a Slight magnitude of change, predominantly from the gradual appearance of array infrastructure on the upper extents of Beins Law ridge. The level of effect would be Moderate, adverse, and not notable.

- Properties at Glentarkie Steading, 550 m to the east of The Site, sit at approx. 170 to 171 m AOD, which is approx. 37 m below the south-eastern corner elevation of The Site.

  The properties would be separated from construction activities by pockets of mature tree planting and field boundary / shelterbelt trees, coupled with local variance in topography. As such, there would be Negligible to no magnitude of change to, and effect on, residential visual amenity resulting from construction activities.

- Easter Catochil, is located 550 m to the north-northeast of the Site, and sits at approx. 225 m AOD on the southwestern face of Dumbarrow Hill. Front views from the property are orientated towards the Site. With the property elevation matching the northeastern corner and boundary of the Site, aspects across the intervening valley are uninterrupted and afford direct views of the northern / upper extents of Proposed Development.

  Construction activity and the gradual appearance of new array infrastructure extending over the ridge of hill would present a Moderate magnitude of change and a level of effect deemed Major/Moderate, adverse, and notable.

- MacGregor House, 560 m west of the Site, sits at approximately 210 m AOD which is approx. 24 m below the eastern boundary elevation.

  With similar setting and elevation to The Byres and Balvaird House (described above), the main orientation is to the south-southwest, away from Proposed Development. From the eastern extents of the garden curtilage, construction operations would present a magnitude of change assessed as Slight, and level of effect deemed Moderate (adverse) and notable.

- Leden Urquhart, 560 m to the south of the Site, sits at approximately 199 m AOD, with the main house and garden views orientated south-southwest away from Proposed Development. The intervening farm steading and stances of woodland / shelterbelt would partially screen and / or filter any glimpsed views of the upper and eastern extents of the construction activities from the garden curtilage. Accordingly, the magnitude of change would be Negligible, resulting in a Minor level of effect, adverse, and not notable.

- Glentarkie Cottage, is located 570 m to the east-southeast of the Site and sits at approx. 168 m AOD. The property is nestled within mature trees, affording main house and garden views that are focused to the southeast, away from Proposed Development. With a setting approximately 38 m lower than the southern boundary of the Site, coupled with intervening

shelterbelt woodland, there would be Negligible to no magnitude of change to residential visual amenity. The property is not considered further.

- Balvaird Cottages, located 660 m to the west of the Site, are outside the ZTV and are not considered further.
- Rosiebank, 750 m to the southeast of the Site, sits at approx. 171 m AOD. The property is approximately 5 m lower than the adjacent road, and 35 m lower than the southeastern extent of the Site. Main house and garden views are orientated south, away from the Proposed Development.

  Views of construction activities, namely the formation of eastern extent of array on the upper slopes of the Beins Law ridge, would see a Slight magnitude of change, resulting in a Moderate level of effect, which is considered adverse, and notable in this instance based on the proximity of view.
- East Cottage and West Cottage, located 770 m to the east-southeast of the Site, sit at approximately 161 m AOD. Both properties are afforded substantial visual screening of The Site and associated construction activities by intervening topography and bands of shelterbelt woodland / trees. There would be little to no magnitude of change to the visual amenity of these residences resulting from construction activities and as such they are not considered further.
- Pittuncarty, 780 m to the southeast of the Site, is predominantly screened from the construction activities of the Proposed Development by intervening large-scale farm sheds and mature shelterbelt / woodland cover. There would be little to no magnitude of change to the visual amenity of this residence resulting from construction operations and as such it is not considered further.
- Catochil Farm, 860 m to the north of Site, is afforded substantial screening to the south by mature perimeter garden trees / shelterbelt. Located at an elevation of 211 m AOD, 39 m below the highest point of Beins Law ridge within the Site, any glimpsed view of construction of the upper extent of the eastern array would see a Slight (at worst) magnitude of change resulting in a Moderate adverse level of effect on residential visual amenity which is deemed not notable in this instance.
- Catochil Farm Cottage, 910 m to the north of the Site, has a similar setting and elevation to Catochil Farm (as assessed above) at 211 m AOD. However, it is not afforded woodland screening to the south.

  With open southerly aspects to the ridge of Beins Law with West Lomond beyond, construction activities aligned with the upper extent of the eastern array would see a Slight magnitude of change resulting in a Moderate level of effect on residential visual amenity, which is deemed adverse, and notable.
- Glen Cottage, 930 m to the northeast of the Site and at an elevation of approx. 239 m AOD is afforded panoramic views southwest through southeast over the locally undulating farmed landscape to the Lomond Hills beyond.

  With intervening tree cover, any glimpsed view of the eastern extent of the upper array during construction would not be noticeable given distance. The magnitude of change would be Negligible with a resulting Minor level of effect, adverse and not notable.

Recreational Receptors

- Balvaird Castle, 500 m to the west-southwest of the Site is a Scheduled Monument, with its sensitivity as a visitor attraction deemed High. Although the tower house itself is not open to the public, the grounds and courtyards are accessible year-round. Courtyards and walled gardens surround the castle, with places to sit and view the surrounding landscape.

  Views of the Site are available from the tower and grounds. Given distance and changes in intervening topography, the most notable construction impact would be the gradual appearance of array infrastructure on the slope and ridge of Beins Law. The magnitude of change would be Moderate, with resultant level of effect classed as Major/Moderate, adverse, and notable.

- Core Path ABNY/26, is located 910 m to the northeast of the Site at the closest point, and passes through a varied landscape setting. This starts at Glen Wood to the northeast of The Site within the Lowland Hill Ranges, travelling southeast through managed farmland in the Upland Hills, before passing through the Lowland Hills and Valleys towards Strathmiglo.

  As illustrated by ZTV mapping (**Figure 1**), topography screens much of this route. Construction operations would be predominantly screened and accordingly would present a magnitude of change on path users deemed Negligible, with Minor level of effect, adverse and not notable.

- Core Paths ABNY/107 and ABNY/111, located 1.35 km northeast of the Site at the closest point, are on the edge of ZTV footprint as illustrated in **Figure 1**. Given the wooded character experienced by users, the magnitude of change resulting from glimpsed views of construction operations through gaps in tree cover, at distances over 1 km, would be Negligible. The level of effect would be Minor, adverse, and not notable.

- Core Path ABNY/22, located 1.5 km northeast of the Site at the closest point, is predominantly in the forested valley between Dumbarrow Hill and Turflundie Wood. Given its enclosed setting and predominantly wooded character, there would be no impact to walker visual amenity or perception as a result of construction operations. As such, this route is not considered further.

- The Bein Inn Hotel & Restaurant, 1.8 km west-northwest of the Site, is located within the incised and wooded valley of Glen Farg at the junction of The B996 and A912 roads. Given its enclosed setting there would be no impact on this local visitor amenity resulting from construction operations and as such it is not considered further.

Wider parts of the Core Path network within the 3 km Study Area are of a forested nature with restricted / contained views, or are outside of the footprint of the ZTV. As such, these routes are not considered further.

Road Users

Views from parts of the local road network would typically be experienced transiently and at speed. Accordingly, the sensitivity of road users is considered to be Medium.

- Leden Urquhart Road, 240 m south of the Site at closest point, is a predominantly local access road connecting dispersed farm and residential properties to the A91 & A912. Views of construction activity, notably the gradual appearance of the southern / eastern extent of array infrastructure on the slopes of Beins Law ridge, would see a Moderate magnitude of change. This would result in a Moderate level of effect, adverse, and notable in this instance based on the proximity of view.

- The A912 is predominantly incised or bounded by vegetation preventing direct views of construction activities from the majority of the route. A short section of road 400 m south of the Balvaird Castle junction, 1.2 km to the west-southwest of the Site, displays potential

visibility. Due to localised topography and intervening stances of woodland, any views of construction activity at the Site are unlikely. There would be a slight increase in visual traffic movement on the A912 north of The Bein Inn Hotel & Restaurant (B996 junction) due to The Site entrance, however this would not present a marked departure from existing vehicular movements on this road. The magnitude of change would be Negligible, with a Minor/Negligible level of effect, adverse, and not notable.

- The A91 is a major road, running from St Andrews in the east to Bannockburn in the central belt, via Cupar. Sections of this road, west of Gateside, 2.7 km to the south of The Site, and at Strathmiglo, 3 km to the southeast, display potential visibility. With views at an oblique angle to the direction of travel, combined with the distance to Proposed Development, and intervening variance in topography coupled with woodland & shelterbelt planting, any clear views of construction activity are unlikely. The magnitude of change would be Negligible, with a Minor/Negligible level of effect, adverse, and not notable.

Along with minor areas of site clearance, earthwork activities, excavation activities, material storage and an increase in traffic movement at the Site, the visual effects would occur primarily from the gradual appearance of the associated array and BESS infrastructure (which are considered below under 'Operational Effects').

On balance, the visual magnitude of change experienced by local receptors during the construction phase would be Slight to Moderate (at worst). The resultant effect would be Moderate at worst, and notable at a local level (<1 km from the Site); predominantly limited to those residential receptors to the south of the Site with views of the open slope of Beins Law ridge and summit, and residences to the north and northwest at a similar elevation to the Site with open aspects towards the ridge of Beins Law.

10 Operational Landscape Effects

This section examines the effects arising as a result of the Proposed Development with reference to landscape fabric within the Site, landscape character and landscape designations.

10.1 Effects on Landscape Fabric

As described above, the local landscape of the Site comprises agricultural / livestock-grazed managed grassland, which is void of any notable features of high landscape value. The wider landscape is predominantly actively-managed agricultural land (grazing), though this is heavily influenced by the Binn Ecopark waste and recycling facility and coniferous plantation woodland, characteristic of the host, and surrounding, LCTs.

The landscape fabric within the Site is assessed as being of Low to Medium sensitivity to the Proposed Development.

The Proposed Development would result in the long-term (40 year) introduction of new electrical generation and storage infrastructure into an area that is predominantly influenced by upland farming. On balance, the residual magnitude of change upon the fabric within the Site would be Moderate, giving rise to a Moderate level of effect (adverse, and notable in this instance). This effect

is reversible.

10.2 Effects on Landscape Character

The effect of the Proposed Development on landscape character largely depends on the key characteristics of the receiving environment; the degree to which the development may be considered to be consistent with or at odds with it; and how the proposal would be perceived within its setting.

Effects on Lowland Hill Ranges LCT and Lowland Basins LCT

With reference to sensitivity analysis within **Annex B**, the local Landscape Character at the Site is assessed as being of Medium sensitivity to the Proposed Development. The effects on landscape character would be direct (predominantly affecting the Site itself) and indirect (affecting the visual and perceptual characteristics of the surrounding area).

There would be no permanent loss of notable valued natural features to facilitate introduction of the BESS compound, solar array, or associated infrastructure. Site access would use existing local roads and field access tracks, with further internal tracks of a temporary and removable construction type.

The interrelationship of the Lowland Hill Ranges in views from the adjacent Lowland Basins is dynamic, with ridges and valleys appearing and disappearing within views in short geographic distances due to the dip slope nature of the landscape. The BESS compound would be located within a less elevated area of the Site and backdropped by existing woodland, while the lower-level solar array would be seen cresting the ridge of Beins Law in certain views from within both the Lowland Hill Ranges and Lowland Basins LCTs. However, the underlying landform would contain views of the Proposed Development from wider parts of the surrounding landscape, as illustrated in the fragmented ZTV coverage across parts of these LCTs at distances beyond approximately 1 km.

The scale of the Proposed Development in context with the scale of the landscape (both LCTs classed as being medium), along with the pattern and scale of nearby areas of woodland (which blankets many ridges and summits), results in a magnitude of change that is deemed to be Moderate across local parts of the Lowland Hill Ranges LCT and Lowland Basins LCT within 1 km of the Proposed Development. The magnitude of change would reduce at greater distances based on the screening influence of the dipslope landform and the presence of the existing Binn Ecopark facility to the north, which exerts a notable influence on local landscape character in its own right. On this basis, the level of effect is classed as Moderate, adverse, and notable within 1 km of the Proposed Development. Beyond 1 km the level of effect on these LCTs is deemed to be Moderate/Minor or less (adverse, and not notable).

<u>Adjacent LCTs</u>

Lowland Hills and Valleys LCT

This LCT extends south of the Site, encompassing the Lomond Hills which form a backdrop to many of the views from the north. The lower-lying areas and slopes within the LCT are predominantly outside the ZTV. Instead, potential views of the Proposed Development would be predominantly restricted to areas of higher ground, which are typically located at greater distance from the Proposed

Development, tempering potential indirect effects upon local landscape character.

The climb to, and summit of, West Lomond allows panoramic views north towards the Site. From this important vantage point, which is outside the 3 km Study area, Proposed Development would represent a discreet addition to the Lowland Hill Ranges, viewed in the mosaic of field patterns, woodland, and coniferous plantations. As such, development would not alter the interrelationship between the LCTs, nor disrupt the character or perception of the Lowland Hills and Valleys. In summary the effects on the Lowland Hills and Valleys LCT would be Negligible, not notable.

Upland Hills LCT

Located to the east / northeast, the Upland Hills which include Clamieduff Hill, Broom Hill, and New Hill are predominantly blanketed with plantation forestry which contains numerous walking routes along the associated commercial tracks. Furthermore, the majority of the LCT is outside the ZTV, reflecting the screening influence of the intervening landform. Potential views of the Proposed Development would be limited to the southwestern edge of the LCT. From this localised part of the LCT, the Proposed Development would represent a new man-made feature within the lower Lowland Hill Ranges and fringe Lowland Basins landscapes. However, the Proposed Development would not be an overriding influence on interrelated Landscape Character, or disrupt the perception of commercial operations which are present in all LCTs within the Study Area. This includes the existing Binn Ecopark facility. In summary the effects on the Upland Hills LCT would be Negligible, not notable.

10.3 Effects on Landscape Designations

As previously determined, there are no international or national landscape designations directly, or indirectly impacted by the Proposed Development.

Local Landscape Designations

Ochil Hills Local Landscape Area (LLA)

The Site, in close proximity to the Binn Ecopark and waste recycling facility, is located within the south of the northeastern spur of this LLA. While the Ochil Hills create a prominent and important backdrop in many lowland views with the southern face of the hills forming a dramatic escarpment, the local surrounding landform tends to screen the Binn Ecopark, which is nestled at a lower elevation within a sheltered basin.

Stretching approx. 40 km from the Firth of Tay to Stirling, the range of hills forms a plateau which is undulating with no prominent peak, the highest point being Ben Cleuch at 721 m AOD which affords views across the central belt. Several of the hilltops are crowned with telecommunications masts and aerials which bring vertical structures into the upland landscape. As with interior wind farms and sporadic single wind turbines located along the fringe, these masts can be visible over long distances.

The Site is in an area of the LLA where the “wildness” and remoteness / tranquility are substantially degraded by the M90 corridor and more extensive lowland fringe influences such as the Binn Ecopark facility. While the motorway alignment is sympathetic to the immediate landscape form (following a glen through the hills), the movement and noise have a considerable impact on the local landscape.

As illustrated by ZTV mapping (see **Figure 1**), the influence of the Proposed Development within the LLA is limited, with direct visual influence predominantly within 1 km. Pockets of visibility occur to the east; north; and northwest through southwest, on the face of hills which ring the Site at approx. 2 km.

The setting of the Ochil Hills as a dramatic backdrop in lowland views from Stirling and Clackmannanshire to the south, along within expansive elevated views from the Lomond Hills to the southeast, would not be notably impacted by the Proposed Development, given the contained scale of ZTV influence in the vicinity of The Site.

The sense of remoteness that the interior of this hill range provides to recreational users would not be impacted by the Proposed Development given the screening influence of topography, namely Ballmanno and Blairstruie Hills at 229 m and 221 m AOD respectively, to the west of the M90 corridor, approx. 4.4 km northwest of the Site. Viewed at distance within the mosaic of surrounding land uses, Proposed Development would be barely perceptible, presenting no obvious alteration to the perception of this area of the LLA from the uplands.

While an important regional landscape designation, the LLA at the Site is deemed to have medium sensitivity to the type and scale of Proposed Development, given the special circumstances surrounding the location of recycling and energy generation infrastructure at Binn Ecopark. Magnitude of change on the overall LLA is considered Negligible, with a Minor to Minor/Negligible level of effect deemed adverse, and not notable.

Loch Leven and Lomond LLA (PKC) / Lomond Hills LLA (FIFEplan 2017)

This LLA is located approx 2.75 km to the south of the Proposed Development at the closest point, with a minor area to the southwest of Strathmiglo included within the Study Area. The LLA falls over the council boundaries of both PKC and Fife, and contains two prominent peaks, namely West Lomond and East Lomond, which sit just under 5 km apart above a long north and west-facing escarpment over 10 km in length. As with the Ochil Hills, these peaks and escarpment form a prominent backdrop to many views from the lowlands and from within further upland areas.

As topography rises to the south of the River Eden (above the 100 m AOD contour line), views to the north begin to encompass the upper extent of the Lowland Hill Ranges on the opposite side of the Eden valley. This includes potential views of the Site. At a distance of approx. 5.40 km to the summit cairn of West Lomond, the Site and Proposed Development would not be discernible amongst the mosaic of land uses, inclusive of blanketing commercial forestry. The magnitude of change on this LLA is considered to be Negligible, with level of effect deemed Minor, adverse, and not notable.

There would be no direct, or indirect, impact or effect on Ancient Woodland found outside the Site. As such, there is no further assessment on woodland.

11 Operational Visual Effects

This section examines the visual effects based on changes to the existing view as experienced by people within the surrounding landscape (as described in **Section 6.4**). This process draws on the

results of the ZTV and viewpoint analysis.

11.1 Visual effects experienced by Local Residents

The appraisal below considers the effects experienced by local residents in isolated residential dwellings/steadings in closest proximity to the Site. In all cases, sensitivity is deemed to be High. Residential properties are shown in **Figure 4**, overlaid with ZTV mapping.

- Gamekeepers Cottage, 140 m to the north.

  Within residual (long-term) views to the crest of Beins Law hill ridge, residents would experience the array infrastructure on the upper extent of the ridge. Given the elevation of the property and distance to the Site, the array would form a new element on the skyline. However, the BESS infrastructure and wider parts of the solar array in the southern part of The Site would be screened by the intervening landform. As such, the Proposed Development would result in relatively minor changes to the view. The minor addition to landscape character and composition would give rise to a magnitude of change deemed Slight, with a Moderate (adverse) and notable level of effect.

- The Byres and Balvaird House, 410 m and 420 m respectively, to the west.

  Primary (front) views from The Byres are orientated west away from development, while garden views to the east are predominantly screened / buffered by mature garden trees.

  Given localised changes in topography, coupled with the intervening presence of large-scale agricultural sheds, views of the Proposed Development would be limited. Accordingly, the magnitude of change would be Slight, with a Moderate (adverse) and not notable level of effect.

  Main / front and garden views from Balvaird House are orientated south / southeast away from development.

  Small pockets of mature garden trees would provide an element of screening. Given distance and elevation change between the property and the Site, there would be partial views of the Proposed Development, oblique to the primary direction of View. The magnitude of change in eastern views from the house and garden curtilage would be Moderate, with a Major/Moderate level of effect deemed adverse and notable.

- Leden Urquhart Cottage & Leden Urquhart Farm Cottage, 480 m south-southwest.

  Primary / front views are orientated southwest away from Proposed Development, while rear / garden views are predominantly screened by mature garden hedgerow and tree cover.

  Any glimpsed view north-northeast towards the Site from the garden and driveway curtilage of Leden Urquhart Cottage would be limited to partial views of the array infrastructure on the upper extents of Beins Law ridge. Given the restricted nature of the view, this would result in a Slight magnitude of change at most. The level of effect would be Moderate, adverse, and not notable in this instance due to the restricted views from the property.

  There would be no perceptible change to the visual amenity of Leden Urquhart Farm Cottage, with no notable level of effect.

- Easter Catochil, 550 m to the north-northeast.

Primary / front aspects across the intervening valley are uninterrupted and afford direct views of the northern / upper extents of the array infrastructure. Conversely, the BESS compound would be screened by existing woodland.

The new solar array, seen as a low-lying element over the ridge of hill, would present a Moderate magnitude of change and a level of effect deemed Major/Moderate, adverse, and notable.

- MacGregor House, 560 m west.

  The main orientation of views from this property is south-southwest, away from Proposed Development. From eastern extents of garden curtilage, there would be partial views of the BESS infrastructure and the new array. This would present a magnitude of change assessed as Slight, and level of effect deemed Moderate (adverse) and notable in this instance based on the proximity of view.

- Leden Urquhart, 560 m to the south.

  The main house and garden views are orientated south-southwest, away from Proposed Development.

  Intervening farm steading and stances of woodland / shelterbelt trees would partially screen and / or filter any glimpsed views of the upper and eastern extents of the new array from the garden curtilage. Accordingly, the magnitude of change would be Negligible with a Minor level of effect, adverse, and not notable.

- Rosiebank, 750 m to the southeast.

  The main house and garden views are orientated south, away from the Proposed Development.

  Potential views of the Proposed Development would be primarily limited to parts of the garden, and would be tempered by the intervening landform. Views of the eastern extent of the new solar array on the upper slopes of the Beins Law ridge from the garden curtilage would see a Slight magnitude of change, resulting in Moderate level of effect, adverse, and notable in this instance based on the elevated location of the array within the view.

- Catochil Farm, 860 m to the north.

  The house is afforded substantial screening to the south by mature perimeter garden trees / shelterbelt.

  Any glimpsed view of the upper extent of the eastern array would see a Slight (at worst, during winter months / periods of leaf-fall) magnitude of change. This would result in a Moderate adverse level of effect on residential visual amenity, which is deemed not notable in this instance due to the limited visibility during summer months in particular.

- Catochil Farm Cottage, 910 m to the north.

  The cottage has a similar setting to Catochil Farm, however, is not afforded woodland screening to the south.

  With open southerly aspects to the ridge of Beins Law, with West Lomond experienced beyond, there would be uninterrupted views of the upper extent of the eastern array. This would see a Slight magnitude of change, resulting in a Moderate level of effect on residential visual amenity which is deemed adverse and notable in this instance based on the open nature of the view.

- Glen Cottage, 930 m to the northeast.

The house is afforded panoramic views southwest through southeast over the locally undulating farmed landscape to the Lomond Hills beyond. However, potential views of the Proposed Development would be restricted by intervening tree cover.

With intervening tree cover, any glimpsed view of the upper eastern extent of the new array would not be noticeable given distance. Magnitude of change would be Negligible with resulting Minor effect, adverse and not notable.

11.2 Visual effects experienced by Recreational Receptors

The appraisal of effects experienced by recreational receptors is described below, listed in order of increasing distance from the Proposed Development. Recreational receptors are considered to be of High sensitivity unless stated otherwise.

Recreational Receptors

- Balvaird Castle, 700 m to the west-southwest of the Site.

  With historical interest aligned to the castle, coupled with open views of the Lowland Basins, Lowland Hills and Valleys, Lowland Hill Ranges, and Upland Hills LCTs, Balvaird Castle is an important visitor site and viewpoint. As a visitor destination, the grounds provide places to sit and view the surrounding landscape. On this basis, the sensitivity of visitors is High.

  With reference to Viewpoint 1, there would be partial views of the Proposed Development in the landscape to the east. New array infrastructure on the slope and ridge of Beins Law would be a noticeable and important new element in the view of the Lowland Basins / Lowland Hill Ranges, and how these LCTs are perceived. However, wider parts of the Proposed Development, including the BESS compound and solar array areas within the eastern and northern parts of the Site would be fully screened by the intervening landform. On balance, the magnitude of change would be Moderate, with the resultant level of effect classed as Major/Moderate, adverse, and notable.

Core Path network

- Core Path ABNY/26, is located 910 m to the northeast of the Site at closest point, passes through a varied landscape setting. This starts at Glen Wood to the northeast of the Site within the Lowland Hill Ranges, travelling southeast through managed farmland in the Upland Hills, before passing through the Lowland Hills and Valleys towards Strathmiglo.

  As illustrated by ZTV mapping (**Figure 1**), topography screens views of the Proposed Development from much of this route. Views of the solar array and BESS compound would be predominantly screened, and would represent a very discreet element in the most open views. Accordingly, the magnitude of change on views experienced by path users is deemed Negligible, with a Minor level of effect, adverse and not notable.

- Core Paths ABNY/107 and ABNY/111, located 1.35 km northeast at closest point, are on the edge of ZTV footprint as illustrated in **Figure 1**. Given the wooded character of the landscape along the paths, potential views of the Proposed Development as experienced by users would be extremely limited. Accordingly, the magnitude of change would be Negligible. The level of effect would be Minor, adverse, and not notable.

11.3 Visual effects experienced by Road Users

- Leden Urquhart Road, is located 240 m south of the Site at closest point. Views of the Proposed Development would encompass the southern / eastern extent of solar array on the slopes of Beins Law ridge (see Viewpoint 2). This would see a Moderate magnitude of change, resulting in Moderate level of effect. This is assessed as adverse, and notable in this instance based on the location of the array on the skyline.
- The A912, is located 400 m south of the Balvaird Castle junction, 1.2 km to the west-southwest of the Site. Due to localised topography and intervening stances of woodland, any views of the Proposed Development are unlikely, and would remain predominantly screened. The magnitude of change would be Negligible, with Minor/Negligible level of effect, adverse, and not notable.
- The A91, is located to the south of the Site. ZTV coverage of the route is very limited, and focused on localised sections west of Gateside, 2.7 km to the south of the Site, and at Strathmiglo, 3 km southeast. From these sections of the route, oblique views of the Site would remain limited by intervening landform and vegetation (see Viewpoint 4). As such, views of the Proposed Development are unlikely, and within glimpsed views the Proposed Development would represent a very discreet element in the background landscape. Accordingly, the magnitude of change would be Negligible, with a Negligible level of effect, adverse, and not notable.

12 Cumulative Effects

This section considers the potential cumulative effects of the Proposed Development in combination with other notable developments within the 3 km Study Area. **Table 3** lists all development at screening stage; in planning; consented; under construction; and existing / operational within the landscape. These cumulative developments are shown within **Figure 5: Cumulative Development**.

Table 3: Cumulative Developments

Development	Status	Distance/Direction*
Hydrogen production facility on land 200m Southeast of Orchard Bungalow, Binn Farm, Glenfarg (25/01484/FLL)	Full Planning Application	~645 m northwest (at closest point)
Four-turbine wind farm (14/01970/FLL)	Operational	~725 m north (to closest turbine)
Binn Energy from Waste (EfW) facility (20/01242/FLM)	Under Construction	~835 m northwest (at closest point)
Binn Ecopark waste and recycling facility	Existing	~865 m north (at closest point)
Binn Ecopark Solar (21/00705/FLL)	Consented	~1 km north
Binn Ecopark BESS (21/00834/FLL)	Consented	~1 km north

**All distances are from The Site boundary / redline application boundary to nearest cumulative site boundary.*

The cumulative effects in association with existing developments are considered certain, and those with consented developments are considered very likely. As such, the cumulative assessment that follows covers existing, under construction, and consented development together. Potential cumulative effects in combination with other proposals are inherently less certain, and are therefore considered separately.

Landscape and visual receptors described in **Sections 10** and **11** as undergoing/experiencing a Negligible or Slight/Negligible magnitude of change (or less), are excluded from consideration in the cumulative assessment on the basis that the Proposed Development would exert such a limited effect in its own right that it would not meaningfully contribute to potential cumulative effects. As such, it would not tip the balance from a minor cumulative effect to a notable cumulative effect.

12.1 Cumulative Landscape Effects

Cumulative Effects on the Lowland Hill Ranges and Lowland Basins LCTs

Since the development of the Binn landfill site, which closed in September 2014, the Binn Ecopark has expanded, further influencing the local area in which it is situated. This has included the development of two separate Material Reclamation Facilities (MRF), an anaerobic digestion facility, in-vessel and green-waste composting facilities, a residual waste Solid Recovered Fuel (SRF) facility, and waste wood processing and storage facilities.

Further recent development of facilities for waste management has seen increased building at the Binn Ecopark, along with on-site energy production in the form of a 4no turbine wind farm and consented solar farm & battery storage (BESS). The existing, and expanding, facility is predominantly screened from wider parts of the surrounding landscape by the nature of the valley it is located in within the Lowland Hill Ranges LCT. The facility therefore has a direct and contained effect on the localised area of the LCT in which it sits, with notable effects limited to within 1 km and fragmented to 3 km to the west, beyond the M90 motorway corridor where there are limited sensitive receptors.

By dint of their vertical and moving nature, the 4no turbines of the Binn Wind Farm are noticeable in views from both the Lowland Hill Ranges and Lowland Basins LCTs. From lower (basin) elevations, many such views are of tip of blade, while from upper Lowland Hill Ranges elevations, some views experience full turbine or multiple turbines.

The introduction of the solar array would see the localised spread of renewable infrastructure extend slightly further to the south, into the Lowland Basins LCT. Intervisibility of both the Proposed Development and existing wind energy schemes would be possible in certain views, predominantly from the south, with some direct views from the west at approx. 2.5 – 3 km distance. From lowland areas, any perceived connection with the existing structures of the Binn Ecopark waste recycling facility would be unlikely. The cumulative magnitude of change on the host LCTs based on the presence of the Proposed Development in combination with the wind farm would be Moderate, with a Moderate level of effect, which is deemed adverse and notable in this instance with reference to the contrast with the surrounding areas of agriculture.

The addition of the proposed Hydrogen production facility (on land 200 m southeast of Orchard Bungalow) would exert limited change to the cumulative context. This is based on its spatial separation from the Proposed Development, and its location within a local landscape context that is already influenced by the Binn Ecopark facility. Accordingly, there would be no change to the cumulative level of effect described above.

Cumulative Effects on adjacent LCTs

In addition to the Proposed Development, the existing, under construction, and consented developments listed above are / will be located within the Lowland Hill Ranges and Lowland Basins LCTs. Similarly, the other development proposal within the Study Area would be located within the Lowland Hill Ranges LCT. The potential influence of these developments on adjacent LCTs is therefore limited to indirect effects based upon views.

Lowland Hills and Valleys LCT

This LCT serves both as a backdrop to many of the views from the north, while offering views into and across adjoining LCTs.

From lower valley locations, the main operations at Binn Ecopark are not apparent. However, as with the Lowland Basins, views of the blade tips of wind turbines can be experienced from localised areas. From more elevated vantage points south and southeast, the Binn turbines are typically more visible and can be experienced as a grouping, comprising all four turbines in their entirety. This is, however, at greater distance.

The cumulative magnitude of change on fabric and character of this LCT, as perceived by potential combined views at distance, would be Slight. The cumulative level of effect would be Moderate/Minor, adverse, and not notable.

The addition of the proposed Hydrogen production facility would exert no change to the cumulative level of effect described above.

Upland Hills LCT

Located to the east / northeast, the Upland Hills which include Clamieduff Hill, Broom Hill, and New Hill are predominantly blanketed with plantation forestry which limits pedestrian access to designated tracks, and constrains wider views to adjoining LCTs.

Potential views of infrastructure at the Binn Ecopark facility are predominantly screened from view, albeit the operational wind turbines are visible from more open vantage points by virtue of their vertical scale. The combination of the Binn turbines experienced in limited and filtered views with the Proposed Development through gaps in intervening tree cover would excerpt a cumulative magnitude of change deemed Slight at worst, with Moderate/Minor level of impact. This would be adverse and not notable.

The addition of the proposed Hydrogen production facility would exert no change to the cumulative level of effect described above.

12.2 Cumulative Visual Effects

Cumulative Effects Experienced by Local Residents

- Gamekeepers Cottage, 140 m to the north.

  The cumulative impacts experienced from this property would see a magnitude of change deemed Moderate, notably from the presence of existing wind turbines to the northeast and the appearance of new solar array infrastructure on the upper extent of the Beins Law ridge to the south (within a different field of view). This would result in a Major/Moderate (adverse) and notable cumulative level of effect.

- The Byres and Balvaird House, 410 m, and 420 m respectively, to the west.

  Rotational (within different fields of view) and combined views of Proposed Development and existing turbines / Binn Ecopark facility are limited given intervening topography and pockets of trees.

  Accordingly, the cumulative magnitude of change would be Slight, with a Moderate (adverse) and not notable level of effect.

- Leden Urquhart Cottage 480 m south-southwest.

  Glimpsed views north-northeast from the garden and driveway curtilage would encompass parts of the array infrastructure on the upper extents of Beins Law ridge. These elements would be experienced in combination with tip of blades of 2no Binn Wind Farm turbines. No further Ecopark infrastructure is viewed.

  The cumulative magnitude of change would be Slight. The cumulative level of effect would be Moderate, adverse, and not notable in this instance based on the limited proportion of view that would be affected.

- Easter Catochil, 550 m to the north-northeast.

  Rotational views of Binn Ecopark buildings, infrastructure, and new EfW facility from this property are restricted by intervening topography and woodland. These elements provide some visual screening from Binn Wind Farm turbines also, though top of mast / nacelle is visible in views to the west.

  The cumulative magnitude of change with existing and future development resulting from new solar array infrastructure seen as a low-lying element over the ridge of Beins Law would be Slight. The cumulative level of effect is deemed Moderate, adverse, and notable in this instance based on the elevated location of infrastructure within views of the skyline.

- MacGregor House, 560 m west.

  The main orientation of views from the property is south-southwest, away from Proposed Development. Rotational and combined views of the Proposed Development and existing turbines / Binn Ecopark, including the under-construction EfW facility, are limited given intervening topography and pockets of trees.

  The cumulative magnitude of change with other development would be Slight, with a Moderate (adverse) and not notable level of effect in this instance due to the filtering influence of intervening tree cover.

- Rosiebank, 750 m to the southeast.

  Main house and garden views are orientated south, away from the Proposed Development.

  The western ridge of Beins Law effectively prevents views of the existing Binn Ecopark and wind farm. As such, there would be no cumulative views of the Proposed Development in combination with other cumulative developments. Accordingly, there would be no increase in the level of effect reported within the main assessment.

- Catochil Farm, 860 m to the north.

  The house is afforded substantial screening to the south by mature perimeter garden trees / shelterbelt.

  Any glimpsed view of the upper extent of the eastern array, in combination with operations at Binn Ecopark would see a Slight (at worst) magnitude of change. This would result in a Moderate adverse cumulative level of effect on residential visual amenity, which is deemed not notable in this instance due to the filtering influence of intervening tree cover.

- Catochil Farm Cottage, 910 m to the north.

  The cottage has a similar setting to Catochil Farm, however, is not afforded woodland screening to the south.

  Open southerly aspects to the ridge of Beins Law allows uninterrupted views of the upper extent of the solar array, above the existing and consented operations at Binn Ecopark. The combined magnitude of change is deemed to be Moderate, resulting in a Major/Moderate level of effect on residential visual amenity, which is deemed adverse and notable.

Cumulative Effects Experienced by Recreational Receptors

- Balvaird Castle, 700 m to the west-southwest of the Site.

  From the visitor carpark pedestrian access route, on approach to the castle there are direct views of the Binn Farm Wind Farm turbines. Given localised variations in topography, coupled with intervening woodland, the extent of turbine(s) and duration of view changes.

  From the grounds of the castle, and as illustrated in VP1 (see **Annex D**), the southern extent of the Proposed Development array would be seen in combined views with the blades of the eastern-most Binn Farm turbine.

  The combined magnitude of change is not significantly different to the standalone impact, as assessed. This would be Moderate, with the resultant cumulative level of effect classed as Major/Moderate, adverse, and notable.

Cumulative Effects Experienced by Road Users

- Leden Urquhart Road, 240 m south of the Site at closest point, is an undulating local access road which is popular with cyclists and walkers.

  Traveling north from the A912, beginning ~300 m west of Leden Urquhart farm access road, direct views towards Beins Law take in the western and southern extent of the Site along with the nacelles & blades of the 4no. turbines at Binn Wind Farm. Travelling further east, the form of the hill obscures the majority of the wind farm, with the blades of the eastern-most turbine seen above crest of ridge. There would be no discernible views of other cumulative developments.

  In summary, the combined visibility of energy development would see a Moderate cumulative magnitude of change resulting in Moderate level of effect, adverse, and notable in this instance based upon the most open views from the road.

13 Conclusions

The Proposed Development, located in an upland position within a lowland hill range, would introduce renewable infrastructure to an area of mixed agriculture. The elevated nature of the Site makes blanket boundary mitigation screen planting unfeasible, although considered and embedded landscape interventions would soften direct and indirect adverse impacts on identified sensitive receptors, while being of benefit to local and wider habits by introducing biodiversity and a reduction in more intensive grazing and land management. Consideration of existing perimeter woodland in the northwest to locate BESS development provides back-dropping and screening to this element of the proposal. Existing external roads and tracks allow for minimal disruption outside of the Site boundary, while new internal tracks will match existing agricultural construction / formation methods.

As assessed, there is no notable difference between the effects of construction and the residual / long-term effects of the solar farm & BESS, given the nature of development, the short-term of construction, and the quick appearance of infrastructure within the landscape. As such, effects described within this summary / conclusion are considered to be the residual effects of development.

In terms of landscape effects, the Proposed Development would result in the spread of renewable infrastructure across the southern edge of the Lowland Hill Ranges LCT and into the Lowland Basins LCT, where baseline perception of energy generation is currently limited to views of the Binn Farm / Ecopark wind farm turbines. The change from upland grazed field to solar & BESS development would result in notable effects on localised parts of the Lowland Hill Ranges LCT and Lowland Basins LCT, within 1km of The Site. From adjacent lowland LCTs in the wider surrounding area, topography and intervening woodland cover tends to screen the Proposed Development from view. As a result, there would be very limited intervisibility, and no notable effects upon landscape character. Similarly, from wider upland LCTs, the Proposed Development would be subject to screening, viewed at distance, and experienced within the existing mosaic of agricultural field patterns and blanket woodland / coniferous plantation. Accordingly, it would not result in a notable level of effect.

The Site is located within the outer, southern edge of the Ochil Hills LLA. This landscape designation is recognised for providing areas of remoteness and a backdrop to surrounding LCTs. As assessed, the impact and resultant effect on this large LLA are deemed to be localised and not notable due to the detracting influence of nearby busy motorway corridor and adjacent Binn Ecopark recycling facility and wind farm within the eastern extent. The effects of these existing features on the baseline landscape and the perception of intrinsic idyllic rural setting are notable.

Visual effects are restricted based on the Site location, which is spatially remote from sizeable residential settlements and busy travel routes. Notable effects would be experienced by residents at Gamekeepers Cottage; Easter Catochil; and Catochil Farm Cottage, located to the north or north-northeast of the Site; and Rosiebank alongside MacGregor House, located to the southeast and west. These effects would reduce over time in accordance with the establishment of embedded planting measures, although screening of development in its entirety would not be possible.

Based on its proximity to Proposed Development and views to localised parts of the solar array in the

southwestern part of the Site, effects on views from Balvaird Castle would be notable. The embedded landscape strategy, which sees an intervening buffer of woodland and scrub planting introduced as part of the Proposed Development, would lessen / soften the direct adverse effect of the southern extent of array on this asset; however, it would not be possible to fully mitigate adverse visual impact.

The amenity of recreational Core Path users in the local and wider landscape would not be notably impacted or adversely affected by Proposed Development.

Overall, the cumulative influence of the Proposed Development on the landscape and visual resource would be restricted by the dipslope nature of the local landscape and the wider topographic variances afforded by the basins and lowland hills LCTs.

As such, cumulative effects in association with the existing 4-turbine Binn Wind Farm would result in a slight increase in perception of renewable infrastructure within the Lowland Basins LCT, extending southwards from the existing development. This would encompass a relatively localised area with a limited number / presence of sensitive receptors. The Proposed Development, in combination with other proposed, consented and existing energy infrastructure, would not result in a notable alteration to wider landscape character or the visual perception of this landscape.

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Appendix A: LVA methodology

Landscape Effects

The starting point for the assessment of landscape effects was a desk-based review of published landscape assessments.

The sensitivity of the landscape to change resulting from a Proposed Development is not absolute and varies according to the existing landscape, the nature of the Proposed Development and the type of change being proposed. Good practice guidance differentiates between baseline sensitivity of the landscape and the sensitivity of a landscape to a specific development proposal (*Landscape Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity*, 2004, NatureScot & Countryside Agency). Accordingly, the concept of 'sensitivity to change' to new development, as described within the baseline published landscape character assessments, is distinct from the consideration of landscape sensitivity to the specific development proposal.

The baseline for consideration of landscape effects is the established landscape character. The landscape effects of a Proposed Development are considered against the key characteristics of the receiving landscape. The degree to which the Proposed Development may change 'the distinct and recognisable pattern that makes one landscape different from another, rather than better or worse' (Countryside Agency and NatureScot, 2002), enables a judgement to be made as to the significance of the effect in landscape character terms. This involves consideration of where the Proposed Development may give rise to a different landscape character type or sub-type.

In general terms, a distinctive landscape of acknowledged value (e.g. covered by a designation) and in good condition is likely to be more sensitive to change than a landscape in poor condition and with no designations or acknowledged value. General guidance on the evaluation of sensitivity is provided below; however, the actual sensitivity would depend on the attributes of the landscape receiving the proposals and the nature of those proposals.

In order to reach an understanding of the effects of development upon the landscape it is necessary to consider different aspects of the landscape as follows:

- Landscape Fabric / Elements: The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified;
- Landscape Quality: The state of repair or condition of elements of a particular landscape, its integrity and intactness and the extent to which its distinctive character is apparent;
- Landscape Value: The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or regional consensus, because of its special qualities/attributes including aesthetic or perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or nature conservation interest; and
- Landscape Key Characteristics: The particularly notable elements or combinations of elements which makes a particular contribution to defining or describing the character of an area, which may include experiential characteristics such as wildness and tranquillity.

The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value. The overall sensitivity is described as high, medium or low. This is assessed by taking into account the existing landscape quality, landscape value, and landscape capacity or susceptibility to change, which often vary depending on the type of development proposed and the particular site location, such that sensitivity needs to be considered on a case-by-case basis. This should not be confused with 'inherent sensitivity' where areas of the landscape may be referred to as inherently of 'high' or 'low sensitivity.

For example, a National Park may be described as inherently of high sensitivity on account of its designation, but it may prove to be less sensitive to particular development and/or the design of that development.

Alternatively, an undesignated landscape may be of high sensitivity to a particular development and/or the design of that development regardless of the lack of local or national designation. The main factors to consider are discussed as follows:

Landscape susceptibility according to GLVIA3 means "the ability of the landscape to accommodate the Proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies". Judgements on landscape susceptibility include references to both the physical and aesthetic characteristics and the potential scope for mitigation that would be in character with the landscape.

The judgements regarding susceptibility and value of the landscape character are identified within the Table A.1. These relationships can be complex and value alone does not automatically or by definition have high susceptibility to all types of change. Examples and on the evaluation of landscape sensitivity are provided below:

Table A.1: Landscape sensitivity criteria

High Sensitivity	Landscape character, characteristics and elements which would generally be of lower landscape capacity or scope for landscape change, and of notable landscape value and quality. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change if inappropriately dealt with.
Medium Sensitivity	Landscape character, characteristics and elements where there would be a moderate landscape capacity or some scope for landscape change. Often include landscapes of moderate landscape value and quality which may be locally designated.
Low Sensitivity	Landscape Character, characteristics and elements where there would be higher landscape capacity or scope for landscape change to accommodate the proposed type of development. Usually applies to landscapes with of lesser landscape susceptibility or higher landscape capacity for the Proposed Development.

The level of landscape effects is not absolute and can only be defined in relation to each development and its location. It is for each assessment to determine the assessment criteria and thresholds using well informed and reasoned judgements.

The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- degree of loss or alteration to key landscape features/elements or characteristics;
- distance from the development;
- duration of effect;
- landscape backdrop to the development;
- landscape context of other built development, particularly vertical elements.

In order to differentiate between different levels of magnitude the following definitions are provided:

Table A.2: Landscape magnitude of change definitions

Substantial	Total loss or extensive alteration to key landscape elements/features/ characteristics of the baseline, or introduction of uncharacteristic elements which would give rise to a fresh characterising effect.
Moderate	Partial loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may be prominent, but not necessarily substantially uncharacteristic with the attributes of the receiving landscape (which could co-characterise parts of the landscape).
Slight	Minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may not be uncharacteristic with the surrounding landscape or may not lead to a characterising or co-characterising effect.
Negligible	Very minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or the introduction of elements that are not uncharacteristic of the surrounding landscape. Change would be barely distinguishable approximating to no change.

Having established where the observation of varying levels of change to the landscape baseline may occur, the geographical extent of the change can be identified and a judgement made as to the level of effect in landscape character terms at varying scales.

The importance of the effect on the landscape resource may be determined by correlating the magnitude of the landscape effect (substantial, moderate, low or negligible) with the sensitivity of the landscape resource (high, medium or low). The following table sets out the main correlations between magnitude and sensitivity.

Table A.3: Landscape effects matrix

Landscape sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	Negligible
	High	Major	Major/Moderate	Moderate	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
	Low	Moderate	Moderate/Minor	Minor	Negligible

Visual Effects

The sensitivity of potential visual receptors will vary depending on the location and context of the viewpoint, the activity of the receptor and importance of the view. Visual receptor sensitivity is defined as high, medium, or low in accordance with the criteria in **Table A.4**.

Table A.4: Visual sensitivity criteria

High Sensitivity	Residents within the curtilage of their homes; users of outdoor recreational facilities including footpaths, cycle ways and recreational road users; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.
Medium Sensitivity	Road users and travellers on trains experiencing views from transport routes. People engaged in outdoor sport other than appreciation of the landscape, e.g. nature conservation, golf and water-based recreation.
Low Sensitivity	Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings.

The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- distance of the viewpoint/receptor from the development;
- duration of effect;
- extent of the development in the view;
- angle of view in relation to main receptor activity;
- proportion of the field of view occupied by the development;
- background to the development;
- extent of other built development visible, particularly vertical elements.

It is assumed that the change would be seen in clear visibility and the assessment is carried out on that basis. Where appropriate, comment may be made on lighting and weather conditions. In order to differentiate between levels of magnitude the following definitions are provided in **Table A.5**.

Table A.5: Visual magnitude of change definitions

Substantial	Where the proposals would have a defining influence on the view. Change very prominent leading to substantial obstruction or complete change in character and composition of the baseline existing view.
Moderate	Where the proposals would be clearly noticeable and an important new element in the view. It may involve partial obstruction of existing view or partial change in character and composition of the baseline existing view.
Slight	The proposals would be partially visible or visible at sufficient distance to be perceptible and result in limited or minor changes to the view. The character and composition, although altered will be similar to the baseline existing situation
Negligible	Change would be barely perceptible. The composition and character of the view would be substantially unaltered, approximating to little or no change.

The threshold for different levels of visual effects relies to a great extent on professional judgement. Criteria and local circumstances require close study and careful judgement.

Beneficial effects upon receptors may result from a change to a view by the removal of eyesores or through the addition of well-designed elements that add to the sense of place in a beneficial manner.

The following **Table A.6** sets out the main correlations between magnitude and sensitivity.

Table A.6: Visual effects matrix

Visual sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	Negligible
	High	Major	Major/Moderate	Moderate	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
	Low	Moderate	Moderate/Minor	Minor	Negligible

Level of Effect

As per the matrices in **Table A.3** and **Table A.6**; the level of any identified landscape or visual effect has been assessed in terms of Major, Moderate, Minor or Negligible. Intermediate correlations are also possible and depend upon professional judgement, e.g. Major/Moderate. These categories are based on the juxtaposition of viewer or landscape sensitivity with the predicted magnitude of change. This matrix should not be used as a prescriptive tool but must allow for the exercise of professional judgement. Effects which area judged to be Major/moderate or Major are considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered.

Type of Effect

Landscape and visual effects are described with reference to type (direct, indirect, secondary or cumulative), timeframe (short, medium, long term, permanent, and temporary) and whether they are beneficial or adverse (beneficial or adverse). The various types of effect are described as follows:

Temporary / Residual Effects

If a proposal would result in an alteration to an environment whose attributes can be quickly recovered, then judgements concerning the significance of effects should be tempered in that light. Commercial development applications typically include permanent, long-term elements as well as minor alternations to landform resulting in residual landscape and visual effects.

Direct/Indirect

Direct and indirect landscape and visual effects are defined in Guidelines for Landscape and Visual Impact Assessment (GLVIA3). Direct effects may be defined "*result directly from the development itself"* (para 3.22). An indirect (or secondary) effect is one that results "*from consequential change resulting from the development*" (para 3.22) and is often produced away from the site of the Proposed Development or as a result of a complex pathway or secondary association. The direct or physical landscape effects of the Proposed Development would generally be limited to an area around the development itself. Any indirect landscape effects are concerned with the view of the changes from outside the local landscape.

Beneficial/Adverse

Landscape and visual effects can be beneficial or adverse and, in some instances, may be considered neutral. Beneficial effects upon landscape receptors may result from changes to the landscape involving beneficial enhancement measures or through the addition of well-designed elements, which add to the landscape experience or sense of place in a complementary manner.

The landscape impacts of the Proposed Development have been considered against the landscape baseline, taking account of the landscape characteristics. Taking a precautionary approach, changes to rural landscapes involving construction of man-made objects of a large scale are generally considered to be adverse, as they are not usually actively promoted as part of a district wide landscape strategy and therefore in the assessment of landscape effects, they are assumed to be adverse, unless specified otherwise in the text.

It is important to recognise that for the same development, some may consider the visual effects for a development of this nature as adverse or beneficial. This depends to some extent on the viewer's predisposition towards landscape change but also the principle of commercial building features in the landscape. Taking a precautionary approach in making an assessment of the 'worst case scenario', the assessment considers that all effects on views which would result from the construction and operation of the Proposed Development to be adverse, unless specified otherwise in the text.

Visualisation Methodology

Zone of Theoretical Visibility Maps

Computer generated Zone of Theoretical Visibility (ZTV) Maps have been prepared to assist in viewpoint selection and to indicate the potential influence of the Proposed Development in the wider landscape.

The Theoretical Visibility Map has been prepared at 1:30,000 scale to indicate the extent of potential visibility on the basis of bare ground, and does not include the screening effects of intervening established tree cover. The Theoretical Visibility Map indicates areas from which it might be possible to secure views of part, or parts, of the Proposed Development. However, use of the Visibility Maps needs to be qualified on the following basis:

- There are a number of areas within the Visibility Maps from which there is potential to view parts of the proposal, but which comprise wetland or farmland, or other land where the general public do not appear to exercise regular access;
- The large-scale Visibility Map does not account for the screening effects and filtering of views as a result of intervening features, such as trees and forestry;
- The Visibility Maps do not account for the likely orientation of a viewer – for example when travelling in a vehicle.

In addition, the accuracy of the Visibility Maps has to be considered. In particular, the Visibility Map will be generated from Ordnance Survey (OS) Landform Panorama digital data based on a gridded terrain model with 5m cell sizes. The resolution of this model cannot accurately represent small-scale terrain features, which can therefore give rise to inaccuracy in the predicted visibility. This can lead to underestimation of visibility – e.g. a raised area of ground permitting views over an intervening obstruction or can lead to overestimation of visibility – such as where a roadside embankment obscures a view.

Photography

A high resolution digital SLR camera with a 50mm fixed lens and full frame sensor is used for viewpoint photography. The camera is mounted on a tripod with a panoramic head to give level and stable photography. Geographic location, elevation, camera height and date and time of photography is recorded.

3D Modelling

The proposed scheme is modelled using industry standard computer aided design (CAD) software and 3D modelling and animation software (3D Studio Max). The model is typically geo-referenced to aid accurate positioning at real-world coordinates.

Camera Matching and Rendering

Virtual cameras are created in 3D Studio Max software to simulate the viewpoint photograph positions and the surveyed reference points for each viewpoint are imported. Displaying the viewpoint photograph in the background, each camera is 'matched' to the photograph using the imported reference points. In this way, the proposed scheme is positioned at the correct scale and in the correct position.

Photomontages

Using industry standard image editing software (Adobe Photoshop), the rendered image is merged with the base viewpoint photograph, masking any elements of the proposed scheme that would be occluded by the intervening existing features.

Presentation

The angle of view (AOV) of the image and the viewing distance from the page is displayed on each sheet. These two variables are compliant with best practice guidelines to give an accurate representation of what would be seen 'in the field'. They often vary within the guidelines depending on the scale of project in the landscape. Viewpoint information, viewpoint coordinates and camera information is also detailed on each sheet.

Annex B: Landscape Character Sensitivity

The sensitivity of the 'host' Lowland Hill Ranges and Lowland Basins LCTs is assessed below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location taking account of susceptibility as described in the methodology. To understand the sensitivity of a particular landscape and its location it is good practice to consider a range of criteria as set out in the table below.

The table below highlights the inherent sensitivities of this landscape to the development proposed, with reference to relevant characteristics as described within NatureScot's *2019 National Landscape Character Assessment*. Extracts are included in italics.

Table B.1: Sensitivity of the Lowland Hill Ranges and Lowland Basins LCTs

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape	Sensitivity Rating
Physical				
Scale	Medium scale *low lying agricultural landscape* *Flat, relatively low-lying landform*	*Hard volcanic rocks which appear as relatively uniform ridgelines* Small and intimate landform and scaling features	Combination of upland ridge and lowland agriculture Upland pasture with uniform ridge profile Medium scale	Medium/Low
Openness	Low-lying agricultural landscape providing gentle dips and hollows Intimate and contained local views	Backdrop to low-lying landscapes and local receptors *Open, large scale*	Local landscape provides both containment and locally longer-distance views due to the dipslope nature of landform resulting from both uplands and lower basins	High/Medium
Landform	Smooth and sweeping agricultural landform *Strong horizontal composition*	*Often distinctive and conspicuous scarp and dipslopes*	The Site comprises a medium-scale upland pasture, rising over the slope of Beins Law providing a northern ridge profile from the low-lying basin landscape to the south	Medium
Land cover	*Areas of extensive forestry* *Medium scale of pasture and arable fields* *A range of natural and planted woodland* Detracting influence of Binn Ecopark recycling plant and operations	Exposed *grass moorland and upland pasture*	*Upland pasture with a predominantly rural character* that also incorporates parcels of plantation woodland in nearby areas, along with the Binn Ecopark recycling facility and energy production infrastructure	Medium

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape	Sensitivity Rating
Complexity and patterns	Simple and sweeping lines, linear features and patterns Binn Ecopark recycling facility	*A sense of relative tranquillity*	Lower valleys and basins of the dipslope landscape provide a complex range of character given the interplay of containment with guided, more expansive views From upland vantage points, the landscape is viewed as a complex mosaic with varied textures and colours arising from agriculture, forestry, topographical variance, and the Binn Ecopark	Medium/Low
Built Environment	Contemporary masts, pylons, industrial elements, buildings, infrastructure	Traditional steadings, country houses, and rural character *Historic sites and associations*	Limited concentration of residential receptors Influence of Binn Ecopark within the north	Medium
Overall physical sensitivity				Medium
Perceptual				
Wildness / Sense of Remoteness	Evidence of human activity: Energy infrastructure; Binn Ecopark; coniferous plantation; perception of busy motorway	*A sense of relative tranquillity;* *Importance as a backdrop to many settlements in the surrounding low-lying agricultural landscapes* *Popular use for informal recreation* *Diverse, calm, settled and (away from main roads and other discordant elements)*	From the north, the locality comprises a mixture of rural agricultural and woodland land management with industrial components and built form From the south there is more of a perception of relative tranquillity	Medium/Low

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape	Sensitivity Rating
Perception of Change	Expansion of Binn Ecopark and appearance of renewable energy infrastructure (turbines) within the upland fringe and surrounding hills	Settled low-lying agricultural valley landscapes providing tranquillity and seclusion	Within 1km of the north of The Site there is the perception of land use change through the expansion of operations at Binn Ecopark and the presence of wind turbines Blanket plantation forestry within the local and wider landscape, although 'natural', further emphasises the managed landscape	Medium
Overall Perceptual Sensitivity				Medium
Visual				
Landscapes that form settings, skylines, backdrops, focal points	*Importance as a backdrop* *Tended pattern of fields*	Areas with strong features, focal points that define the setting or skyline	While direct and open views of the southern slope of The Site up to the western ridgeline of Beins Law are achievable, there are limited sensitive receptors	Medium/Low
Views intervisibility	Visually contained and have limited inward or outward views	*Views are wide and panoramic across the basins along strong visual links to adjacent landscape types*	The 'policy woodlands and shelterbelts' restrict intervisibility of the Site from surrounding areas.	High/Medium
Overall Visual Sensitivity				Medium
Value				
Rarity	Commonplace	Rare	The mix of farmland, woodland and elements of commercial activity are not considered to be of particular rarity	Low

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape	Sensitivity Rating
Designated scenic quality	No specific designation	Regional designation	The Site is within a Local Landscape Area (Ochil Hills LLA) which would normally result in a High sensitivity to the scale and nature of Proposed Development This area of the landscape designation is impacted by the current and expanding operations of Binn Ecopark	Medium
Cultural associations	No specific cultural associations	Strong cultural association	Cultural associations are present in wider surrounding areas, including the Scheduled Monument of Balvaird Castle	High/Medium
Amenity and recreation	Limited amenity function	Well used for amenity/recreation, especially for Core Paths	While predominantly rural in character, local Core Path routes which are afforded views of The Site are influenced by the baseline landscape which includes the operations at Binn Ecopark energy and recycling facility Wider Core Path networks are screened by topography and woodland	Medium/Low
Overall Value				**Medium**
Overall Sensitivity of the Lowland Hill Ranges and Lowland Basins LCTs				**Medium**

Annex C: Landscape Figures

Binn Farm Solar & BESS

Figure 1 - Zone of Theoretical Visibility with Viewpoints

TGP LANDSCAPE ARCHITECTS

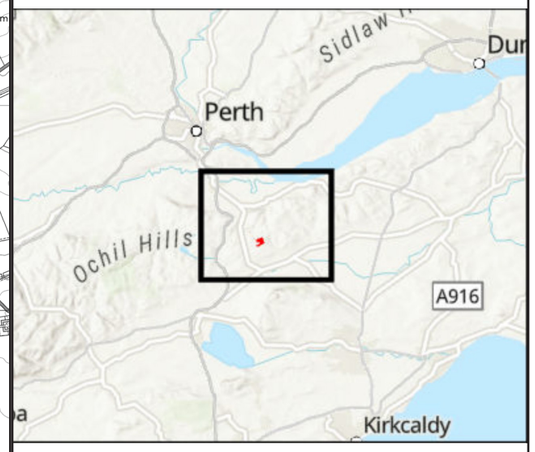
Key

- Site Boundary
- 3 km Study Area
- Council Boundary
- Predicted visibility of solar panels and BESS
- Predicted visibility of solar panels only
- Predicted visibility of BESS only
- 1 Viewpoints

1. View northeast from Balvaird Castle, Ochil Hills SLA
2. View northwest from Minor Road near Pittuncarty
3. View south from Track near Easter Catochil
4. View north from A91 at Gateside

Notes:
The calculations of this map are based on the 'bare earth' model of the landform and do not allow for any effects of screening from obstacles such as buildings and vegetation. The landform data was taken from Ordnance Survey Terrain 5 digital terrain model (gridded height data at 5m intervals).

Figure Data:
This figure has been based on the following data:
Solar Panel Units: 2.7 m
Associated Infrastructure (BESS):
- Proposed DNO Substation 2.7 m
- Private Substation 2.7 m



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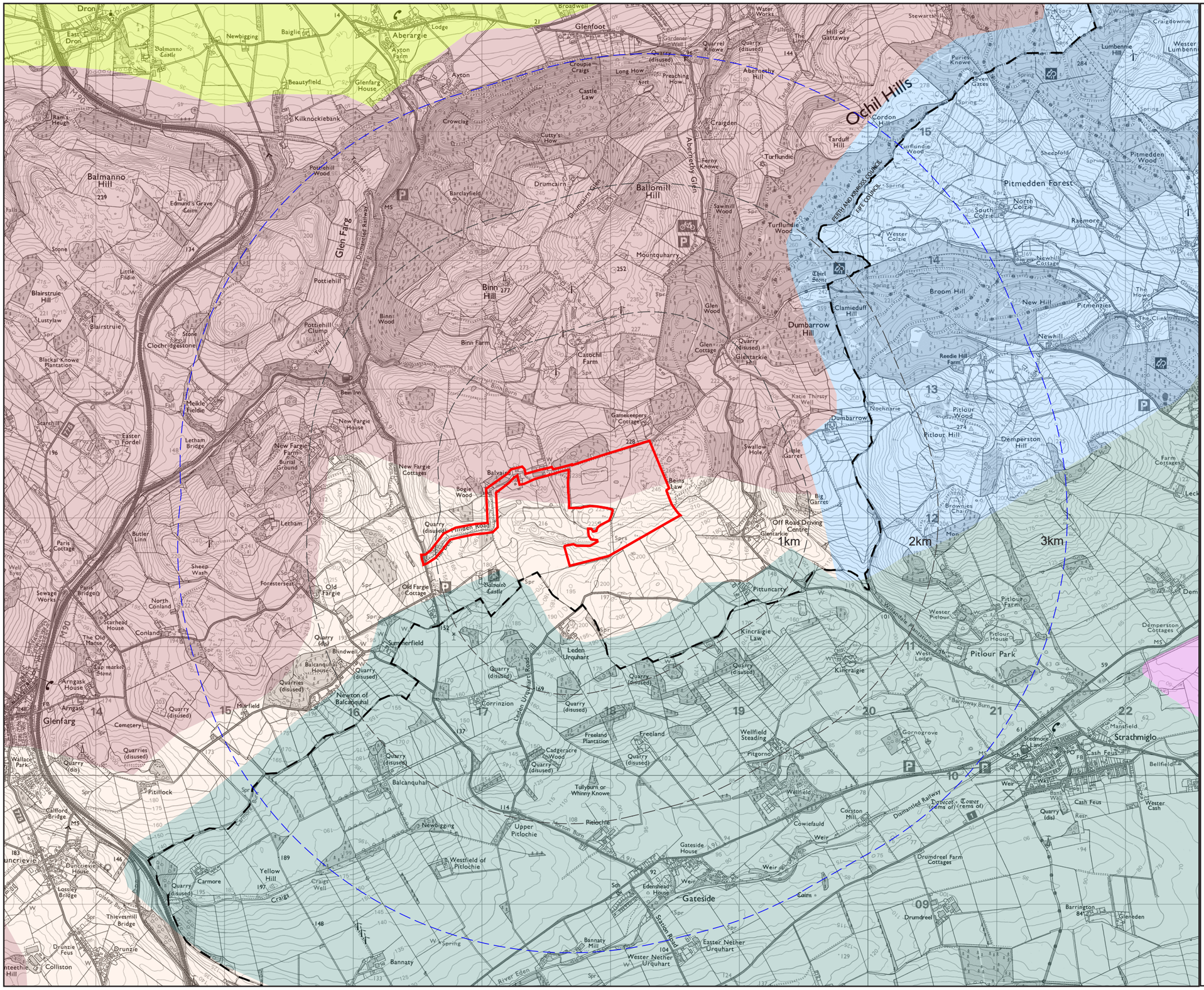
Date	Scale@A3	Produced By	Checked By	Rev.
16/12/25	1:30 000	EA/OM	CL	-

Binn Farm Solar & BESS

Figure 2 - Landscape Character Types



Key

- Site Boundary
- 3 km Study Area
- Council Boundary
- 382 - Lowland Hill Ranges LCT
- 390 - Lowland Basins LCT
- 186 - Lowland Hills and Valleys LCT
- 182 - Upland Hills LCT
- 384 - Broad Valley Lowlands - Tayside LCT
- 190 - Lowland River Basins LCT

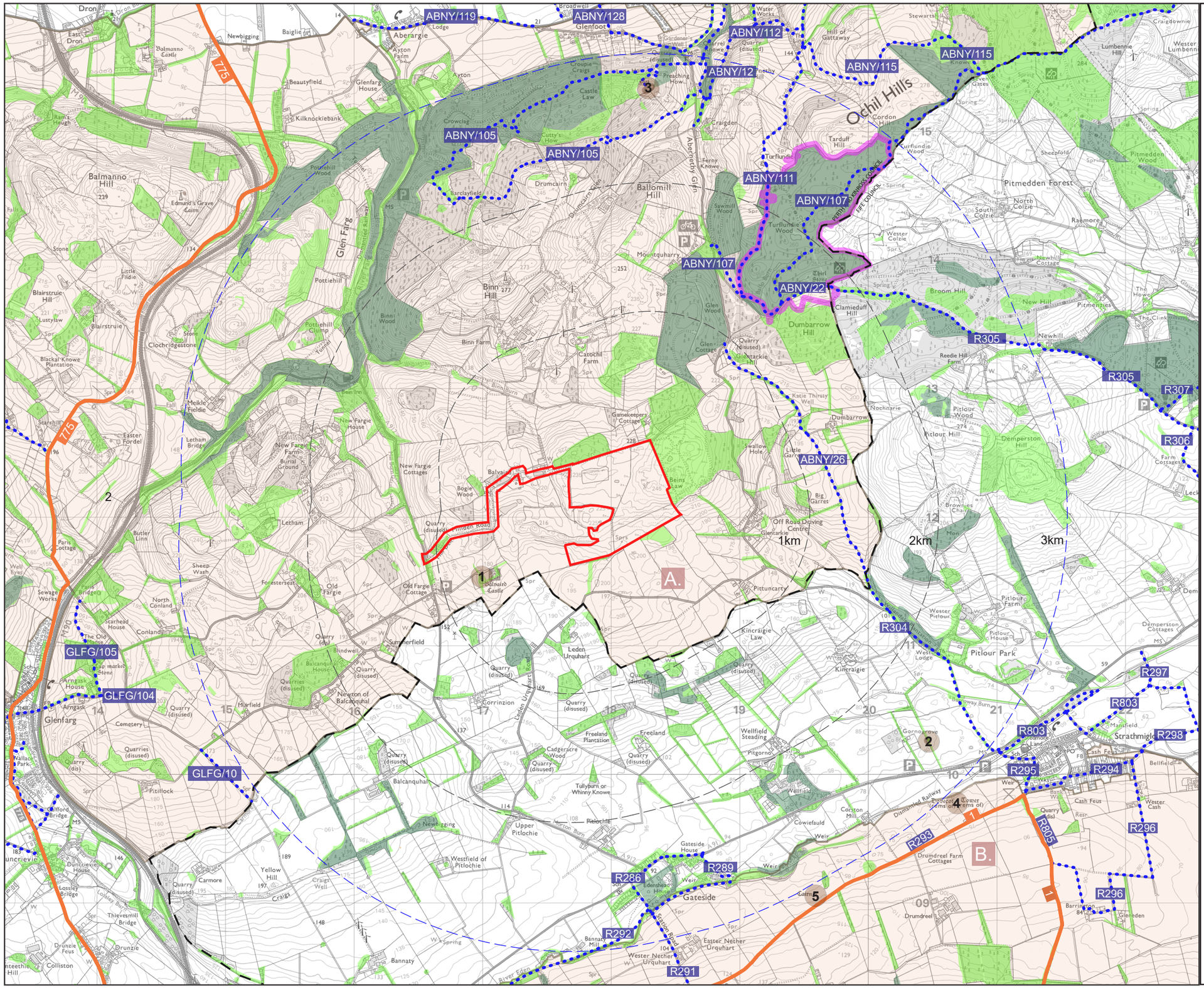
0 500 1km

Date	Scale@A3	Produced By	Checked By	Rev.
16/12/25	1:30 000	EA/OM	CL	-

Binn Farm Solar & BESS

Figure 3 - Landscape Designations and Visual Receptors

TGP LANDSCAPE ARCHITECTS



Key

- Site Boundary
- 3 km Study Area
- Council Boundary
- National Cycle Network Route 775
- Core Paths ABNY/107
- Local Landscape Areas:
  - *A. Ochil Hills LLA*
  - *B. Loch Leven and Lomond Hills LLA*
- Special Areas of Conservation
- Ancient Woodland
- Seminatural Woodland
- 1 Scheduled Monuments:
  - *1.Balvaird Castle*
  - *2.Court Knowe, Mound*
  - *3.Castle Law, Fort, Abernethy*
  - *4. Corston Tower,Towerhouse And Dovecot*
  - *5. Easter Nether Urquhart, Cairn*

0 500 1km

Date	Scale@A3	Produced By	Checked By	Rev.
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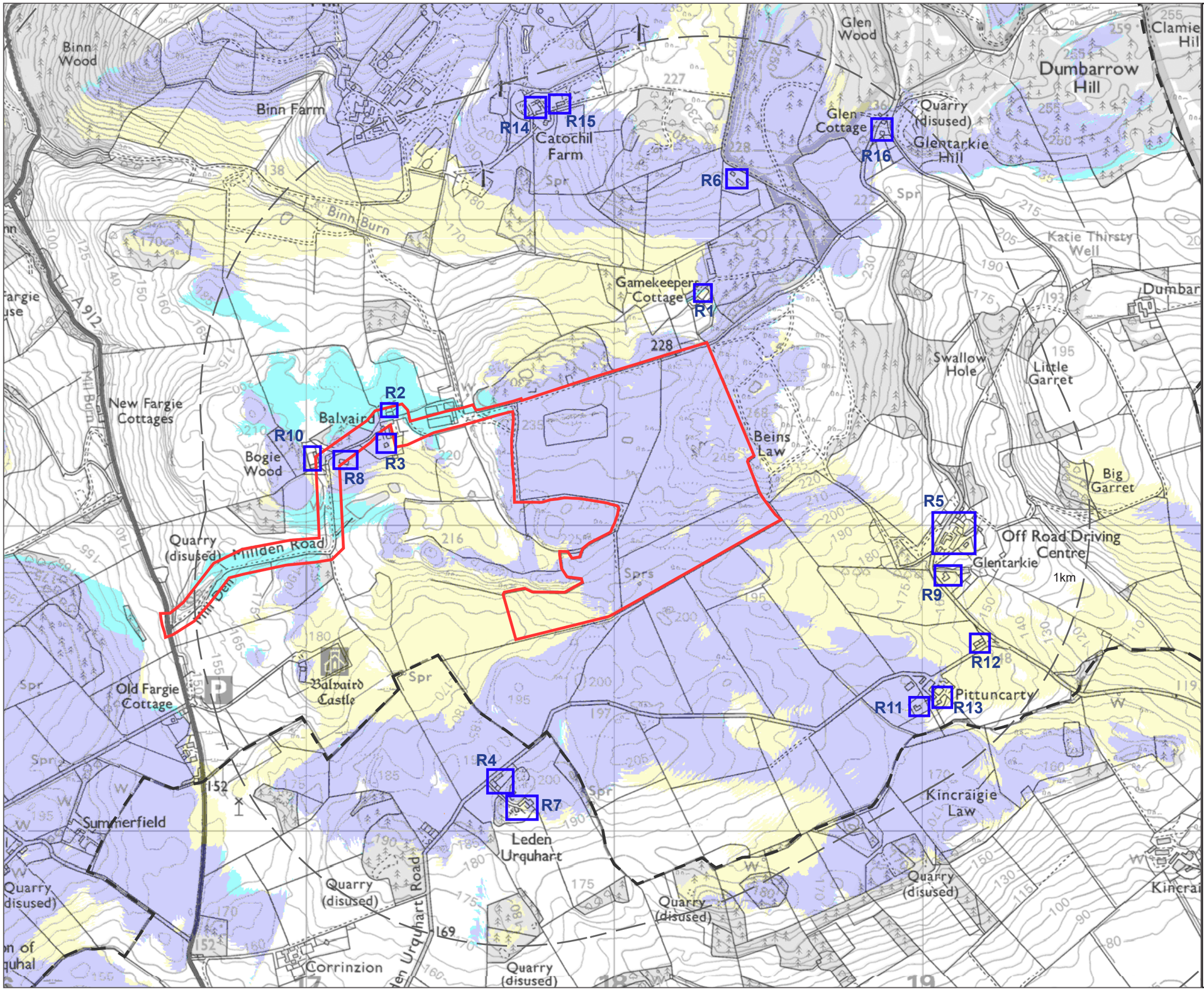
Binn Farm Solar & BESS

Figure 4 - Residential Receptors (1km)



Key

- Site Boundary
- 1 km radii
- Council Boundary
- Predicted visibility of solar panels and BESS
- Predicted visibility of solar panels only
- Predicted visibility of BESS only
- R1 Residential Receptors

1. Gamekeepers Cottage
2. The Byres
3. Balvaird House, 420m to the west
4. Leden Urquhart Cottage and Leden Urquhart Farm Cottage
5. Properties at Glentarkie Steading
6. Easter Catochil
7. Leden Urquhart
8. MacGregor House
9. Glentarkie Cottage
10. Balvaird Cottages
11. Rosiebank
12. East Cottage and West Cottage
13. Pittuncarty
14. Catochil Farm
15. Catochil Farm Cottage
16. Glen Cottage

Notes:
The calculations of this map are based on the 'bare earth' model of the landform and do not allow for any effects of screening from obstacles such as buildings and vegetation. The landform data was taken from Ordnance Survey Terrain 5 digital terrain model (gridded height data at 5m intervals).

Figure Data:
This figure has been based on the following data:
Solar Panel Units: 2.7 m
Associated Infrastructure (BESS):
- Proposed DNO Substation 2.7 m
- Private Substation 2.7 m

0 250 500m

Date	Scale@A3	Produced By	Checked By	Rev.
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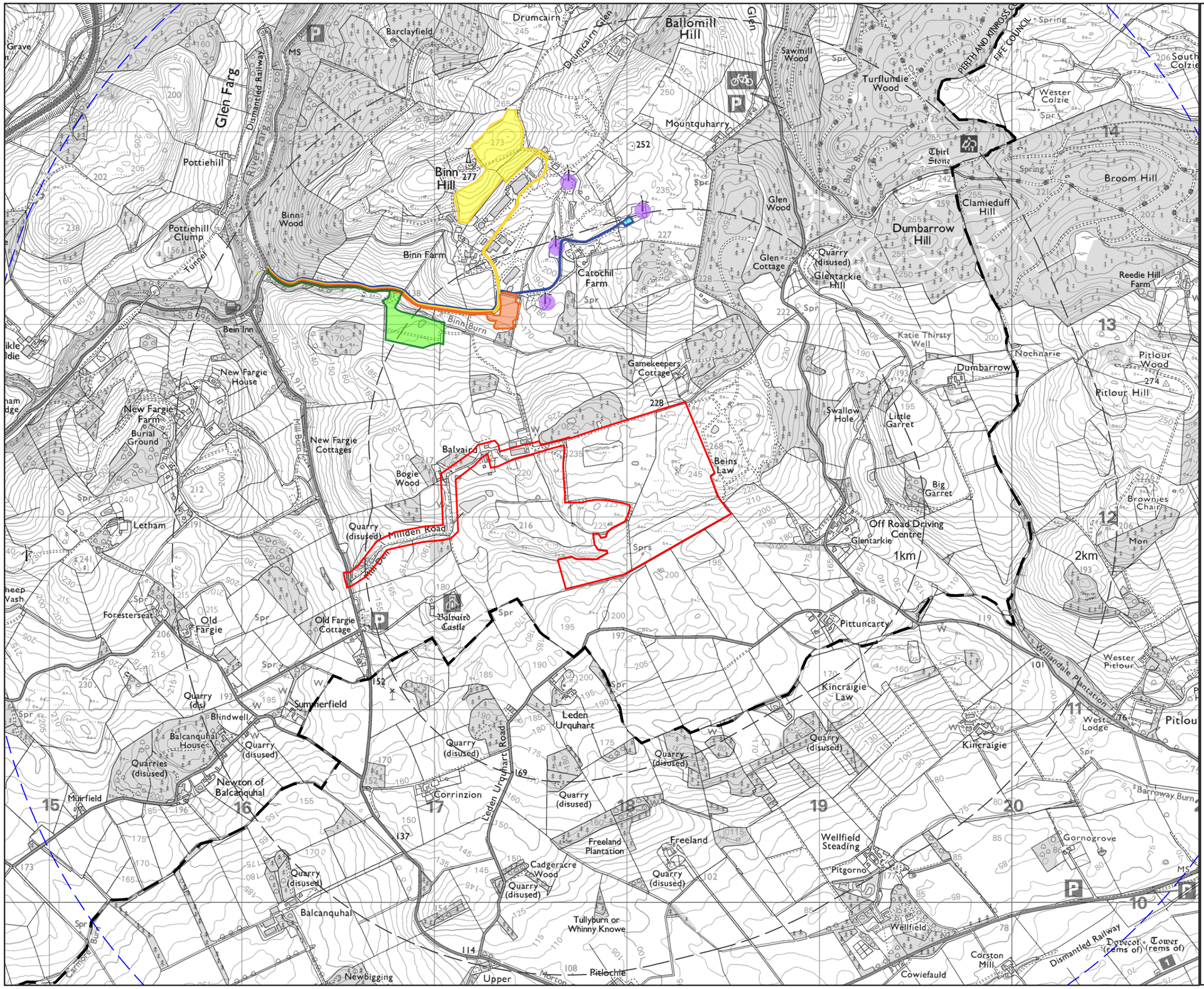
Binn Farm Solar & BESS

Figure 5 - Cumulative Development



Key

- Site Boundary
- 2 km radii
- Council Boundary
- Binn Hydrogen Production Facility (25/01484/FLL)
- Binn Energy from Waste (EfW) facility (20/01242/FLM)
- Binn Ecopark Solar (21/00705/FLL)
- Binn Ecopark BESS (21/00834/FLL)
- Binn Wind Farm (14/01970/FLL)

0 500m 1km

Date	Scale@A3	Produced By	Checked By	Rev.
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Annex D: Landscape Enhancement and Mitigation Plan (LEMP) & Visualisations