Strategic Landscape Capacity Assessment for Solar Energy in Angus

Contents

- 1. Introduction
- 2. Methodology
- 3. General Guidance in Relation to Landscape Capacity for Solar PV Development
- 4. Assessment of Landscape Capacity by Landscape Character Type
- 5. Overall Assessment of Capacity and Cumulative Development

Appendix A: Assessment of Landscape Character Sensitivity, Visual Sensitivity and Landscape Value by Landscape Character Type

1. Introduction

The Angus Local Development Plan 2016 (ALDP) includes Policy PV9 on Renewable and Low Carbon Energy Development. The ALDP is supported by an Action Programme which sets out how Angus Council intends to implement the ALDP. Action 41 in the Action Programme includes the preparation of Supplementary Guidance on Renewable and Low Carbon Energy Development.

This study is intended to provide a background technical assessment of the landscape capacity of Angus to accommodate solar photovoltaic development and is intended to compliment the Strategic Landscape Capacity Assessment for Wind Energy in Angus (2014) prepared by Ironside Farrar on behalf of Scottish Natural Heritage and Angus Council (the wind energy study). As with the wind energy study, it is intended that the Strategic Landscape Capacity Assessment for Solar Energy in Angus will:

- be recognised as a material consideration in the determination of planning applications for solar energy proposals, and;
- inform the preparation of supplementary guidance for policy PV9 of the emerging Local Development Plan.

2. Methodology

2.1 Background & Approach

It is intended that this study provides an assessment of landscape capacity for solar photovoltaic development within Angus. This study has been carried out by a combination of desk study and on-site assessments by Angus Council landscape professionals. This assessment substantially relies upon much of the work contained within the Strategic Landscape Capacity Assessment for Wind Energy in Angus (2014) prepared by Ironside Farrar on behalf of SNH and Angus Council (the wind energy study). This background work has not been reproduced within this study, but is referenced where relevant. This consistency of approach is considered helpful to informing the preparation of Supplementary Guidance on Renewable and Low Carbon Energy Development.

In January 2016, Scottish Natural Heritage (SNH) published guidance on "Large Scale Solar Photovoltaic Installations: Considering Landscape, Visual and Ecological Impacts". The SNH guidance seeks to promote a consistent and proportionate level of assessment.

The publication lists the key considerations which SNH would consider when proposed development would affect a sensitive landscape, such as National Scenic Areas and <a href="Wildle-W

The Building Research Establishment (BRE) National Solar Centre has published <u>Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems</u>. The guidance is undated but refers to the second edition of the Landscape Institute/ Institute of Environmental Management & Assessment publication "Guidelines for Landscape and Visual Impact Assessment" which was replaced by the third edition in April 2013. The BRE guidance, within appendix A, prescribes methods for assessing landscape and visual impacts, which may need updating to reflect the changes within the third edition. The BRE guidance relates to the UK but the legislation, policy and guidance referred to relates to England. Notwithstanding this, there are broad similarities across the UK which gives the BRE guidance some relevance to solar PV development within Angus.

Cornwall Council has produced Renewable Energy Planning Advice which includes guidance in relation to solar photovoltaic development. Landscape and visual guidance produced by Cornwall Council in respect of solar photovoltaic is likely to be the most detailed produced by local authorities within the UK to date. Annex 1 of the guidance in An Assessment of the Landscape Sensitivity to On-Shore Wind Energy & Large-Scale Photovoltaic Development in Cornwall (March 2016). This assesses landscape capacity by landscape character area. Annex 3 Cumulative Impact Assessment Guidance for Cornwall – Solar Farms (March 2016) allocates one of four cumulative strategies to each of character area. This classification system is broadly similar to the typologies developed in respect of wind turbines as part of the Strategic Landscape Capacity Assessment for Wind Energy in Angus (2014). The general approach is broadly similar to that adopted by Cornwall Council in respect of both wind energy and solar photovoltaic planning advice.

Panels are arranged in groups or 'arrays' of around 18 – 20 panels. The panels are encased in an aluminium frame, supported by aluminium or steel stands, and the position fixed at an angle between 20 - 40 degrees from horizontal facing south. The arrangement of arrays tends to be regular in pattern. Ground mounted panel arrays tend to be 3 – 4m above ground level. They typically create a landscape element with a strong horizontal emphasis.

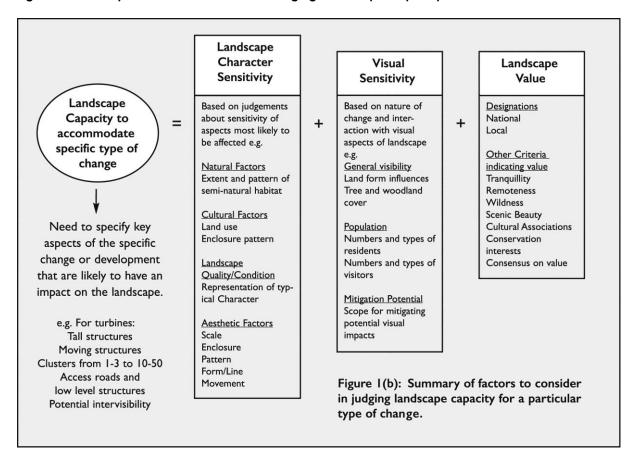
Cornwall Council planning advice has noted that when viewed from a distance, solar developments can be perceived as forming a solid, continuous land cover which has been likened to standing water or poly tunnels. However, it should be noted that the panels may also be seen from behind or along the rows which makes the underlying pasture visible. The assessment considers the landscape capacity to accommodate solar PV development of one hectare in size or greater.

2.2 Angus Study

This study focuses on the local authority area of Angus. Whilst impacts upon the Cairngorms National Park have been considered as part of this study, no guidance is included in respect of those parts of Angus within the National Park.

Landscape capacity is derived from consideration of Landscape Character Sensitivity, Visual Sensitivity and Landscape Value. The wind energy study systematically assessed each of these factors for each landscape character type and these are contained within appendix 7 of the study. The Landscape Character Sensitivity and Visual Sensitivity assessments were however prepared in the context of wind energy development and therefore have appropriately highlighted factors and sensitivities particularly pertinent to the consideration of wind energy.

Figure 1: Summary of Factors to Consider in Judging Landscape Capacity



Swanwick, C. (undated) "Landscape Character Assessment Guidance for England and Scotland - Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity" Countryside Agency and SNH

A revised assessment of Landscape Character Sensitivity, Visual Sensitivity and Landscape Value in respect of solar PV development by landscape character type and sub-area is included as appendix A.

2.3 Landscape Character Sensitivity

Section 3 of the wind energy study details the landscape baseline. This baseline describes landscape character and maps both landscape and other designations within the study area. The underlying landscape character is not considered to have substantively changed since this was produced in 2013; therefore same baseline is used for the landscape baseline of this study.

The wind energy study provides an assessment of landscape capacity based upon the landscape character types within the Tayside Landscape Character Assessment (TLCA). In assessing capacity, the wind energy study recognised that some of the landscape character types in Angus cover extensive areas and show clear variations in character relating particularly to scale, topography and vegetation cover. As a consequence, the study identified sub-areas within some landscape character types with consistent characteristics which may have a bearing on sensitivity and capacity. In addition, some of the type boundaries within the wind energy study have been refined. These are listed within appendix 3 of the wind energy study. For consistency, this study assesses capacity and provides guidance using the same landscape character type boundaries and sub-areas as within the wind energy study. These are shown on figure 2.

Whilst most of the descriptions within Appendix 7 of the wind energy study have relevance to solar energy development, there are additional aspects of landscape character which are also relevant in terms of considering solar PV development. Solar energy development typically consists of rows of PV panels on frames tilted towards a southerly aspect. They therefore cover the underlying landscape and often form distinct blocks of development. Solar arrays are most suited to landscapes with a strong field pattern with differential cropping. Therefore, they are likely to be most suited to enclosed arable landscapes with strong framework of field boundaries, trees and woodlands. Conversely, they are less suited to unenclosed landscapes and enclosed upland farming landscapes where fields are typically pasture.

Similarly, woodland cover and field boundaries can strongly influence landscape capacity for solar PV development, in terms of providing a framework within which development may take place. This is different from potential landscape scale issues which may arise in respect of wind energy developments.

Lastly, landform is an important consideration for both wind and solar energy developments, but again the nature of how capacity is affected is different. In respect of wind energy, scale and the provision of backdrop are often important, but with solar PV sloping sites can increase prominence and lead to development being inconsistent with landscape pattern and form.

2.4 Visual Sensitivity

Section 4 of the wind energy study details the visual baseline. This baseline assessed the relative visibility and visual sensitivity of different parts of Angus. The same baseline is used for the visual baseline of this study.

The wind energy study provides an assessment in relation to visual receptors which include settlements, routes and viewpoints. This was carried out by Envision 3D, using a computer based technique in which the intervisibility between receptors and landforms, or objects of specific heights on landforms, is determined. The method is described in appendix 2 of the wind energy study.

Appendix 4 of the wind energy study contains Visibility Analysis for Wind Turbines in Angus. This analysis has informed the assessment of visual sensitivity for each landscape character type within appendix 7 of the wind energy study.

Solar PV development cover parts of the landscape, therefore overlooking from higher ground is likely to be a consideration in assessing all proposals. However woodland cover can sometimes substantively influence visibility in some parts of the landscape. Whilst a number of different turbine heights are modelled within appendix 4, the zero metres above ground level is relevant to consideration in respect of solar PV development.

2.5 Landscape Value

The assessment of Landscape Value within the wind energy study is considered to be equally applicable for both wind and solar energy development. Accordingly, these tables from Appendix 7 of wind energy study have been reproduced within appendix A of this study without change.

2.6 Landscape Capacity Assessment

Section 3 of the study includes general guidance in relation to landscape capacity for solar photovoltaic development within Angus.

Section 4 is an assessment of landscape capacity by landscape character type and subarea. It describes the characteristics of the type or sub-area and assesses the landscape capacity for solar PV development. It describes any variation in capacity within each subarea and indicates areas or features which may be less suitable for solar PV development. The development size threshold of one hectare has made it possible to identify lower levels of capacity in landscapes which do not have capacity for larger developments. This study does not consider ground or roof mounted solar PV development. The descriptive criteria for landscape capacity thresholds are described in Table 2.1.

Table 2.1: Landscape Capacity Thresholds

| Landscape Capacity | Thresholds |
|--------------------|--|
| No Capacity | A landscape with higher landscape character and visual sensitivity; and where landscape value is also higher. These are landscapes where solar PV development cannot take place without significantly affecting any of the defining criteria. |
| Low Capacity | A landscape that is both sensitive to solar PV development and has high value, where only a slight level of change can be accommodated without significantly affecting any of the key defining criteria. Where capacity is considered to exist, it may only be in relation to smaller scale development. |
| Medium Capacity | A landscape that has some sensitivity to solar PV development and has some aspects of value, where a moderate level of change can be accommodated which may significantly affect some of the defining criteria. |
| High Capacity | A landscape that has low sensitivity to solar PV development and has low value, and can accommodate change that significantly affects most of the key defining criteria. It may also be a landscape where landscape value is not low, but it can accommodate solar PV development without significantly affecting the defining criteria. |

Section 5 is an assessment of capacity and cumulative development. The wind energy study (section 2.7 of appendix 2) discusses in detail the issues involved in determining cumulative change thresholds and the acceptability of these changes. This rationale similarly applies to solar PV development and is relied upon without being reproduced. Key factors that affect the perception of cumulative change include:

- the distance between individual solar PV developments;
- the distance over which they are visible;

- the overall character of the landscape and its sensitivity to solar PV development;
- the siting and design of the solar PV development (particularly size and arrangement), and:
- the way in which a landscape is experienced.

The descriptions in Table 2.2 set out a graduated landscape typology and define increasing levels of cumulative landscape and visual impact of solar PV development by their effect on landscape character and the experience of those living and travelling through the landscape.

The landscape type for the solar PV development consented up to August 2016 has been assessed and mapped. The proposed limits to solar PV development by landscape type are also mapped.

Table 2.2: Description of Levels of Cumulative Solar PV Development

| Landscape Type | Landscape Character | Visual Experience |
|--|---|---|
| Landscape with no Solar PV Development | A landscape type or area in which no, or a minimal number/size of solar PV development is present, or visible from neighbouring areas. | There would be no, or negligible, effects on visual receptors. |
| Landscape with Occasional Solar PV Development | A landscape type or area in which solar PV development is located and/or is close to and visible. Solar PV development is not of such a size, number, extent or contrast in character that they become one of the defining characteristics of the landscape's character. | Visual receptors would experience occasional close-quarters views of a solar PV development and more frequent background views of solar PV development. Some of the solar PV development would not be perceived as being located in the landscape character type or area. No overall perception of solar PV development being a defining feature of the landscape. |
| Landscape with Solar PV Development | A landscape type or area in which solar PV development is located and/or visible to such an extent that it become one of the defining characteristics of the landscape character. However, they are clearly separated and not the single most dominant characteristic of the landscape. | Visual receptors would experience frequent views of solar PV development as foreground, mid-ground or background features, affecting their perception of the landscape character. However there would be sufficient separation between solar PV development and sufficient areas from which wind turbines are not visible such that they would not be seen as dominating the landscape over all other landscape features. |
| Solar PV Development Landscape | A landscape type or area in which solar PV development is extensive, frequent and nearly always visible. They become the dominant, defining characteristic of the landscape. Nevertheless there is a clearly defined separation between discrete developments. | Visual receptors would experience views of solar PV development as foreground, mid-ground and background features, to the extent that they are seen as the most dominant aspect of landscape character. Few areas would be free of views of solar PV development, although development would appear separated. |
| Solar PV Development | Landscape fully developed as a solar PV development with no clear | Visual receptors would always be close to and nearly always in full view of solar PV |

| separation between groups of solar PV development. Few if any areas where solar PV development not visible. | development, with no clear separation between solar PV developments. |
|---|--|
|---|--|

2.7 Seascape Character

Seascape refers to 'an area, as perceived by people, from land, sea or air, where the sea is a key element of the physical environment'. The term is commonly used and is included within the definition of landscape contained within the European Landscape Convention.

This capacity study does not include a seascape baseline assessment nor does it include a formal assessment of impacts upon seascape character. It is however recognised that terrestrial solar PV development has the capacity to impact upon seascape particularly in relation to the landscape types closest to the coast. Notwithstanding this, landscape types closest to the coast have been assessed as having no or low landscape capacity for solar PV development, without consideration of seascape.

3. General Guidance in Relation to Landscape Capacity for Solar PV Development

A number of broad principles often apply to in relation to the development of solar PV in the landscape. Specific guidance by landscape character type or sub-area is contained within section 4.

Landscape Character Effects

- Rectilinear blocks of solar arrays are more likely to fit within lowland landscapes where there is an
 existing strong pattern of rectilinear fields. Lowland arable landscapes typically have different
 cropping from field to field emphasising the field pattern. On slightly higher ground, fields are more
 typically pasture with greater homogeneity between fields making them less suitable for solar PV
 development.
- Layouts should respect and reinforce existing field patterns. Where landscape character has been
 eroded by the amalgamation of fields, development may provide opportunity to reinstate a field
 boundary structure.
- Where development is proposed to occupy more than one field, it is helpful that development in each field is sufficiently separate to avoid visual amalgamation of fields.
- Existing field boundary dykes, hedges and tree lines in particular can assist in visually dividing development. Similarly, the off-setting of fields where development takes place can sometimes reinforce field patterns.
- Existing woodland, forestry, tree lines and hedges can all increase the capacity of a landscape to accept solar PV development. However, avoid siting development in areas which would be affected by shade from trees.
- The presence of solar PV development may increase the perceived human influence on the landscape; therefore avoid areas where lower perceived human influence is part of the landscape character.
- Development on uneven ground could mask the underlying landscape character and could create an incongruous feature in the landscape (particularly where they do not follow contours).
- Avoid significant adverse effects upon the setting of sensitive features such as hill forts, other scheduled monuments and settlements.

Visual Amenity Effects

- Solar PV development on flat ground is typically less widely visible in views than development on sloping sites. Conversely, development on a hillside can increase visibility. Avoid development on profoundly sloping landforms, hill-tops and escarpments or the areas above them.
- Sites which are over-looked from higher ground, particularly within 2km will have higher visual impact.
- Visual effects will vary dependent upon the position of the viewer relative to the arrangement of
 the array. Typically, views from the west, through south to east would be towards the reflective
 face of the panels. Views from other directions would view the rear elevation of panels and
 supporting structures.
- An existing landscape structure of woodland blocks, tree lines and hedges can screen; provide backdrop; and visually break up views of solar PV development in the landscape. The ability of commercial forestry to create landscape capacity will depend upon intended forestry operations during the lifetime of the solar PV development.
- Avoid unacceptable significant effects upon sensitive visual receptors such as promoted recreation paths and areas noted for their scenic qualities. These could include Core Paths, path networks, Country Parks, hilltops, viewpoints and settlements.

Cumulative Landscape & Visual Effects

- Solar PV development in open landscapes, or on sloping landform; hill tops and ridges are likely to increase the potential for cumulative effects on both landscape character and views.
- An existing landscape structure of woodland blocks, tree lines and hedges can reduce all types of cumulative visibility.
- Where more than one field is proposed for solar PV development, sufficient space at field edges

- and possibly off-setting developed fields can preserve landscape pattern. Tree and hedge planting can reduce cumulative effects.
- In some parts of Angus there are extensive areas of poly-tunnels, most notably between Arbroath and Carlingheugh Bay. Both poly-tunnels and solar PV development consist of lines of frames with potentially reflective surfaces. They each have the potential to create a more intensive developed character to a landscape. There is therefore likelihood that both developments together would create cumulative effects which could erode the underlying landscape character of these areas. These cumulative effects should be assessed as part any cumulative assessment of landscape and visual effects. These cumulative effects are likely to reduce landscape capacity for solar PV development and should be assessed as part of cumulative assessments.
- Similarly, other man-made structures including electricity pylons and wind turbines can increase the developed character of a landscape and when considered with solar PV development can cumulatively increase the developed character and sometimes introduce visual clutter.

4. Assessment of Landscape Capacity by Landscape Character Type

The assessment of landscape capacity by landscape character type and sub-areas is detailed below. As well as describing the factors which affect landscape capacity, it also describes the variability of landscape capacity and also provides guidance on the particular constraints and opportunities within each type or sub-area. Landscape capacity by landscape type and sub-area is shown on figure 3.

TAY 1A Upper Highland Glen (outside National Park)

There is considered to be no capacity for solar PV development within the Upper Highland Glens type.

These are deeply incised glens with qualities of remoteness and wildness emphasised by a lack of development and only minor roads and tracks. The areas outwith the National Park generally have similar qualities to those areas within. However, being further removed from the highest mountains within the National Park they are generally of lesser depth and wildness with more settled references on valley floors; such as enclosed fields, public roads and occasional houses and farms.

Where fields exist they are pasture and there remains a uniformity of colour and pattern.

TAY 1B Mid Highland Glens (outside National Park)

There is considered to be low capacity for solar PV development in the Mid Highland Glens type.

Glens within this type are generally of lesser depth than the Upper Glens, with settled valley floors including enclosed fields, public roads, farms, houses and occasional villages. Fields are typically pasture but occasionally arable as part of crop rotation. The often undulating glen floors are typically overlooked from valley sides and higher ground nearby.

There may be limited opportunities for development in the more developed parts of the type; where ground is flatter; and existing woodland may provide visual screening from higher ground.

TAY 3 Highland Summits and Plateaux (outside National Park)

There is considered to be no capacity for solar PV development within the Highland Summits and Plateaux type.

This is a landscape where landform and vegetation cover is dominant with few manmade features. It contains irregular patterns of heather, grassland and forestry, relating to landform with no field boundaries. Solar PV development would form incongruous rectilinear blocks of development and would typically introduce a human scale element into a large scale landscape.

Development would also be highly visible in a landscape with medium/high landscape value.

TAY 5 Highland Foothills

There is considered to be variable capacity for solar PV development within the Highland Foothills type. Overall, landscape capacity is considered to be low.

The type lies on the Highland Boundary Fault and as such is a transitional landscape. The Highland Foothills have complex landforms and often small scale detail due to the complex

pattern of steep hills, small settled valleys and pockets of more sheltered fertile ground. The lower slopes are often arable giving way to enclosed pasture with elevation; which in turn becomes unenclosed pasture and heather towards the crests and ridges of these rounded hills. Similarly, there is a pronounced transition from a more tamed and more developed character in the arable areas to a greater perceived wild land character on the unenclosed higher ground. This type is highly visible in the wider landscape from Broad Valley Lowland, the Low Moorland Hills, Igneous Hills and Summits and Plateaux types. Overlooking from higher ground, together with steeper slopes limits capacity even in the arable areas. Avoid development in non-arable areas and where slopes are steeper and overlooked from higher ground. Views to and from the White and Brown Caterthuns within the Menmuir Hills are particularly sensitive.

TAY 8 Igneous Hills

There is considered to be variable capacity for solar PV development within the Igneous Hills type. Overall, landscape capacity is considered to be low.

As is the case with the Highland Foothills LCT, there is substantial variation in character within the Igneous Hills in terms of factors which influence landscape capacity for solar PV development. The lowest slopes to both the north and southern edges of these hills are more gentle sloping enclosed arable fields. As elevation and often gradient increases, this gives way to enclosed pasture, which in turn, becomes unenclosed pasture and heather towards the crests and ridges of these rounded hills. Similarly, there is a pronounced transition from a more tamed and more developed character in the arable areas to a greater perceived wild land character on the unenclosed higher ground. Towards the eastern part of Igneous Hills hills are more rounded and merge with Dipslope Farmland with gradients often more gentle than further west. There are also more extensive areas of enclosed arable fields but with limited woodland cover.

There is an extensive network of paths across the hills and there are hillforts at Kinpurney Hill, Auchterhouse Hill and at Denoon Law. On the summit of Kinpurney Hill within the hillfort there is a ruin of an observatory. Above Balkello Community Woodland, Baluderon Hill is a local geodiversity site and there is a viewpoint on Carrot Hill..

This type is highly visible in the wider landscape from Broad Valley Lowland, Dipslope Farmland, the Low Moorland Hills, Highland Foothills and Summits & Plateaux types. Overlooking from higher ground, together with steeper slopes limits capacity even in the arable areas. Avoid development in non-arable areas and where slopes are steeper and overlooked from higher ground.

Avoid development in non-arable areas and where slopes are steeper and on or above hill crests. Similarly, avoid areas overlooked from higher ground, particularly from ancient monuments and recreational, attractions.

TAY 10 Broad Valley Lowland

This type can be considered to consist of two areas (Strathmore and the Lower South Esk & North Esk valleys)

Strathmore

This sub-area has variable capacity for solar PV development, but typically medium. Strathmore, (west of Forfar) is enclosed by the Highland Foothills to the north and the Igneous Hills to the south. The rectilinear arable field pattern of this type increases capacity for solar PV development. The policies of Glamis Castle is a designed landscape

Tree and woodland cover within Strathmore is limited, which reduces capacity, but with the extensive policies of the Glamis Castle designed landscape being the most notable exception. Whilst tree cover can increase capacity to accept development, the importance of the designed landscape is likely to significantly constrain landscape capacity. However, there may be less sensitive areas, which do not feature in views towards or from the castle and its designed landscape.

Avoid development where it is overlooked and prominent from higher ground particularly from the north and south of the sub-area.

In addition sub-area (i) is an area of complex rolling fluvioglacial landforms where field sizes are smaller and less regular. Again, these characteristics reduce landscape capacity for solar PV development. Avoid development on steeper slopes and on landform crests and ridges where development would be either be prominent or inconsistent with the landscape pattern.

Lower South Esk & North Esk River Valleys

This sub-area has variable capacity for solar PV development, but typically medium. The rectilinear arable field pattern of this type and typical gentle slopes increase capacity for solar PV development. Much of this area is enclosed by the Highland Foothills to the northwest and the Low Moorland Hills to the south or south-east. The rectilinear arable field pattern of this type increases capacity for solar PV development.

Tree and woodland cover within this area is typically limited to along the river corridors; around Careston and the Brechin Castle designed landscape. The landscape is otherwise typically open in character.

Sub-area (ii) is the corridor of the South Esk. It is characterised by a degree of topographic enclosure, with sometimes steep river terraces and the meandering course of the South Esk. This sub-area includes the Brechin Castle designed landscape. Avoid development on or just above the river terrace escarpments where they are likely to be prominent. Capacity is greatest where the pattern consists of rectilinear arable fields.

Sub-area (iii) is a significant area lying between the A90(T) and the Menmuir Hills and is topographically separated by a curved ridge of land north of sub-area (ii). Sub-area (iii) drains to the North Esk. To the north of this sub-area lies the Menmuir Hills and two hillforts, the White and Brown Caterthuns. Both scheduled monuments are in the care of Historic Scotland. Avoid development where it is overlooked and prominent from higher ground particularly from the Caterthuns. Avoid development on the curved ridge where development would be either be prominent or be inconsistent with the landscape pattern.

Sub-area (iv) is an elevated area at Muir of Pert between Brechin, the A90(T) and Montrose, which separates the North Esk and Montrose Basin. Although within Broad Valley Lowland, it rises to a plateau of over 100m AOD, has steep escarpments to the north and south, and have many of the more exposed characteristics of Dipslope Farmland. Tree and woodland cover is typically limited, which reduces overall capacity for solar PV development. Avoid development on escarpments where it would be prominent or be inconsistent with the landscape pattern. This sub-area has a significant number of wind turbines which cumulatively may contribute to a more developed character. This will locally limit capacity and should be assessed as part of any landscape and visual impact assessment submitted in support of applications.

TAY 12(i) Low Moorland Hills (Forfar Hills)

It is considered that there is low capacity for solar PV development within the Low Moorland Hills (Forfar Hills).

A varied landscape of small steep hills and ridges set within a wider area of rolling farmland. The hills provide a backdrop to Forfar and define the southern edge of the South Esk section of Strathmore. To the north of Forfar, ridges are more pronounced with unenclosed grassland typically on the higher ground, with arable on lower and flatter ground. South of Forfar, hills are more rolling with a greater occurrence of enclosed arable, even on the higher ground. Woodland cover is limited and localised, often on hilltops including Hill of Finavon, Carse Hill, Dunnichen Hill and Fotheringham Hill.

The type contains a number of sensitivities which reduce capacity. These include the setting of Turin and Finavon hillforts together with Pictish standing stones around Aberlemno. Balmashanner Hill is close to Forfar and is an important part of the Forfar Path Network and has a network of Core Paths across it. The open character of this type together with the landform combines to substantially increase visibility and reduce landscape capacity for solar PV development.

Avoid development on escarpments and slopes where it would be prominent or be inconsistent with the landscape pattern. Avoid PV development in areas of pasture, where development would be inconsistent with landscape pattern. Avoid significant impacts upon the setting of historic sites and recreational areas and views from such places.

TAY 12(ii) Low Mooorland Hills (Monteathmont Moor)

It is considered that there is medium capacity for solar PV development within the Low Moorland Hills (Montreathment Moor) sub-area.

This sub-area to the east of the Forfar Hills is distinctly different in character. The landform is predominantly gently undulating and gradually slopes down to the Montrose Basin LCA to the east. There are no distinctive hill landforms, although the northern edge forms an escapment of some 100m descending to the River South Esk. It is a medium to large scale arable landscape dominated by the Montreathmont Forest. The north-western part of the sub-area, to the east of Aberlemno rises in elevation towards the escarpment and has little woodland cover. This elevated and open landscape is more widely visible than other parts of the sub-area.

Capacity for solar PV development is typically high on flatter, lower areas where forestry provides a strong landscape structure within which to locate development. In contrast, capacity is considered to be low on the more open higher ground east of Aberlemno.

Avoid development on or above the escarpment due to high prominence of these areas. Avoid development on higher more open areas and on sloping landforms where visibility is likely to be high.

TAY 13 Dipslope Farmland (Overall Assessment)

Overall, the capacity for solar PV development within Dipslope Farmland is variable and ranges from high within the Monikie/ Crombie sub-area to low or no capacity within the Ethie sub-area. This reflects the variation in landform and in particular the level of enclosure across Dipslope Farmland. Each of the six sub-areas is assessed below:

TAY 13(i) Dipslope Farmland (Dundee/ Tealing)

It is considered that there is medium capacity for solar PV development within the Dipslope Farmland (Dundee/ Tealing) sub-area.

A settled area of elevated lowland arable farmland area set between the Sidlaw hills and Dundee. Landform is gently rolling or undulating, falling south and east from the Sidlaw Hills towards Dundee and the Firth of Tay. The escarpment of the southern edge of the Sidlaws rises abruptly along the northern edge of this sub-area. Landuse consists of large or medium rectilinear arable fields, woodland blocks. This pattern is broken by occasional watercourses on lower ground.

Although overlooked by the Sidlaw Hills they screen views from further north and west and whilst close to Dundee views from the city are limited by containing landform. Whilst rectilinear arable fields increases capacity for this type of development, overlooking from the Sidlaws and the limited woodland cover reduce capacity.

The sub-area, particularly west of the A90(T) around Tealing, has a number existing wind turbines and a series of electricity pylons radiating from the Tealing sub-station. While solar PV development would be consistent with this semi-industrialised character, it could lead to an over-developed and cluttered effect upon views and landscape character. Cumulative effects should be carefully considered as part of any LVIA.

Avoid areas over-looked from the Sidlaws within 2km. Development should seek to reinforce the established field patterns and use existing woodland as a landscape structure within which to locate development.

TAY 13(ii) Dipslope Farmland (Monikie/ Crombie)

It is considered that there is high capacity for solar PV development within the Dipslope Farmland (Monikie/ Crombie) sub-area.

The sub-area is a slightly elevated arable area with significant areas of enclosure and recreational landscapes. The landform is gently rolling or undulating, with a north-south dip towards the sea. The sub-area consists of medium sized rectilinear arable fields broken up by woodlands. There are occasional open uncultivated areas on higher ground.

There are substantial areas of woodland within the sub-area around both Monikie and Crombie Country Parks. In addition, the relict designed landscape associated with the demolished Panmure House, provides an extensive framework of woodland, shelterbelts and parkland areas.

In general there are open views from higher and treeless areas to both the north and south of this sub-area, but tree cover restricts views elsewhere. From outwith the sub-area, few areas are prominent when seen from surroundings although it is overlooked by higher ground to the north and east, including around Douglasmuir. It is visible as backdrop from the coast.

Overall the rectilinear arable field pattern together with a strong woodland framework within which development could be accommodated substantially increases capacity for solar PV development.

Avoid development in areas which affect the setting of the country parks or which are overlooked from higher ground.

TAY 13(iii) Dipslope Farmland (Redford Farmland)

It is considered that there is medium capacity for solar PV development within the Dipslope Farmland (Redford Farmland) sub-area.

A large, intensively managed elevated arable farmland area set above the North Sea and surrounded by similar farmland. Gently rolling or undulating, with a NW-SE dip towards the

sea and lower farmland. The sub-area has large or medium rectilinear arable fields, many where field boundaries have been removed. There are only occasional woodland blocks in this sub-area, the most notable being around Guynd designed landscape.

Views are generally open, although tree cover around Guynd restricts views. Development within this sub-area can be prominent at a distance. Whilst rectilinear arable field patterns can increase capacity for solar PV development, the lack of woodland cover and frequent absence of field boundaries substantially reduces capacity to low in more open areas. Development proposals should seek to reinforce the established field patterns and use existing woodland as a landscape structure within which to locate development.

Avoid development on higher more open areas and on sloping landforms where visibility is likely to be high.

TAY 13(iv) Dislope Farmland (Letham/ Lunan Water/ Arbroath)

It is considered that there is variable capacity for solar PV development within the Dipslope Farmland (Letham/ Lunan Water/ Arbroath) sub-area, but overall it is considered to be medium,

This sub-area consists of intensively managed agricultural land with areas of more sheltered and intimate landscape in shallow valleys. The sub-area is typically gently rolling or undulating, shallow and sometimes indistinct valley sides, and often flat valley floors gradually descending to the North Sea coast. The area has medium rectilinear arable fields, woodland blocks, broken by watercourses on lower ground.

The sub-area contains designed landscapes at Pitmuies and Guthrie, which create a more wooded character locally. Overall, woodland cover is variable, most commonly located on the lower ground closer to the Lunan Water. On slightly higher ground, most notably between Arbroath and Friockheim, the more intensive arable farming is more open with less frequent woodland. Whilst visibility is varied, the lower areas are often less visible than many other parts of Dipslope Farmland. Elsewhere, there are open mid distance views.

There are areas of poly-tunnels, particularly north of Arbroath and within the valley of the Lunan Water between Friockheim and Inverkeillor. Both poly-tunnels and solar PV consist of lines of frames with potentially reflective surfaces. They each have the potential to create a more intensive developed character to a landscape. There is therefore likelihood that both developments together would create cumulative effects which could erode the underlying landscape character of these areas. These cumulative effects should be assessed as part any cumulative assessment of landscape and visual effects. These cumulative effects are likely to reduce landscape capacity for PV solar development.

Capacity for solar PV development is considered highest on lower ground, where significant impacts upon designed landscapes are avoided and where existing woodland provides a framework for development.

Avoid development on or above river valley escarpments; higher more open areas and on sloping landforms where visibility is likely to be high.

TAY 13(v) Dipslope Farmland (Ethie)

It is considered that there is variable capacity for solar PV development within the Dipslope Farmland (Ethie) sub-area. Overall it is considered to be low, but may be higher away from the coast and steeper slopes inland, where there may be no capacity.

The rectilinear arable field pattern of this sub-type and gentle slopes increase capacity for solar PV development. A structure of trees and woodland towards the western part of this sub-type, around Kinblethmont and West Woods of Ethie, can provide a landscape framework within which solar PV development could be accompdated. Steeper slopes locally, particularly around Kinblethmont Hill and Dickmontlaw, reduce capacity due to increased visual prominence and potential landscape character impacts upon landform.

Towards the east, capacity is reduced by the limited screening provided by trees and woodland. Promoted paths closer to the coast further reduce capacity.

There are extensive areas of poly-tunnels between Arbroath and Carlingheugh Bay within this type (as well as within 14b Coast with Cliffs). Both poly-tunnels and solar PV consist of lines of frames with potentially reflective surfaces. They each have the potential to create a more intensive developed character to a landscape. There is therefore likelihood that both developments together would create cumulative effects which could erode the underlying landscape character of these areas. These cumulative effects should be shown in visualisations and assessed as part any cumulative assessment of landscape and visual effects. These cumulative effects are likely to reduce landscape capacity for PV solar development. Avoid solar PV development which would be prominent in in coastal panoramas.

Therefore in summary, greatest capacity exists to the western part of this sub-type where trees and woodland can provide a landscape structure to accommodate development. Solar PV layouts should aim to reinforce field patterns. Where more than one field is proposed for development it would be desirable that each field continues to be visually distinct by the retention of field boundary features. In some cases the field pattern can be emphasised by the off-setting developed fields. Within the eastern part and closer to the coast, the combination higher landscape value; limited screening and the existence of polytunnels substantially reduces capacity for solar PV development.

TAY 13(vi) Dipslope Farmland (Rossie Moor)

It is considered that there is low capacity for solar PV development within the Dipslope Farmland (Rossie Moor) sub-area.

A broad rolling undulating hill with a south and east dip towards the sea and the Lunan Water and steeper northern slopes above Montrose Basin. The sub-area forms a backdrop to Montrose Basin and town. The sub-area has large or medium rectilinear arable fields often with former field boundaries removed, There is an open uncultivated moorland on higher ground at Rossie Moor.

There is a designed landscape with associated woodland at Dunninald Castle. Woodland is typically concentrated along the northern escarpment of the sub-area and in larger blocks on or close to hilltops at Rossie School, Rossie Moor, Fithie Wood and Wuddy Law.

The location of the woodland together with the hill landform and the often absence of field boundaries leads to it being generally visible and sometimes prominent from surrounding lower ground and further afield. Capacity is highest where existing woodland provides a landscape framework and reduces visibility of development on arable areas with established field boundaries.

Avoid development on non-arable land and the periphery of Rossie Moor. Avoid development on or above the northern escarpment; higher more open areas and on sloping landforms where visibility is likely to be high.

TAY 14a Coast with Sand

There is considered to be no capacity for solar PV development within the Coast with Sand type.

This type is relatively narrow strip along the coastline. The rectilinear arable field pattern of this type and gentle slopes would normally increase capacity for solar PV development. However, the high relative landscape value; scenic qualities; and the Angus Coastal Path, combined with limited screening and open views substantially reduce capacity.

TAY 14b Coast with Cliffs

There is considered to be no capacity for solar PV development within the Coast with Cliffs type.

This type is relatively narrow strip along the coastline. The rectilinear arable field pattern of this type and gentle slopes would normally increase capacity for solar PV development. However, the high landscape value; scenic qualities; and the Angus Coastal Path, combined with limited screening and open views substantially reduce capacity.

There are extensive areas of poly-tunnels between Arbroath and Carlingeugh Bay within this type. Both poly-tunnels and solar PV consist of lines of frames with potentially reflective surfaces. They each have the potential to create a more intensive developed character to a landscape. There is therefore likelihood that both developments together would create cumulative effects which could erode the underlying landscape character of these areas and compromise the undeveloped character of the coast. These cumulative effects should be assessed as part any cumulative assessment of landscape and visual effects. These cumulative effects are likely to reduce landscape capacity for PV solar development.

Given the above it is considered unlikely that solar PV development could take place without significantly adversely affecting the scenic qualities of the type; the setting of the coastal paths; and panoramic views along the coastline.

TAY 15 Lowland Basin

There is considered to be low capacity for solar PV development within the Lowland Basin type.

Towards the east is a large scale open basin with rectilinear arable fields to the west of the basin and more organic patterns within Kinnaird deer park. Closer to the basin, there is a structure of hedges and hedgerow trees. There are small scale steep slopes on raised beaches and river embankments. The type is enclosed by higher ground to both the north and south. Whilst trees, hedges and woodland can increase capacity, the designed landscape at Kinnaird; the proximity to Montrose Basin; and the overlooking from higher ground substantially reduces capacity for development.

There may however be visually discreet areas where landscape value and visual sensitivity would not be significantly affected by smaller scale development.

5. Overall assessment of Capacity and Cumulative Development

There is currently eight approved solar photovoltaic developments within Angus within the scope of this study (August 2016). The resultant landscape typology has been field assessed and mapped. This is shown on figure 4. As can be seem, the extent to which solar photovoltaic development contributes towards landscape character is currently localised. The proposed limit to development for solar photovoltaic development within Angus is shown on figure 5.

Appendix A: Assessment of Landscape Character Sensitivity, Visual Sensitivity and Landscape Value by Landscape Character Type

TAY 1A Upper Highland Glen (outside National Park)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium, but with high sides. Solar PV development may introduce new human scale elements. Low/Medium |
| Landform | Steep sides enclosing flat or narrow valley floor. Medium/High |
| Pattern | Irregular. Relatively few boundaries or other pattern features. Dominated by landform. High |
| Development | Low to minimal development: tracks, occasional roads and houses. Small farmland areas. Medium/High |
| Quality | Most areas relatively natural and unaffected by development. A sense of wildness. High |
| Elements and Features | Dominated by landform features. Occasional farms and houses. Trackways. Occasional fields and forestry. Medium/High |
| Context | Glens form part of the highland backdrop to Angus and are the main access into the National Park. High |
| Overall Rating | Medium/High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Minimal number of residential receptors. Main receptors are recreational visitors to highlands and National Park. High |
| Internal Visibility | Corridor views/ vistas and slightly wider visibility from upper valley sides. Medium |
| External Visibility | Only visible from Mid Highland Glens and Highland Summits and Plateaux. Medium/Low |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | No landscape designations although adjacent to National Park and NSA. Other designations include occasional listed buildings and SAMs. Cateran Trail in Glen Isla. Medium/High |
| Community Value | Used by visitors and local population for outdoor recreation or access to highland summit areas. High |
| Cultural Value | The Angus Glens are a key landscape feature of the local authority area. Former routes into/across Highlands. Occasional castles and hunting lodges. High |
| Perceptual | Tranquil, with a low level of development, elements of wildness and highly scenic views. Medium/High |

| Overall Rating | High |
|----------------|------|
| | |

TAY 1B Mid Highland Glens (outside National Park)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium to small, but with high sides. Medium |
| Landform | Steep sides enclosing flat or narrow valley floor. Medium |
| Pattern | Variable, dominated by landform but areas of flatter valley floors have field and woodland. Fields are predominantly pasture but with some arable. Medium/High |
| Development | Some development. Scattered farms/ dwellings along valley floors, becoming less developed higher up towards the upper glens. Medium |
| Quality | Many areas relatively natural and unaffected by development. Settled areas generally in scale and harmony with rural glen setting. Medium/High |
| Elements and Features | Dominated by landform features. Clusters of dwellings, farms and isolated houses in valley floor areas. Fields on valley floor and lower sides. Extensive broadleaved woodland and conifer plantations. Medium/High |
| Context | Glens form part of the backdrop to Angus and are the main access into the highland area. High |
| Overall Rating | Medium/High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Low number residential receptors. Main receptors are recreational visitors to highlands and National Park. High |
| Internal Visibility | Corridor views/ vistas and slightly wider visibility from upper valley sides. Lower ground overlooked from valley sides. Medium/High |
| External Visibility | Mainly visible from Upper Highland Glens and Highland Summits and Plateaux but lower sections extensively visible from lowland areas to the south. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | No landscape designations although adjacent to National Park. Other designations include HGDL in Glens Isla and Clova, occasional SAMs, Many listed buildings. Cateran Trail in Glen Isla. Medium/High |
| Community Value | Used by visitors and local population for outdoor recreation or access to highland summit areas. Visitor attractions. Medium/High |
| Cultural Value | The Angus Glens are a key landscape feature of the local authority area. Former routes into/across Highlands. Castles, hunting lodges and estate policies. High |

| Perceptual | Tranquil, with a balanced rural character, transitional between settled and wilder areas with highly scenic views. Medium/High |
|----------------|---|
| Overall Rating | Medium/High |

TAY 3 Highland Summits and Plateaux (outside National Park)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Large but with high sides. Solar PV development may introduce new human scape elements. Medium/High |
| Landform | Rolling but often steep sided hills of moderate elevation with occasional crags, steep corries, burns in gullies, folds or narrow upper glens. Medium/High |
| Pattern | Irregular patterns of heather, grassland and forestry, relating to landform. No field boundaries. High |
| Development | Little evidence of built development. Tracks, paths and occasional forestry. Medium/High |
| Quality | Generally well maintained/natural upland of heather with occasional planted forest. Medium/High |
| Elements and Features | Landform and vegetation cover is dominant. Few manmade features, boundaries etc. Medium/High |
| Context | These uplands border the mountains of the National Park and contain the Angus Glens. Medium/High |
| Overall Rating | Medium/ High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Outdoor recreation receptors. Low population of residential receptors within or adjacent. Visible at distance from a wider area including a number of larger settlements and main transport routes. Medium/High |
| Internal Visibility | Extensive views across the type from the summits and ridges, but restricted in narrow valley and drainage landforms. Medium/High |
| External Visibility | Generally very conspicuous backdrop from lowland areas to the south within and beyond Angus. Any tall objects would also be highly visible from higher ground to the north. High |
| Overall Rating | Medium/ High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | No landscape designations and few other designations but adjacent to National Park. Medium |
| Community Value | Important for outdoor recreation and access to higher summits to the north. A resource for sporting estates. Medium/High |
| Cultural Value | A setting to the Angus Glens. Some well known viewpoints. Medium |

| Perceptual | An open landscape with panoramic views and a sense of remoteness and wildness. Forming backdrop to lowland areas and foreground to National Park mountains. Enclosing skyline to many Angus Glens Medium/High |
|----------------|--|
| Overall Rating | Medium/High |

TAY 5 Highland Foothills

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium with some small scale areas. Low/Medium |
| Landform | Varied. Rolling and steep hills above undulating lower ground and narrow valleys. Burns often in gullies, folds or narrow glens. Medium/High |
| Pattern | Varied pattern from open hills to enclosed pasture farmland and shelterbelts. Medium/High |
| Development | Lack of larger settlements. Development limited to farms, isolated houses, steadings, small villages, minor roads. All areas traversed by a high voltage electricity line. Medium |
| Quality | Generally well maintained farmland and estate land. Medium/High |
| Elements and Features | Attractive hamlets, large houses/castles, woodland copses, hillforts, electricity transmission line. Field and road boundaries often have walls and hedges. Medium/High |
| Context | A transitional landscape marking the Highland boundary fault, separating the uplands of the Mounth from Strathmore. 'Gateway' to Angus Glens. Medium/High |
| Overall Rating | Medium/High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Local population of residential receptors and travellers. More distant residential and travelling population in adjacent lowlands, Walkers, visitors to locations of interest. Medium/High |
| Internal Visibility | Varied visibility; between panoramic views from hilltops to narrow vistas from small glens. Medium |
| External Visibility | Generally quite visible from areas of population and transport corridors. Visible to receptors travelling to/from the Angus Glens. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | No landscape designations. Many ancient woodlands and several SAMs (mainly settlements and hillforts) Medium/High |
| Community Value | Areas used by local residential population and visitors for informal |

| | recreation. Sites of historic/ archaeological/ natural history interest. Medium/High |
|----------------|---|
| Cultural Value | Significant number of locations of archaeological/ historic interest including Caterthuns, Edzell Castle, Balintore Castle. Medium/High |
| Perceptual | Deeply rural landscape of highly varied interest and many attractive settings and views. Forms a 'gateway' to the Angus Glens. Medium/High |
| Overall Rating | Medium/High |

TAY 8 Igneous Hills

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium with some larger scale. Low |
| Landform | Rolling or conical hills and valleys of variable form. Occasional outcrops. Medium/High |
| Pattern | Diverse but typically higher ground is open and the lower areas with rectilinear patterns of medium-large scale fields and shelterbelts. Fields are predominantly pasture but with some arable on lower slopes and to the east. Medium/High |
| Development | Varies between areas of low development in some of the hills to lower farmland areas with settlements main roads, pylons and other infrastructure. Wind turbines and transmitter masts on some hills. Medium |
| Quality | Well managed open and enclosed farmland. Heather Moor variably managed with some areas reverting to scrub. Medium |
| Elements and Features | Plantations, tree belts in lower areas. Transmitter towers, wind turbines (Ark Hill and Scotston). Electricity transmission lines. Medium |
| Context | The Sidlaws form a backdrop to Dundee and the Firth of Tay and divide the lowland farming areas of Angus and Perthshire. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Residential and travelling receptors within the LCA and surrounding areas. Outdoor recreational receptors on the hills. Medium/High |
| Internal Visibility | Extensive views from ridges and summits. More restricted views from valleys. Medium |
| External Visibility | Visible as a skyline landform from surrounding lower areas. Southern and eastern slopes particularly sensitive to views from large population but lower landforms well screened from surroundings. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|------------------------------|
| | |

| Designations | No landscape designations. Some SSSIs. Kinpurney/ Auchterhouse Hill Forts. Medium |
|-----------------|---|
| Community Value | Areas used by local residential population for informal recreation. Viewpoints and footpaths. Medium |
| Cultural Value | Some archaeological/ historic interest including hillforts and cairns on summits and small castles on the periphery. Medium |
| Perceptual | Varied hill and farmland landscape forming backdrop to Dundee and the Tay, with some development of transmission towers windfarm. Open, but with little feeling of remoteness or naturalness. Medium/Low |
| Overall Rating | Medium |

TAY 10 Broad Valley Lowland

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, although overall scale of valley is very large. Low |
| Landform | Generally a simple, gently sloping or flat valley form but with areas of more complex fluvioglacial landform. Medium/Low |
| Pattern | Open, simple, regular large arable fields with variable field boundaries, predominantly post and wire fences. A network of shelterbelts and plantations although more open to the west. Low |
| Development | Well settled landscape with small towns, villages and a significant density of farms and houses. Areas crossed by major roads and a network of minor roads Medium/Low |
| Quality | Farmland intensively managed. Generally a well managed landscape although hedgerows/ trees are declining with expanded field sizes/ lack of management. Some sand and gravel quarrying and peri-urban landscapes detract. Medium/High |
| Elements and Features | Typical lowland farmland features together with roads and settlements. Tree/hedgerow boundaries to many fields but also low wall and post and wire. Generally arable occasionally with poly-tunnels and agricultural fleece. A number of large houses/ castles and designed landscapes including Glamis Castle. Electricity lines and some wind turbines. Medium |
| Context | Mid section of a vast lowland valley stretching from the River Tay in the southwest to Howe of the Mearns in the northeast, set between the Highland Boundary and volcanic hills to the south. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Significant population of residential and transport receptors throughout. Visitors to attractions such as Glamis/ Kirriemuir. Medium/High |
| Internal Visibility | Wide open views across the valley and long distance views along it. Screening by shelterbelts and landforms from lower parts of the valley in some areas. Low/Medium |

| External Visibility | Views over valley from all higher surrounding areas. Sensitivity increases |
|---------------------|--|
| EXICITION VISIONITY | closest to higher ground. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | Some significant designed landscapes. Many SAMs and listed buildings. Ancient Woodlands and SSSIs. Medium/High |
| Community Value | Setting and recreational amenity for a number of settlements and residents as well as visitor locations. Many core paths. Medium/High |
| Cultural Value | Designations reflect a rich past history of settlement and activity. Literary associations include JM Barrie. Medium/High |
| Perceptual | A settled, developed, active landscape with roads, buildings and large agricultural enterprises, although there are also many tranquil spots. Medium/Low |
| Overall Rating | Medium |

TAY 12(i) Low Moorland Hills (Forfar Hills)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium, with some smaller scale areas on hills. Low |
| Landform | A series of east-west ridges rising above more gently undulating farmland, with steep slopes and outcrops in places. Medium/High |
| Pattern | Variable, with lower angled areas having rectangular medium/large field patterns and hills and steeper slopes with smaller, broken patterns rising to open pasture. Mixture of arable and pasture with the latter becoming more common on higher ground. Medium |
| Development | Small settlements, scattered houses and farms. A network of mainly small roads. Medium |
| Quality | Managed farmland and open hilltops. Scenic areas within the hills. Medium |
| Elements and Features | Varied. Dense network of small roads, tracks, farms, houses and cottages. Hillforts and standing stones. Stone wall and hedge field boundaries. Small lochs between some hills. Electricity lines and telecommunications towers on some hills are detractors. Medium/High |
| Context | Several distinctive hilltops provide views across surrounding farmland area which merges into the Dipslope Farmland and Strathmore. Hills provide a backdrop to Strathmore and Forfar. Medium/High |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|--------------------|--|
| Receptors | Moderate to high population of residential and travelling receptors within area and close by. Hills visible from wider areas. Some visitors to |

| | hilltops, lochs etc. Medium/High |
|---------------------|--|
| Internal Visibility | Fairly open landscape in which development is widely visible. Medium/High |
| External Visibility | Hills widely visible from surrounding areas but lower ground between hills less so. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| | |
| Designations | Hillfort and standing stone SAMs. SSSI Lochs. Small areas of inventory ancient woodland. Medium |
| Community Value | Informal recreation for local people and visitors. Network of footpaths and |
| | several viewpoints. Medium |
| Cultural Value | Hillforts, crosses (Aberlemno) and standing stones of historic interest. Viewpoint on Balmashanner Hill. Some estates with listed buildings. Medium |
| Perceptual | A varied rural landscape with distinctive hilltop views and relatively little development. Medium/High |
| Overall Rating | Medium |

TAY 12(ii) Low Mooorland Hills (Monteathmont Moor)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium to large, with smaller scale domestic reference features in farmland areas. Low |
| Landform | Undulating and gently rising to the north and west before sloping steeply down to Strathmore. Medium |
| Pattern | Predominantly medium/large rectilinear patterns of fields and forestry. Arable rectilinear field pattern. Medium/Low |
| Development | Small settlements, scattered houses and farms. A network of mainly small roads. Forestry area largely undeveloped. Medium |
| Quality | Managed farmland and forest. Deterioration in field boundaries. Medium |
| Elements and Features | Mainly arable farmland and mature forestry with intermittent stone wall and hedge field boundaries. Network of small roads, tracks, farms, houses and cottages in farmland area. Montreathment forest is distinctive. Medium |
| Context | Elevated lowland farming area between Forfar Hills and Montrose Basin set between other lowland areas. Medium |
| Overall Rating | Medium/Low |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|--------------------|--|
| Receptors | Moderate population of residential receptors. Some visitors to forest area. Network of mainly minor roads. Medium |

| Internal Visibility | Fairly open landscape, although Montreathmont forest provides significant screening across the centre. Medium |
|---------------------|--|
| External Visibility | Edges visible from surrounding lower areas but central forest area mainly visible from higher ground including nearby hills and Rossie Moor. Medium |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | Montreathmont forest is in ancient woodland inventory. Medium |
| Community Value | Network of forest paths provides informal recreation for local people and visitors. Medium |
| Cultural Value | Little of note. Melgund Castle. Some listed buildings. Medium/Low |
| Perceptual | A typical rural arable landscape with a distinctive large lowland forest that offers a sense of tranquillity and naturalness. Medium |
| Overall Rating | Medium |

TAY 13 Dipslope Farmland (Overall Assessment)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, with some larger scale areas on highest ground but also with smaller domestic scale features. Medium |
| Landform | Gently rolling or undulating, with a north-south dip towards the sea and steeper northern slopes above Montrose Basin. Medium |
| Pattern | Large or medium rectilinear arable fields, woodland blocks, broken by watercourses on lower ground. Occasional open uncultivated areas on higher ground (e.g. Rossie Moor) or where field boundaries have been removed. Medium |
| Development | Bordering urban areas (Dundee, Carnoustie, Arbroath). Occasional villages and scattered hamlets, farms and houses. Main roads, railway line and a network of smaller roads. Disused quarries and airfields. Medium |
| Quality | Intensively managed agricultural landscape with some areas of unimproved land and woodland and some areas of former mineral extraction. Areas of well-maintained designed landscape. Medium |
| Elements and Features | Arable farmland predominates. Scattered settlement dispersed throughout. Occasional large houses and policies. Large farm buildings. Electricity pylons. Medium |
| Context | A large slightly elevated lowland farmland area set between igneous hills, Dundee and the North Sea. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Moderate number of both travelling and residential receptors. Medium |
| Internal Visibility | Generally open views from higher areas, with some lower valley areas more restricted. Tree cover in the west restricts views. Development may sometimes be prominent at a distance. Medium/High |
| External Visibility | Varied. Few areas are prominent when seen from surroundings although the areas north and east of Dundee are potentially visible from a large population and Rossie Moor is visible from surrounding lower ground. Medium |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Designed landscapes at Pitmuies, Guthrie and Guynd. Large areas of SAMs along Lunan Water and Bay area. SSSIs. Scattered ancient woodland. Two country parks at Crombie and Monikie. Medium |
| Community Value | Setting to a number of settlements. Country parks, Golf Course, Medium |
| Cultural Value | Policy woodlands, SAMs. Castles. Medium |
| Perceptual | A vast area of open, intensively managed agricultural land with areas of more sheltered and intimate landscape in shallow valleys, settlements, designed landscapes and country parks. Medium |
| Overall Rating | Medium |

TAY 13(i) Dipslope Farmland (Dundee/ Tealing)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, but also with smaller domestic scale features. Low |
| Landform | Gently rolling or undulating, falling south and east from the Sidlaw Hills towards Dundee and the Firth of Tay. Medium |
| Pattern | Large or medium rectilinear arable fields, woodland blocks, broken by occasional watercourses on lower ground. Low |
| Development | Bordering urban area of Dundee although city screened. Villages and scattered hamlets, farms and houses. Main roads and a network of smaller roads. Disused airfield. Large electricity substation. Medium |
| Quality | Intensively managed agricultural landscape with woodland areas. Medium |
| Elements and Features | Arable farmland predominates. Scattered settlement dispersed throughout. Large farm buildings. Golf courses. Quarry. Several electricity transmission lines. Occasional wind turbines. Medium |
| Context | A settled area of elevated lowland arable farmland area set between the Sidlaw hills and Dundee. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Moderate number of both travelling and residential receptors. Close to Dundee (although southern edge is a screening ridge). Overlooked by walkers/ viewpoints on Sidlaw Hills Medium |
| Internal Visibility | Mainly open with small woodlands partially screening views. Medium/High |
| External Visibility | Limited. Although overlooked by Sidlaws they screen views from further north and west. Although close to Dundee views from the city are limited by containing landform. Medium |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Small areas of inventory ancient woodland. Occasional SAMs. Listed buildings Medium |
| Community Value | Setting to a number of small settlements and backdrop to Dundee. Adjacent country parks in Dundee. Forest access land. Golf Course. Medium/High |
| Cultural Value | No notable features. Some SAMs and listed buildings. Medium/Low |
| Perceptual | An area of open, intensively managed agricultural land with a number of settlements forming a hinterland to Dundee and rising into the Sidlaw Hills. Medium |
| Overall Rating | Medium |

TAY 13(ii) Dipslope Farmland (Monikie/ Crombie)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, with some smaller scale areas and features associated with villages and country parks and larger open areas to the north. Low |
| Landform | Gently rolling or undulating, with a north-south dip towards the sea. Medium/Low |
| Pattern | Medium rectilinear arable fields broken up by woodlands. Occasional open uncultivated areas on higher ground. Low/Medium |
| Development | Bordering urban areas in south (Monifieth, Carnoustie). Occasional villages and scattered hamlets, farms and houses. Less populated in the north. Main road in south and a network of smaller roads. Medium/High |
| Quality | Intensively managed agricultural landscape with some areas of unimproved land and significant areas of well maintained recreational and designed landscape. Medium/High |
| Elements and Features | Arable farmland predominates but also significant areas of country parks and estate policies (Panmure house demolished in 1950s). Settlement dispersed throughout. Large farm buildings. Electricity pylons. Medium/High |

| Context | A slightly elevated arable farmland area close to Dundee with significant areas of enclosure and recreational landscapes. Medium |
|----------------|---|
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | High number of both travelling and residential receptors within or nearby. Medium/High |
| Internal Visibility | Generally open views from higher and treeless areas to N and S. Tree cover restricts views elsewhere. Medium |
| External Visibility | Varied. Few areas are prominent when seen from surroundings although overlooked by higher ground to N and E and from edge of Dundee. Visible as backdrop from coast. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Two country parks at Crombie and Monikie. Inventory ancient woodland at Panmure estate. Some SAMs and listed buildings associated with estates. National Trust site at Barry Mill. Peat bog SSSI. Medium/High |
| Community Value | Setting to a number of settlements. Two country parks. Medium/High |
| Cultural Value | Panmure estate and a number of SAMs. Medium |
| Perceptual | A varied area of farmland close to Dundee with a number of settlements significant enclosed areas of mature woodland including two country parks and a relict estate landscape. Medium/High |
| Overall Rating | Medium/High |

TAY 13(iii) Dipslope Farmland (Redford Farmland)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium, with some larger scale areas on highest ground where field boundaries are removed and trees are few. Also smaller domestic scale features. Low |
| Landform | Gently rolling or undulating, with a NW-SE dip towards the sea and lower farmland. Medium/Low |
| Pattern | Large or medium rectilinear arable fields, many where field boundaries have been removed. Occasional woodland blocks. Medium |
| Development | Scattered hamlets, farms and houses. Main roads and a network of smaller roads. Disused quarries. Low/Medium |
| Quality | Intensively managed agricultural landscape with declining field boundaries, some areas of woodland and some former mineral extraction. Area of well maintained designed landscape. Medium |
| Elements and Features | Arable farmland with intermittent boundaries predominates. Scattered |

| | minor settlement dispersed throughout. Large house and policies at Guynd. Large farm buildings. Electricity pylons. Medium |
|----------------|--|
| Context | A large, intensively managed elevated arable farmland area set above the North Sea and surrounded by similar farmland. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Moderate number of travelling and low number of residential receptors. Medium/Low |
| Internal Visibility | Generally open views, although tree cover around Guynd restricts views. Development can be prominent at a distance. Medium/High |
| External Visibility | Varied. Few areas are prominent when seen from surroundings, but often forming a low horizon. Medium |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Designed landscape at Guynd. Some SAMs and listed buildings. Little inventory ancient woodland. Medium |
| Community Value | Setting to small settlements and houses. Medium/Low |
| Cultural Value | House and designed landscape at Guynd. A few SAMs and listed buildings. Medium |
| Perceptual | An area of open, intensively managed arable land with few features and limited areas of more sheltered and intimate landscape. Medium/Low |
| Overall Rating | Medium/Low |

TAY 13(iv) Dislope Farmland (Letham/ Lunan Water/ Arbroath)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, with many smaller scale areas/ features associated with settlements and watercourses. Low |
| Landform | Gently rolling or undulating, shallow and sometimes indistinct valley sides, and often flat valley floors gradually descending to the North Sea coast. Medium |
| Pattern | Medium rectilinear arable fields, woodland blocks, broken by watercourses on lower ground. Low |
| Development | Bordering or containing urban areas/ villages (Arbroath, Letham, Friockheim). Hamlets, farms and houses. Main roads, railway line and a network of smaller roads. Golf course. Disused quarries and airfields. Medium/High |
| Quality | Intensively managed agricultural landscape with some areas of woodland and some areas of former mineral extraction. Areas of well |

| | maintained designed landscape and golf course. Medium |
|-----------------------|--|
| Elements and Features | Arable farmland predominates. Mixture of stone walls, post and wire fences and open field edges. Areas of polytunnels. Watercourses. Settlement dispersed throughout. Main roads often following valley and linking settlements. Network of minor roads. Large farm buildings. Occasional wind turbines. Medium |
| Context | A settled, lowland, arable farmland area situated mainly in shallow valleys and often sheltered by areas of higher farmland. Medium/High |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Moderate to high number of both travelling and residential receptors. Medium/High |
| Internal Visibility | Generally open mid distance views, although tree cover restricts views in many locations. Large areas of development can be prominent at a distance. Medium |
| External Visibility | Varied but some parts are less visible than surrounding Dipslope Farmland areas. Medium |
| Overall Rating | Medium |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Designed landscapes at Pitmuies and Guthrie. Large areas of SAMs along Lunan Water and Bay area. Significant numbers of listed buildings. Scattered inventory ancient woodland. Medium/High |
| Community Value | Setting and travel routes to a number of settlements. Golf Course. Medium/High |
| Cultural Value | Designed landscapes, SAMs and listed buildings. Medium/High |
| Perceptual | An area of intensively managed agricultural land with areas of more sheltered and intimate landscape in shallow valleys, settlements and designed landscapes. Medium |
| Overall Rating | Medium/High |

TAY 13(v) Dislope Farmland (Ethie)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium but also with smaller domestic scale features in more sheltered and woodland/ plantation areas. Fairly limited extent. Low |
| Landform | Gently rolling or undulating, falling inland to shallow valleys and towards the sea. Low/Medium |
| Pattern | Large or medium rectilinear arable fields with poly-tunnels and woodland blocks, broken by watercourses on lower ground. Low/Medium |

| Development | Occasional farms and houses. Main road and railway line and a network of smaller roads. Medium |
|-----------------------|---|
| Quality | Intensively managed agricultural landscape with small areas of estate policies/ plantation woodland. Medium/High |
| Elements and Features | Arable farmland predominates with poly-tunnels locally common. Low stone walls towards the sea but more mixed boundaries including hedges inland. Scattered houses dispersed throughout including large listed houses/ castles which are now hotels. Large farm buildings. Communications masts. Medium/High |
| Context | A slightly elevated lowland farmland area set above Arbroath and surrounding shallow valleys and exposed to the North Sea, but with more intimate and sheltered inland areas. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Moderate number of both travelling and residential receptors within or nearby. Coastal walkers and cycleway. Guests at hotels. Medium/High |
| Internal Visibility | Generally open exposed views from higher areas, with some lower areas more restricted. Tree cover further inland restricts views. Development can be prominent at a distance. Medium/High |
| External Visibility | Mainly visible at close or middle distance from surrounding farmland and coastal areas. Development would be fairly widely visible. Medium |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | Scattered inventory ancient woodland. Occasional SAMs and a number of listed buildings. Medium |
| Community Value | Background setting to Arbroath. Cycle route. Medium/Low |
| Cultural Value | Large houses/ castle and policy woodlands, SAMs. Medium |
| Perceptual | A small area of open, intensively managed agricultural land elevated above its surroundings and exposed to the North Sea coast, with areas of more sheltered and intimate landscape in small estate landscapes. Medium/High |
| Overall Rating | Medium |

TAY 13(vi) Dipslope Farmland (Rossie Moor)

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|--|
| Scale | Medium, with some larger scale areas on highest ground but also with smaller domestic scale features. Low |
| Landform | Rolling or undulating. A broad hill with a south and east dip towards the |

| | sea and the Lunan Water and steeper northern slopes above Montrose Basin. Medium/High |
|-----------------------|--|
| Pattern | Large or medium rectilinear arable fields often with boundaries removed, woodland blocks, broken by watercourses on lower ground. Open uncultivated area on higher ground at Rossie Moor. Medium/High |
| Development | No villages. Scattered hamlets, farms and houses. Main road, railway line in east. Sparse network of smaller roads in west. Medium |
| Quality | Intensively managed agricultural landscape with varied field boundaries, some areas of natural moorland and woodland and a quarry. Medium |
| Elements and Features | Arable farmland predominates. Scattered small settlement throughout. Occasional castle/ large houses and policies. Rossie school. Large farm buildings. Communications mast. Medium |
| Context | A large elevated lowland farmland area set between Montrose Basin, Lunan Water and the North Sea. Medium/High |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|--|
| Receptors | Moderate number of travelling and residential receptors. Coastal walkers and cycle route nearby. Medium |
| Internal Visibility | Generally open views. Tree cover and landform restricts views in places. Development can be prominent at a distance. Medium/High |
| External Visibility | Generally visible and sometimes prominent from surrounding lower ground and further afield. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | Designed landscape at Dunninald Castle. SSSI at Rossie Moor. Grade A listed buildings at Braikie and Dunninald. Scattered inventory ancient woodland. Medium |
| Community Value | Walks across Rossie Moor and adjacent woodlands. Cycle route. Medium |
| Cultural Value | Two castles. Designed landscape. Medium |
| Perceptual | A large area of open, intensively managed agricultural land and scattered houses, with a small area of more natural moorland landscape. Forms a backdrop to Montrose Basin and town. Unfrequented in the west but transport corridors pass through the east. Medium/High |
| Overall Rating | Medium |

TAY 14a Coast with Sand

| Landscape Character | Criteria/ Sensitivity Levels |
|---------------------|------------------------------|
| Sensitivity | |

| Scale | Medium, with smaller scale features. Generally limited in area. Low |
|-----------------------|---|
| Landform | Flat, open, low lying, with mature dunes and small escarpments. Medium |
| Pattern | Predominantly simple but varied between regular pattern in cultivated farmland areas, linear pattern in beach areas, organic pattern in golf courses and irregular pattern in dunes. Medium/High |
| Development | Varies between influence of adjacent urban margins to occasional isolated hamlets and houses. Roads (mainly minor) and railway. One small fishing village. Golf courses. Medium |
| Quality | Varied. Generally scenic due to open sea views. Often intensively managed (golf courses and arable farming). In places character is compromised by adjacent urban development. Medium |
| Elements and Features | Sandy beaches and mature dunes. Flatness and open sea views. Golf courses. Former WW2 airstrips and defences (current military range at Barry Budden) Medium/High |
| Context | Mainly a narrow strip between farmland, settlements and the sea. Sometimes indistinct transition into inland farmland areas. Medium |
| Overall Rating | Medium |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Low population of residential receptors with greater numbers immediately adjacent. Travelling population on road and rail. Cyclists. Beachwalkers and golfers. Sailors and Kayakers. Medium/High |
| Internal Visibility | Wide open views with some local restrictions due to dunes/landforms and occasional blocks of trees at Barry Budden and Montrose. Development can be prominent in this landscape type. High |
| External Visibility | Visible from adjacent higher ground and urban areas. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|--|
| Designations | SSSI and SAC at Barry Budden and SSSI north of Montrose. SAMs at Lunan Bay. Medium |
| Community Value | Setting for local residents in houses/ villages. Most areas easily accessible from neighbouring settlements and holiday caravan parks for formal and informal recreation. Golf courses. Cycle routes. Beach walks. High |
| Cultural Value | Historic/ attractive villages. Some locations of archaeological/ historic interest. Medium |
| Perceptual | Windswept coastal strips with accessible sandy beaches and hinterland which whilst undramatic in landform provide tranquillity, recreational access and open views. Medium/High |
| Overall Rating | Medium/High |

TAY 14b Coast with Cliffs

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium, with smaller scale features (cliffs generally up to 30m but escarpments up to 80m). Generally limited in area. Low |
| Landform | Gently sloping with small rocky cliffs, rocky reefs, bays, inlets and rocky escarpments. Medium/High |
| Pattern | Varied between regular pattern in arable farmland areas with areas of poly-tunnels to complex and irregular pattern in rocky cliff areas. Medium/High |
| Development | Varies between influence of adjacent urban margins to occasional isolated hamlets and houses and stretches with no settlement/ roads. A number of small fishing villages/ havens and harbours. Roads (mainly minor) and railway. Golf courses. Medium/High |
| Quality | Varied. Generally scenic due to open sea views and cliff landforms. Hinterland often intensively managed (arable farming). In places character is compromised by adjacent urban development. Medium/High |
| Elements and Features | Rocky outcrops and cliffs characterised by very varied eroded form with many caves, arches and small stacks/ outcrops. Small coves, havens and harbours. Lighthouse at Scurdie Ness. Open and distant sea views. Medium/High |
| Context | A narrow strip between farmland, settlements and the sea but with dramatic elevated views and considerable detail and interest. Medium/High |
| Overall Rating | Medium/High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Low population of residential receptors with greater numbers immediately adjacent. Travelling population on road and rail. Cyclists and walkers. Sailors and Kayakers. Medium/High |
| Internal Visibility | Wide open views. Development can be prominent in this landscape type. High |
| External Visibility | Visible from adjacent urban areas, hinterland, sandy coastline and other headlands. Development can be prominent along the coastal strip. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | SSSI along most lengths of rocky coast. Medium/High |
| Community Value | Setting for local residents in houses/ villages. Most areas easily accessible from neighbouring settlements and holiday caravan parks for formal and informal recreation. Cycle routes. Clifftop walks. High |

| Overall Rating | Medium/High |
|----------------|--|
| Perceptual | Windswept coastal strips with accessible clifftop walks and secluded beaches/ havens providing tranquillity, dramatic interest, recreational access and open views. Medium/High |
| Cultural Value | Historic/ attractive fishing villages. Some locations of archaeological/ historic interest including clifftop forts and castles. Medium |

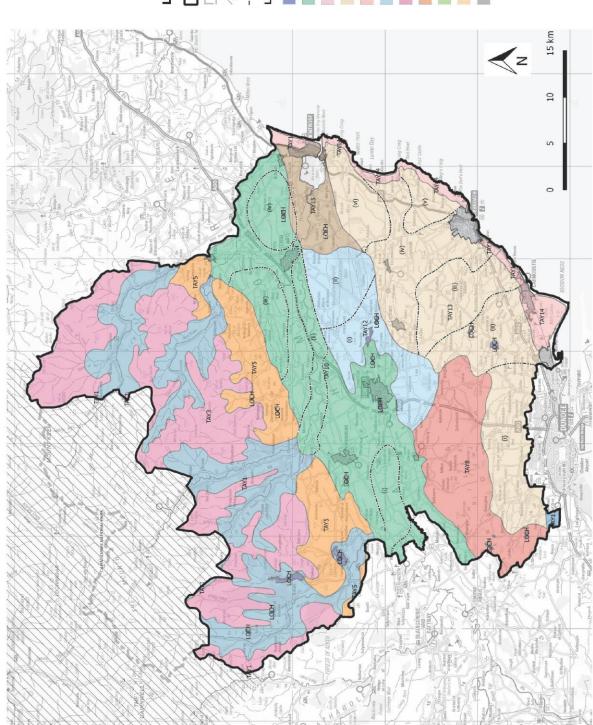
TAY 15 Lowland Loch Basin

| Landscape Character Sensitivity | Criteria/ Sensitivity Levels |
|------------------------------------|---|
| Scale | Medium to large. Medium/Low |
| Landform | Flat, open, low lying tidal basin and farmland contained by surrounding higher areas of farmland. Small scale steep slopes on raised beaches and river embankments Medium |
| Pattern | Varied. Open, large-scale basin to E. Rectilinear arable fields to W and more organic patterns within Kinnaird deer park. Low/Medium |
| Development | Montrose to E of basin, otherwise small hamlets and scattered farms/ houses. Fringed by main roads, crossed by minor roads, railways Medium |
| Quality | Well managed farmland. Estate policies. Basin managed for wildlife. Attractive rural settlements. Medium/High |
| Elements and Features | Tidal basin is unique in Scotland. Shorelines, mudflats and tidal watercourses. Rich natural heritage. Arable farmland with mature deciduous/mixed woodlands, avenue trees, hedges. Town of Montrose. Attractive hamlets. Kinnaird House and deer park. Medium/ High |
| Context | Generally lowland surroundings. Unique basin provides a setting for Montrose. Medium/High |
| Overall Rating | Medium/High |

| Visual Sensitivity | Criteria/ Sensitivity Levels |
|---------------------|---|
| Receptors | Moderate/ high number of residential receptors as overlooked by Montrose in addition to small settlements. Significant travelling population along peripheral main roads. Visitors to attractions including wildlife centre, House of Dun, Montrose. Medium/High |
| Internal Visibility | Clear inter-visibility within basin area but some screening by trees in western part. Medium/High |
| External Visibility | Overlooked from higher surrounding areas to north and south, but screened from a distance. As a result, development would be prominent in this type. Medium/High |
| Overall Rating | Medium/High |

| Landscape Value | Criteria/ Sensitivity Levels |
|-----------------|---|
| Designations | Basin is a SSSI. HGDLs and listed buildings at Kinnaird castle and House of |

| | Dun (adjacent). Medium/High |
|-----------------|--|
| Community Value | Areas used by local residential population and visitors for formal/informal recreation. Visitor attractions including SWT visitor centre, Caledonian railway. Medium/High |
| Cultural Value | HGDLs. Some SAMs. Caledonian Railway. Historic town of Montrose Medium/High |
| Perceptual | A unique tidal basin feature with water and sky reflections, set in a wider lowland farmland landscape. Provides a setting for the town of Montrose. Hinterland of well managed farmland, mature trees and attractive hamlets and houses. Medium/High |
| Overall Rating | Medium/High |





Capacity Assessment for Solar Energy in Angus Fig 2 Strategic Landscape

Legend

- Study Area
- Angus Council Boundary
- // Caimgorms National Park
- ---- LCA Sub Areas

Landscape Character Type

- Tay10, Broad Valley Lowland Loch, Inland Loch
- Tay14, Coast
- Tay13, Dipslope Farmland
- Tay5, Highland Foothills
- Tay1, Highland Glens
- Tay3, Highland Summits and Plateaux Tay8, Igneous Hills
 - Tay12, Low Moorland Hills
- Tay15, Lowland Loch Basin
- Urban, Urban

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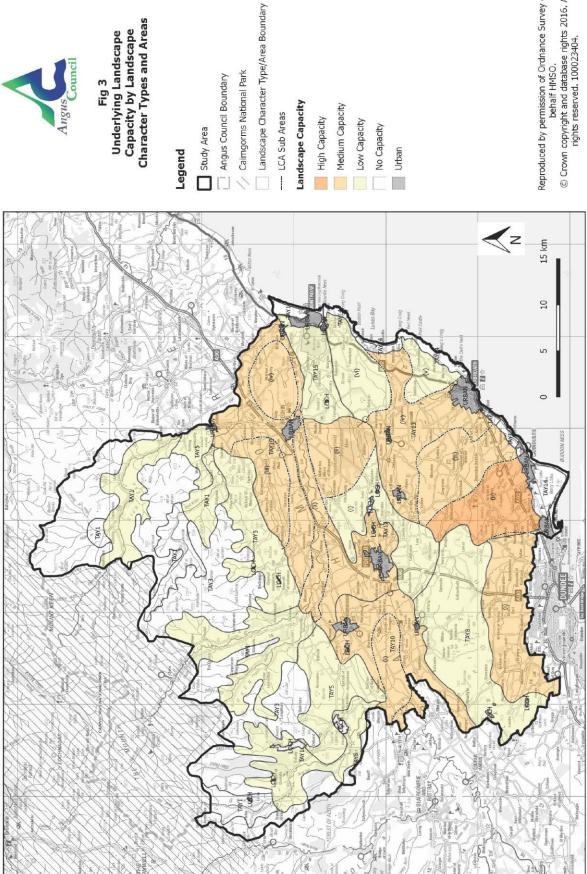


Fig 3 Underlying Landscape Capacity by Landscape Character Types and Areas

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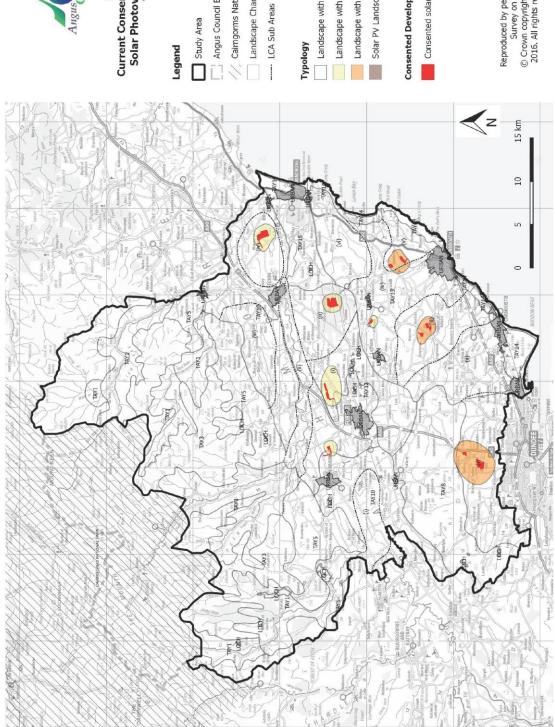




Fig 4
Current Consented Development:
Solar Photovoltaic Landscape

Cairngorms National Park Angus Council Boundary Study Area

Landscape Character Type/Area Boundary

Typology

Landscape with no Solar PV

Landscape with Occasional SolarPV Landscape with Solar PV

Solar PV Landscape

Consented Development

Consented solar pv

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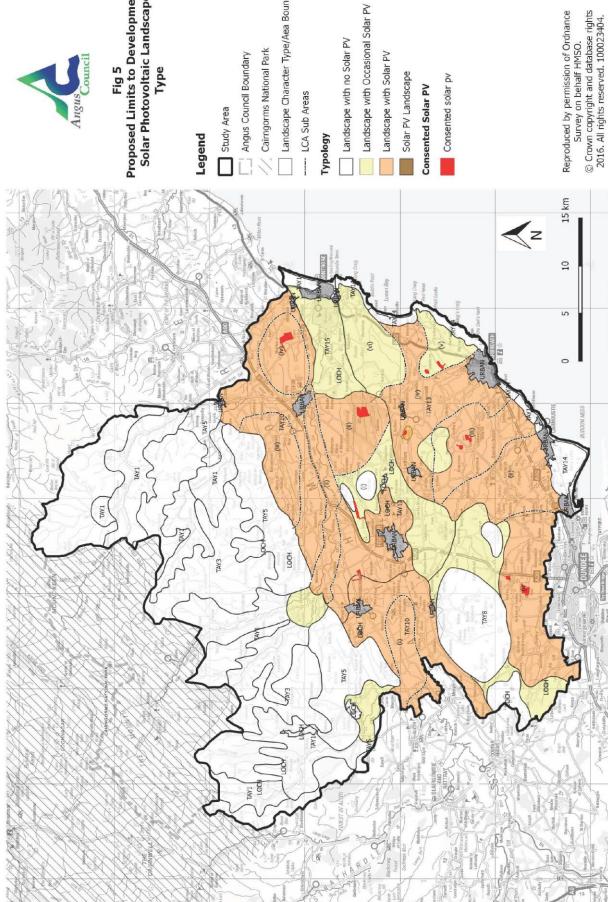


Fig 5 Proposed Limits to Development: Solar Photovoltaic Landscape

/ Cairngorms National Park

Landscape Character Type/Aea Boundary

Landscape with no Solar PV

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