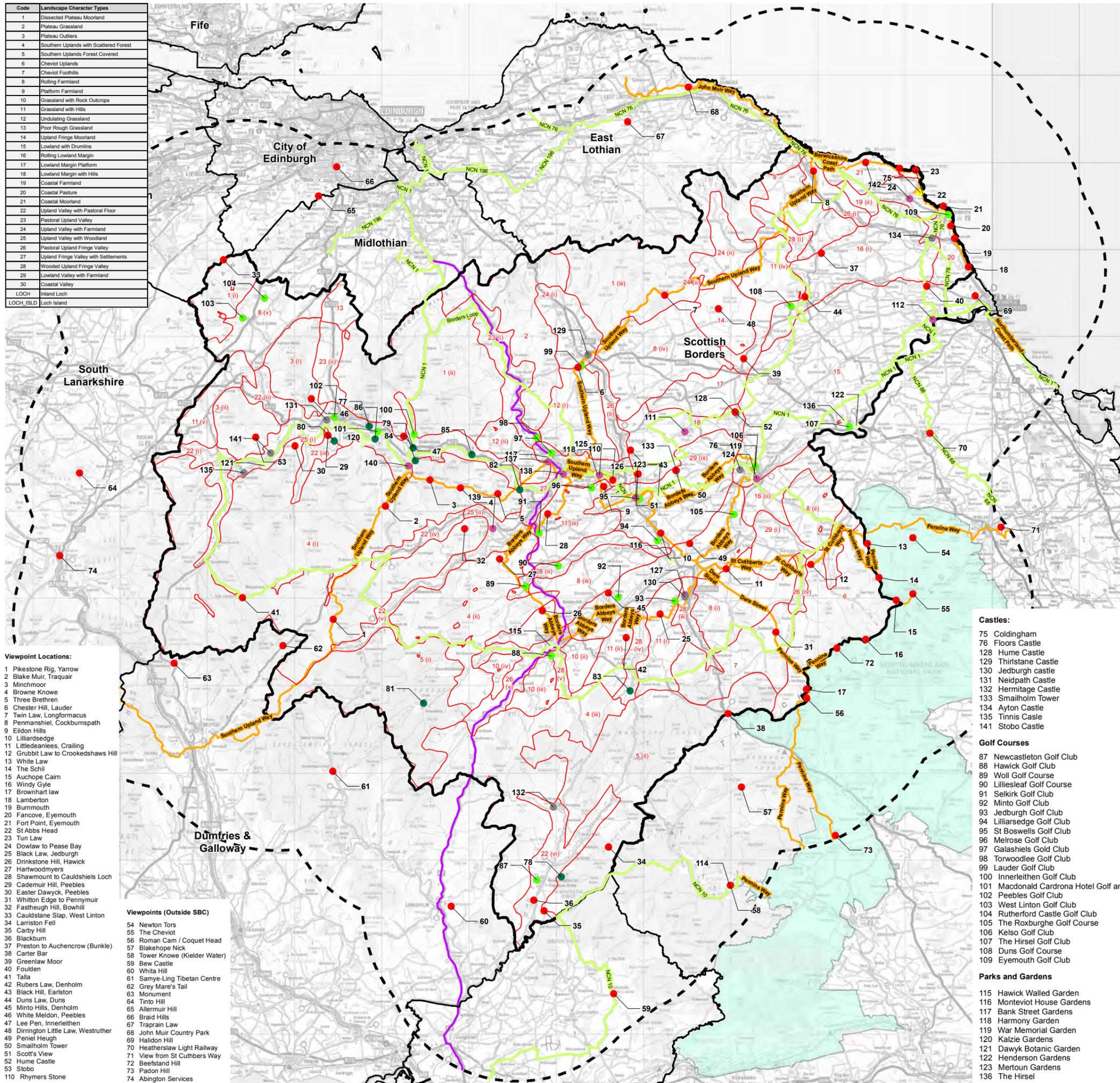


Scottish Borders Updated Wind Energy Capacity Study

May 2016

8558_GIS_110

Code	Landscape Character Types
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2	Plateau Grassland
3	Plateau Outliers
4	Southern Uplands with Scattered Forest
5	Southern Uplands Forest Covered
6	Cheviot Uplands
7	Cheviot Foothills
8	Rolling Farmland
9	Platform Farmland
10	Grassland with Rock Outcrops
11	Grassland with Hills
12	Undulating Grassland
13	Poor Rough Grassland
14	Upland Fringe Moorland
15	Lowland with Drumlins
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27	Upland Fringe Valley with Settlements
28	Wooded Upland Fringe Valley
29	Lowland Valley with Farmland
30	Coastal Valley
LOCH	Inland Loch
LOCH_ISLD	Loch Island



Legend

- SBC Local Authority Boundary
- Local Authority Boundary 15km Buffer
- Other Local Authority Boundaries
- Landscape Character Areas
- Northumberland National Park
- Borders Historic Route
- Major Promoted Paths
- National Cycle Network and Borders Loop
- Viewpoint
- Castles
- Forests & Woodlands
- Parks & Gardens
- Historic Buildings & Homes
- Golf Courses
- Beach

Viewpoint Locations:

- 1 Pikestone Rig, Yarrow
- 2 Blake Muir, Traquair
- 3 Minchmoor
- 4 Browne Knowe
- 5 Three Brethren
- 6 Chester Hill, Lauder
- 7 Twin Law, Longformacus
- 8 Penmanshiel, Cockburnspath
- 9 Eildon Hills
- 10 Lilliardsedge
- 11 Littledeanlees, Crailing
- 12 Grubbit Law to Crookedshaws Hill
- 13 White Law
- 14 The Schil
- 15 Auchope Cairn
- 16 Windy Gyle
- 17 Brownhart law
- 18 Lambert
- 19 Burnmouth
- 20 Fancove, Eyemouth
- 21 Fort Point, Eyemouth
- 22 St Abbs Head
- 23 Tun Law
- 24 Dowlaw to Pease Bay
- 25 Black Law, Jedburgh
- 26 Drinkstone Hill, Hawick
- 27 Hartwoodmyers
- 28 Shawmout to Cauldshields Loch
- 29 Cademuir Hill, Peebles
- 30 Easter Dawyck, Peebles
- 31 Whitton Edge to Penymuir
- 32 Fastheugh Hill, Bowhill
- 33 Cauldstane Slap, West Linton
- 34 Larriston Fell
- 35 Carby Hill
- 36 Blackburn
- 37 Preston to Auchencrow (Bunkle)
- 38 Carter Bar
- 39 Greenlaw Moor
- 40 Foulden
- 41 Talla
- 42 Rubers Law, Denholm
- 43 Black Hill, Earlstoun
- 44 Duns Law, Duns
- 45 Minto Hills, Denholm
- 46 White Meldon, Peebles
- 47 Lee Pen, Innerleithen
- 48 Dinnington Little Law, Westruther
- 49 Peniel Heugh
- 50 Smallholm Tower
- 51 Scott's View
- 52 Hume Castle
- 53 Stobo
- 110 Rhymer's Stone

Viewpoints (Outside SBC)

- 54 Newton Tors
- 55 The Cheviot
- 56 Roman Cam / Coquet Head
- 57 Blakehope Nick
- 58 Tower Knowe (Kielder Water)
- 59 Bew Castle
- 60 White Hill
- 61 Samye-Ling Tibetan Centre
- 62 Grey Mare's Tail
- 63 Monument
- 64 Tinto Hill
- 65 Allermuir Hill
- 66 Braid Hills
- 67 Traprain Law
- 68 John Muir Country Park
- 69 Halidon Hill
- 70 Heatherslaw Light Railway
- 71 View from St Cuthberts Way
- 72 Beefstand Hill
- 73 Padon Hill
- 74 Abington Services

Castles:

- 75 Coldingham
- 76 Floors Castle
- 128 Hume Castle
- 129 Thirstane Castle
- 130 Jedburgh castle
- 131 Neidpath Castle
- 132 Hermitage Castle
- 133 Smallholm Tower
- 134 Aytoun Castle
- 135 Tinnis Castle
- 141 Stobo Castle

Golf Courses

- 87 Newcastleton Golf Club
- 88 Hawick Golf Club
- 89 Woll Golf Course
- 90 Lilliesleaf Golf Course
- 91 Selkirk Golf Club
- 92 Minto Golf Club
- 93 Jedburgh Golf Club
- 94 Lilliardsedge Golf Club
- 95 St Boswells Golf Club
- 96 Melrose Golf Club
- 97 Galashiels Golf Club
- 98 Torwoodlee Golf Club
- 99 Lauder Golf Club
- 100 Innerleithen Golf Club
- 101 Macdonald Cardrona Hotel Golf and Country Club
- 102 Peebles Golf Club
- 103 West Linton Golf Club
- 104 Rutherford Castle Golf Club
- 105 The Roxburgh Golf Course
- 106 Kelso Golf Club
- 107 The Hirsell Golf Club
- 108 Duns Golf Course
- 109 Eyemouth Golf Club

Parks and Gardens

- 115 Hawick Walled Garden
- 116 Monteviot House Gardens
- 117 Bank Street Gardens
- 118 Harmony Garden
- 119 War Memorial Garden
- 120 Kaizie Gardens
- 121 Dawyk Botanic Garden
- 122 Henderson Gardens
- 123 Mertoun Gardens
- 136 The Hirsell

Forests and Woodlands:

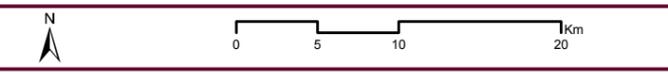
- 77 Gientress Forest
- 78 Newcastleton
- 79 Caberston Forest
- 80 Cademuir Forest
- 81 Craik Forest
- 82 Yair Forest
- 83 Craigbank Wood
- 84 Innerleithen
- 85 Thornielee Forest
- 86 Cardrona Forest
- 114 Kielder Water & Forest Park

Historic Buildings and Homes

- 111 Mellerstrain House & Gardens
- 112 Paxton House, Gallery & Country Park
- 124 Kelso Abbey
- 125 Melrose Abbey
- 126 Dryburgh Abbey
- 127 Jedburgh Abbey
- 137 Gala House
- 138 Abbotsford House
- 139 Bowhill
- 140 Traquair House
- 142 Coldingham Priory

Figure 4.2

Tourism Infrastructure



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5.0 WIND TURBINES IN THE STUDY AREA

The following section describes the operating, consented and proposed wind turbine developments in Scottish Borders at July 2016 and rest of the study area according to available databases.

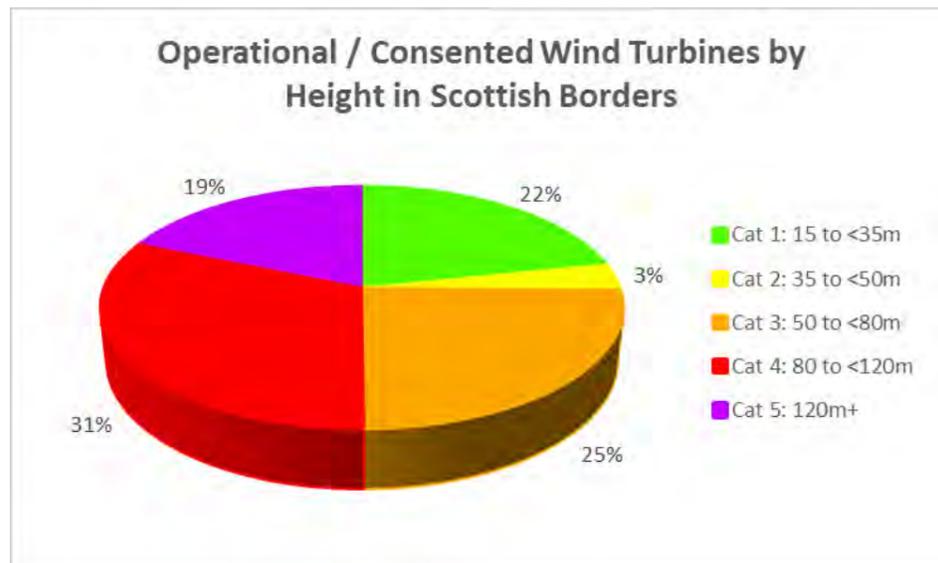
5.1 Turbine Numbers and Distribution

The study area, for the purposes of visibility, landscape and visual impacts of turbines includes the Scottish Borders region, plus a 15km buffer around its boundary, taking in the majority of East Lothian and Midlothian, the southern area of Edinburgh City Council, the eastern area of West Lothian and South Lanarkshire and the north eastern area of Dumfries and Galloway. The study area also extends into northern England and includes the northern tip of Cumbria and the north western area of Northumberland. The extents of the study area are illustrated on Figure 3.1.

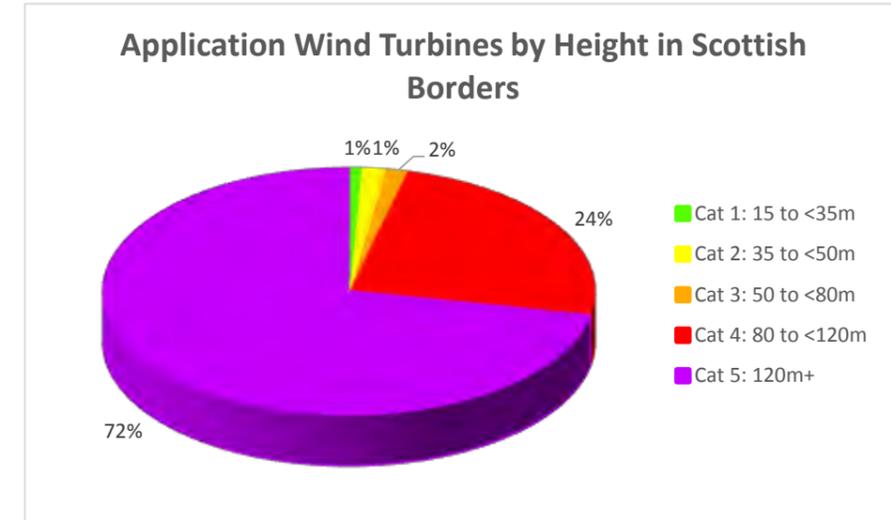
Consented and proposed wind energy developments within the study area are listed, together with details (where available) of location, number and height of turbines, etc, in Appendix 5. The locations are shown in Figure 5.1 (Scottish Borders) and 5.2 (whole study area).

At **July 2016** there were, within Scottish Borders, a total of 479 operational or consented turbines of 15m or greater height and 128 in planning or S36 applications awaiting a decision. Turbine numbers are according to the height categories listed in Chapter 2, Table 2.1.

Of those turbines consented, a significant proportion (240 or 50%) are in the two largest height categories, being 80m or more to blade tip, and 104 are in the smallest height category, below 35m in height. The following chart shows the distribution of sizes.



In the applications the vast majority of proposed turbines (123 or 96%) are 80m or more in blade height, as the following chart shows.



At or before July 2016 there are also very significant numbers of operational, consented and proposed wind turbines in the 15km buffer (Approximately 600 existing/consented and 74 proposed). This is particularly due to parts of the Crystal Rig/ Aikengall cluster extending into East Lothian; and Clyde windfarm and extension on the boundary with South Lanarkshire and significant developments in Dumfries and Galloway. Most of these turbines are 80m or taller to blade tip.

5.2.1 Operating and Consented Wind Turbines

Scottish Borders, but particularly the wider study area, has a high number of windfarms with larger sized turbines when compared to many areas of Scotland. The largest windfarm within the study area and 15km buffer is Clyde Windfarm, (152x125m turbines) and Clyde Extension (54x125-142m turbines) located to the west of Scottish Borders, mainly within South Lanarkshire but three turbines within Scottish Borders. Of the consented and operational windfarms well within Scottish Borders, the two largest windfarms have over 50 turbines:

- Dun Law; 26x67.5m and 25x75m contiguous with two smaller windfarms (Pogie and Keith Hill totalling 11 turbines) in East Lothian
- Crystal Rig/ Aikengall windfarm development cluster straddling the Scottish Borders and East Lothian boundary in total comprises 127 turbines, with 48 turbines of between 100 and 125m within Scottish Borders

There are four windfarms with between 20 and 50 turbines:

- Fallago Rig (48x110/125m)
- Bowbeat windfarm (24x80m)
- Black Hill windfarm; 22x78m
- Drone Hill Windfarm; 22x76m

There are six medium sized windfarms with between 9 and 20 turbines:

- Quixwood Farm, 13x115m
- Penmanshiel Farm, 14x100m
- Toddleburn windfarm; 12x125m
- Long Park windfarm; 19x100m
- Glenkerie windfarm and extension; 17x100-125m
- Langhope Rig; 10x121.2
- Cloich Forest (18x115m),
- Windy Edge (7x125, 2x110)

There are three windfarms with three larger size turbines:

- Carcant windfarm; 3x107m
- Brockholes windfarm; 3x79m
- Hoprigshiels windfarm; 3x115m

A significant number of smaller non-commercial/FiT developments, single, 2 or 3 turbine developments, mainly with smaller turbines, are operational or are consented, particularly in the northeast and northwest of the study area.

5.2.2 Proposed Windfarms

There are several proposed windfarms or windfarm extensions within the Scottish Borders. The main proposals at July 2016 are:

- Aikengall IIA (19x125-145m) on the eastern edge of the Lammermuirs (partly in East Lothian)
- Fallago Rig extension (12x126.4m) in the central Lammermuirs
- Inch Moor (16x126.5m) on the southern fringes of the Lammermuirs, west of Duns
- Earlishaugh (22x125m) and Whitelaw Brae (14x113.5m) in the Southern Uplands south of Tweeddale
- Kilrubie (7x115m) in the *Plateau Outliers* west of Eddleston
- Longpark Extension (7x100-110m)
- Birneyknowe (15x132m) south of Rubers Law
- Highlee Hill (13x176m) in the Wauchope Forest south of Chesters.

Within the 15km radius the following main schemes are at application stage:

- Fernylea II (6x115m) just east of Aikengall II windfarm in East Lothian
- Harestanes Extension (7x127m) and Loganhead (13x130m) in Dumfries and Galloway

There are scattered smaller turbine applications mainly in the northeast and northwest of Scottish Borders.

5.3 Landscape Character of Turbine Locations

At July 2016 there were 462 turbines over 15m or taller operating, under construction or consented in Scottish Borders, with another 130 in application. Another 674 operational, consented and proposed turbines lie within 15km of the Scottish Borders boundary.

A clear pattern of wind energy development emerges, with the largest turbines and windfarms mainly located in the Uplands areas and the smaller schemes of three or fewer smaller size turbines located in Lowland and River Valley areas (see Fig 5.1 with reference to Fig. 3.3 Regional Landscape Character Types).

The operational windfarms are primarily in the Lammermuir and Moorfoot Hills regional landscape area to the north of the Tweed; although Clyde windfarm is located to the west of the Central Southern Uplands, just outside Scottish Borders. There are two mid-sized windfarms within the Central Southern Uplands, together with five further applications. In contrast, the Cheviot Hills regional area, predominantly Upland in character, is largely free of wind energy development.

There is also a significant concentration of consented smaller windfarms and small groups of larger turbines in the Upland Fringes south and east of the Lammermuirs extending into the neighbouring Coastal Zone.

The majority of smaller schemes, typically with 1-3 turbines below 50m, are found in the Upland Fringe and Lowlands. There are very few turbines within the River Valleys.

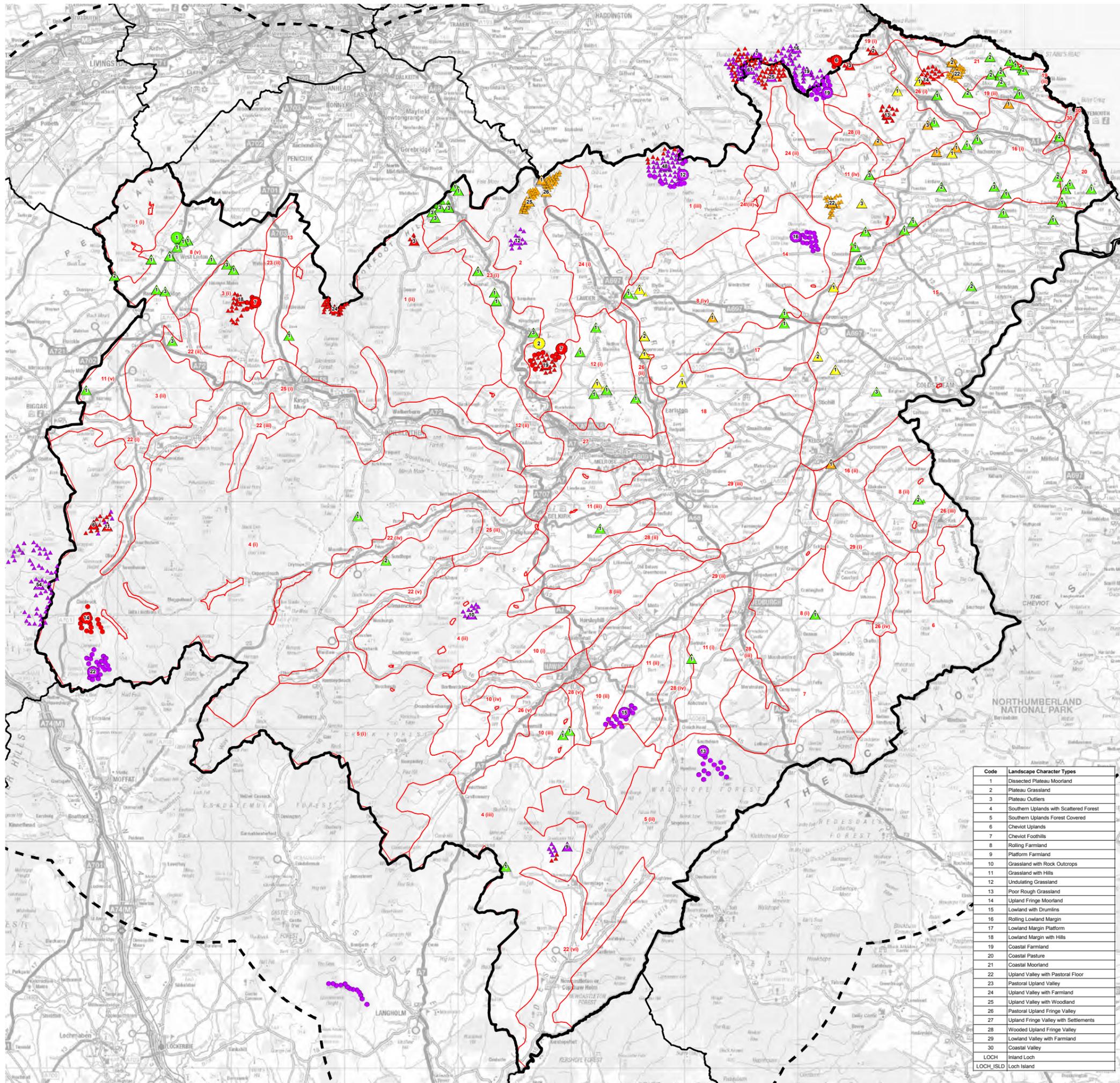
The tendency for windfarms and larger turbine development to be located within the Uplands and Upland Fringe landscapes is partly due to the large area of upland landscapes available, but mainly due to their scale and character. In landscape terms, Upland areas offer a larger-scale landscape, which can accommodate larger turbines, and it is rational to locate turbines in open and elevated areas to take advantage of higher wind speeds. Nevertheless, Upland areas are landscapes with a higher level of wildness characteristics and few overtly man-made features, in which wind turbines could be seen as an unwelcome industrial addition. Furthermore, some uplands have landforms of prominence, steepness or complexity which are unlikely to harmonise with large scale wind energy development.

Upland Fringe areas have lesser wildness characteristics, but are often of a relatively large scale and simplicity capable to some extent of accommodating larger schemes and turbines. However, within Scottish Borders there are notable landforms in some Upland Fringe areas, such as the Eildon Hills, that would not be suitable for wind energy development.

Coastal Zone landscape areas are often of larger scale, open, exposed, simple character comparable with the Uplands and Upland Fringe and capable of accommodating wind energy. Nevertheless in Scottish Borders the area is of limited size, with a complex and

scenic coastal edge and areas of more intimate settled character which can limit the scale of development to be accommodated.

In Lowland areas and River Valleys, the scale and pattern of the landscape is generally smaller, meaning that larger windfarms and turbines would appear incongruous, particularly given the greater array of “reference features” available such as trees, hedgerows and houses with which to compare them. Together with the proximity of settlements and properties there are clear landscape and visual sensitivities in such landscapes which would restrict their suitability for development. Nevertheless, a location within the lowland area better reflects the relationship between energy production and the consumer, as well as generally being easier to service in terms of both access and connection to the electricity grid.



Legend

- SBC Local Authority Boundary
- Local Authority Boundary 15km Buffer
- Other Local Authority Boundaries
- Landscape Character Areas

Windfarm: Status, Height Category

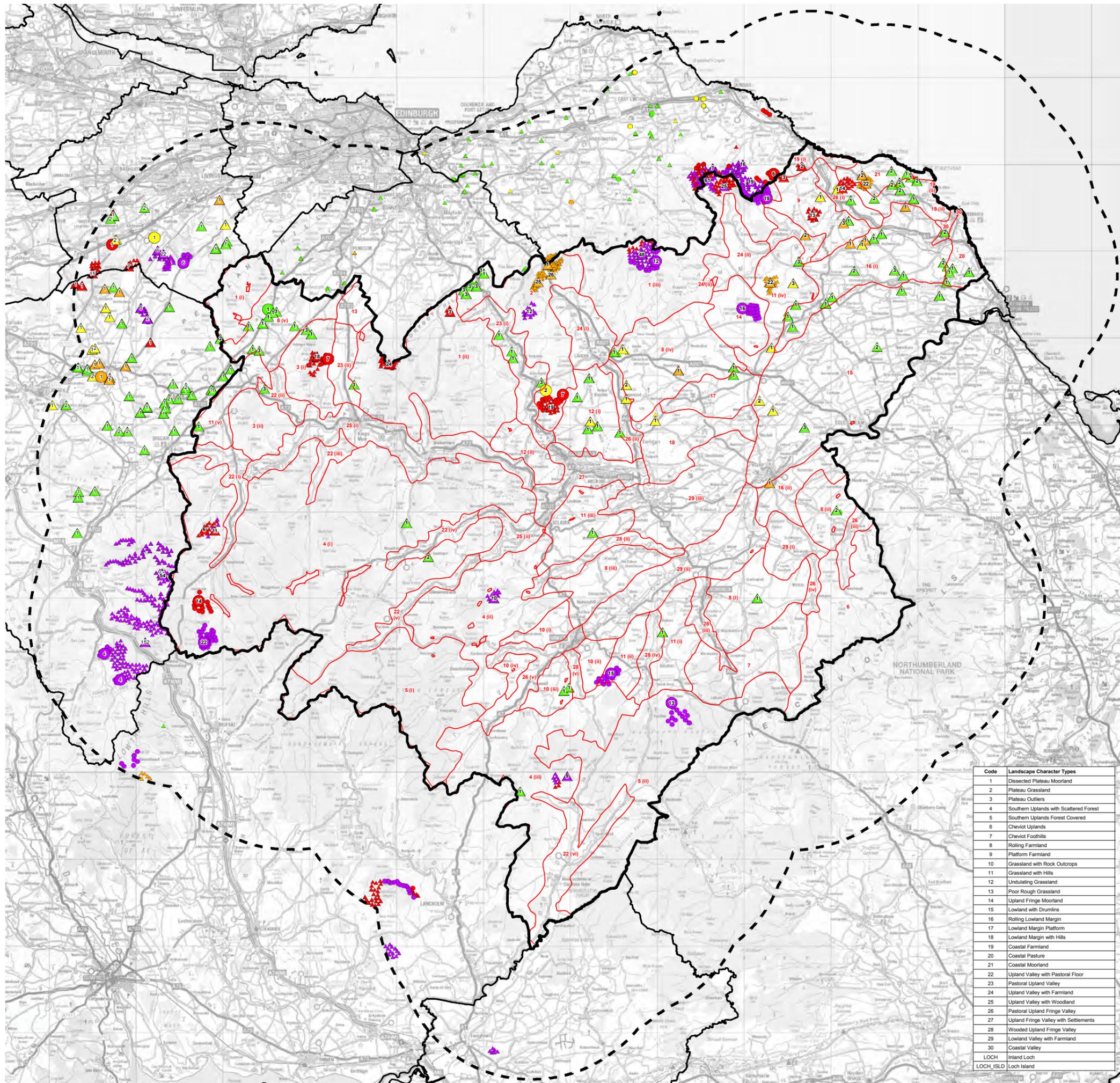
- Operational / Consented, Cat 1: 15 to <35m
- Operational / Consented, Cat 2: 35 to <50m
- Operational / Consented, Cat 3: 50 to <80m
- Operational / Consented, Cat 4: 80 to <120m
- Operational / Consented, Cat 5: 120m+
- Application, Cat 1: 15 to <35m
- Application, Cat 2: 35 to <50m
- Application, Cat 3: 50 to <80m
- Application, Cat 4: 80 to <120m
- Application, Cat 5: 120m+

Code	Landscape Character Types
1	Dissected Plateau Moorland
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28	Wooded Upland Fringe Valley
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LOCH	Inland Loch
LOCH_ISLD	Loch Island

Figure 5.1
Existing, Consented & Proposed Wind Turbines in Scottish Borders (as July 2016)



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- Local Authority Boundary 15km Buffer
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- Landscape Character Areas

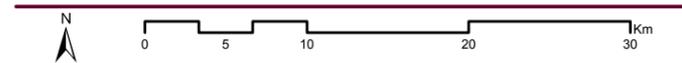
Windfarm: Status, Height Category

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- Operational / Consented, Cat 3: 50 to <80m
- Operational / Consented, Cat 4: 80 to <120m
- Operational / Consented, Cat 5: 120m+
- Application, Cat 1: 15 to <35m
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LOCH	Inland Loch
LOCH_ISLD	Loch Island

Figure 5.2

Existing, Consented & Proposed Wind Turbines in Study Area



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6.0 ASSESSMENT OF LANDSCAPE CAPACITY AND CUMULATIVE CHANGE

6.1 Assessment Purpose and Process

The purpose of the following assessment is to determine the capacity of the Scottish Borders landscape to accommodate wind turbine development and to determine what levels of cumulative development could be considered acceptable across Scottish Borders. The assessment also takes into account the level of cumulative development that already exists within and around Scottish Borders and is based on the premise that current renewable energy policies have and will lead to an inevitable level of landscape change within Scottish Borders. SPP highlights that cumulative impacts may present a limit to the extent of onshore wind development and that there is a need to consider cumulative impacts in the decision making process.

This capacity assessment resolves landscape capacity with levels of cumulative development and involves three stages:

- 1) Firstly, identifying the *underlying* capacity of the Scottish Borders landscape to accommodate wind turbine development;
- 2) Secondly, assessing the degree of cumulative change resulting from operating and consented wind turbines in the study area and in specific areas of Scottish Borders;
- 3) Thirdly, assessing the level of further development that could acceptably be accommodated within areas of Scottish Borders thereby identifying *remaining* capacity.

An assessment methodology is given in chapter 2.0 and further detailed in **Appendix 2**. The conclusion of the assessment is set out in **Table 6.1(i)-(vi)** and illustrated in **Figures 6.1 to 6.4**, which show landscape capacity, landscape typology and opportunities and constraints for wind energy development.

The assessment of landscape capacity and cumulative landscape change is based on the 30 Scottish Borders landscape character types (LCTs) in the *Borders Landscape Character Assessment*. These are divided into further landscape character areas (LCAs). The location and extent of each LCT and the component LCAs is illustrated in maps in the following pages.

Detailed assessment of the sensitivity and value of each landscape character type is shown in a tabulated form in **Appendix 6** and summarised in left hand columns of Tables 6.1(i)-(vi) which are interleaved with the relevant LCT maps. This information is used to determine the capacity for accepting different turbine sizes, detailed in Table 6.1(i)-(vi) and as maps in Figures 6.1a – e. The maps are indicative, showing geographical location of each LCT/LCA and *overall* rating of capacity for a particular turbine size based on the assessed sensitivities. Capacity will vary across each of the areas and reference should be made to the detailed assessment and guidance in Table 6.1

This assessment accounts for the great range of turbine sizes and variations between areas of the same landscape character type as well as the underlying and remaining capacities. This is discussed further in 6.2.4 below.

An assessment is then made of the current level of cumulative change based on the distribution of operational and consented onshore wind energy developments, as listed in Table 5.1 and illustrated in Figures 5.1 and 5.2. The landscape character types are shown indicatively in Figure 6.2 as a map of areas of current wind turbine landscape typologies (based on types detailed in Table 2.2 of this report).

The proposed acceptable landscape capacity for development is detailed in Table 6.1 and illustrated indicatively in Figure 6.3 as a map of areas of proposed wind turbine landscape typologies (incorporating the current typologies illustrated in Figure 6.2).

Guidance on wind turbine sizes, numbers and distribution is given in the right hand side of Table 6.1(i)-(vi) for managing development to the appropriate level within each landscape type. Analysis of landscape and comments on landscape capacity are detailed in the right hand column.

This assessment is carried out for each of the 30 LCTs in Scottish Borders. Many of the LCTs appear as LCAs more than once across the following six main regional landscape areas of Scottish Borders:

- i. Midland Valley;
- ii. Lammermuir and Moorfoot Hills;
- iii. Central Southern Uplands.
- iv. Cheviot Hills;
- v. Tweed Lowlands;
- vi. Coastal Zone;

The LCTs and component LCAs are grouped into each regional area in which they appear and each LCA is given a separate assessment. Table 6.1 is split into the six regional groupings. This is followed in 6.3 by overall assessments of capacity and cumulative effects for each regional landscape area.

The assessment concludes with a summary for the whole local authority area (refer to section 6.4). Spatial guidance regarding areas with residual capacity for further development (refer to section 6.5) are given at the end of this chapter and schematically illustrated in Figure 6.4.

6.2 Guidance

Table 6.1 also gives guidance on turbine sizes, cluster sizes and separation between groups of turbines for each landscape type that would limit cumulative development to the proposed acceptable level. This relates to turbines of 15m to blade tip and greater (refer to Table 5.2). Further detail, with location maps for individual landscape character areas, is provided within Table 6.1. As highlighted in section 2.7 guidance on small turbines, below 15m to blade tip, applies at a local level.

Appendix 4 of this report contains detailed discussion of how turbine size, group size and group separation affects perceptions of wind energy and landscape character. Further guidance is given in SNH's *Siting and Designing Windfarms* publication. The following briefly outlines the main considerations in developing the specific guidance for this assessment given in Table 6.1.

6.2.1 Turbine Size

The height of turbines which can be accommodated within a particular landscape is influenced by its scale and openness. Landscape scale varies with the presence or absence of detailed features such as buildings, trees, walls and hedgerows which can provide a visual reference point to compare turbines with. In general, the larger the scale of the landscape and the more open and simple the landscape, the greater the ability to relate to larger development typologies.

Smaller size turbines are generally more suitably located in smaller scale landscapes with more complex patterns and smaller scale reference features. They may also be accommodated in the lower edges of large scale landscape types, although their proximity to larger size turbines within these areas would need to be carefully controlled and large groups of such turbines would not be appropriate.

The largest scale upland landscapes in Scottish Borders are extensive and many already accommodate extensive developments with larger scale turbines.

6.2.2 Turbine Group Size

Turbine group sizes relate to scale and complexity of the landscape, particularly to landform and pattern. In general, larger scale more simple landscapes with gentle landforms and simpler patterns can accommodate larger groups of turbines, subject to having the physical capacity (i.e. available area). In the case of Scottish Borders, there are some extensive areas with large scale and simple landform and pattern, comparable to the large scale uplands found elsewhere in Scotland, which accommodate the largest windfarms. However, there are also smaller isolated areas of upland of restricted extent and diverse river valley and lowland landscapes of generally small and intimate scale with very limited capacity for development of only smaller turbines, or sometimes none at all.

6.2.3 Separation between Turbine Groups

Turbine size and group size can be generically related to landscape character when applied to a single turbine or windfarm, or across a number of windfarms. However, separation between groups of turbines is the single most important factor in controlling cumulative effects. This is because of the high prominence and extensive visibility of most turbines, leading to effects on landscape character well beyond the turbines and between individual schemes, as discussed in detail in Appendix 4.

The guidance in Table 6.1 therefore gives approximate separation distances that should be applied between turbine groupings (including single turbines) in order to achieve the planned wind turbine landscape types as described in Table 2.2. Existing and proposed distribution of landscape types are shown in Figure 6.3.

The main factors controlling the proposed separation distance relate to the proposed wind turbine landscape type, turbine size, turbine group size and the character of the host landscape:

- 1) Proposed Turbine Landscape Typology: each proposed typology detailed in Table 2.2 requires a different separation distance between turbines or schemes to achieve the landscape and visual criteria described.
- 2) Turbine Size: due to their lesser prominence and visibility, smaller turbines would require closer spacing than larger turbines to achieve the defined landscape typology.
- 3) Group Size: smaller groups of turbines would be less dominant and require closer spacing to achieve the same landscape typology than would larger groups of the same size of turbine.
- 4) Underlying landscape character type: this has an effect on all the above criteria. More open, flatter landscapes are more easily affected by intervisibility of turbines and are likely to require greater separation distances between groups. Landscapes with significant topography and woodland cover have the potential to reduce intervisibility. Scale and pattern can have a more subjective effect, but in general smaller scale landscapes are more likely to be affected by wind energy development compared with larger scale landscapes. The presence of other tall objects such as electricity pylons also affects the perception of turbine development.

The distances given in Table 6.1 are approximate, relating primarily to (1) and (2) above. Landscape character including topography is also important: where landforms are capable of visually separating turbine groups the distance between landforms is a consideration in setting distances. For example:

- in the *Rolling Farmland* which is a proposed *Landscape with Occasional Turbines*, the separation distances are designed to ensure a degree of screening: a distance of 3-5km is the separation required to ensure that a significant landform separates groups of mid-sized turbines and 5-10km is the distance that the nearest larger size turbines, if seen above landforms, will become a minor feature in the view.
- In contrast *Plateau Grassland*, which is a proposed *Landscape with Turbines*, has undulating plateau like landforms and larger turbines in larger groups are separated by 5-10km, such that they are likely to be partially inter-visible but nevertheless clearly separated but recognisable as a 'cluster' of developments in one area.

In the case of landscape character areas of limited extent, the separation distances for larger turbines in particular mean that, in theory, only one grouping would be comfortably accommodated within the area. The separation distance may then apply between a development in that area and a similar size development in an adjacent landscape character area.

In the case of extensions to, or repowering of existing windfarms it will be necessary to assess the potential change to wind turbine landscape type that could result from increased turbine size, increased numbers within a group and/or the reduced separation between turbine groups.

As the recommended distances are an approximate range it is emphasised that separation distances between specific proposals should be considered in more detail on a case by case basis.

6.2.4 Windfarm Extensions

In some cases, it is more appropriate to extend an existing windfarm than to create a new focus of development with a new set of separation distances. The acceptability of such extensions depends upon the extent to which the original approved site has occupied the space available and whether additional turbines will push on to visually sensitive areas or sensitive landscapes. Extensions should fit harmoniously to form a single coherent composition with the previously existing windfarm.

6.2.5 Re-powering of Existing Windfarms

Re-powering involves the replacement of existing turbines with more modern and generally much larger turbines located within the site of an existing windfarm. In practice, this will involve new turbine positions and different turbine separation distances set for the new parameters. Effectively, it involves the creation of a new windfarm on the site of an old one. In assessing the acceptability of such developments, it will be necessary to assess the potential change to wind turbine landscape type that could result from increased turbine size, as the scaling relationships of larger turbines and the associated Zones of Theoretical Visibility may be radically different and may exceed an established landscape capacity. The existing windfarm forms part of the visual baseline for assessment.

6.2.6 Other Factors which Influence Guidance

The generic capacity assessment for some landscape types does not cover the variation found between or even within individual geographical units of that type. This is usually because of one or two key landscape factors which override the characteristics including:

- All or part of the character area is much more prominent and visible than the bulk of the area covered by the landscape type;
- A particularly small area is covered by the character area compared with the main areas of the landscape type;
- Some or all of the character area lies in an area designated to protect a landscape (eg. National Scenic Area) or the setting and amenity of a settlement;
- Close proximity to other more sensitive neighbouring character areas which would be significantly affected by wind energy proposals otherwise suitable for the host character area.
- Close proximity to other landscape types, settlements or industry which reduces the sensitivity of a host landscape character area or part area compared with the bulk of the area covered by the landscape type.

A combination of any of these factors might limit the ability of a specific landscape character area or part of an area to accommodate a level of development otherwise acceptable to the type. The main areas are identified in Table 6.1 and Figures 6.1 to 6.4.

Nevertheless, any specific development should be considered in more detail and also assessed against local factors where appropriate.

Finally, it is emphasised that this assessment is focused on landscape and visual issues. Areas which have been identified as suitable on this basis may be restricted by other unrelated factors such as protection of wildlife, effects on residential amenity, tourism and recreation, aviation restrictions, lack of grid connection or within the exclusion zone/ consultation zone of the seismological array at Eskdalemuir. Where particular significant non-landscape issues are known, which may conflict with the conclusions on landscape capacity, they are highlighted in the table. However, these issues are not comprehensively covered as they are not the subject of this assessment; but they are covered in the Council's Renewable Energy Supplementary Guidance.

Explanation of Table 6.1

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT			PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)									
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel't'd to turbine size)				Analysis & Guidelines	
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<30m	30-<50m	50-<80m	80-<120m		Over 120m
Landscape Character Area: <i>Name of Landscape Character Area/ Sub-Area</i>																	
Med/ High	Med/ High	Med/ High	Med/ High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>			Brief description of consented wind energy developments (at time of report), including numbers size range, distribution, with key developments named.	Wind Turbine Landscape Type(s) within the area resulting from current consented levels of development (refer to Table 2.1 for description of type and map in Figure 6.2 for distribution of types across study area)	Proposed limits to future Wind Energy development expressed as a Wind Turbine Landscape Type (refer to Table 2.1 for description of type and Figure 6.3 for proposed distribution of types across the study area)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>			<p>Landscape Analysis: Brief description of key qualities and characteristics of the landscape character area/ sub-area affecting its capacity to accommodate different types of wind turbine development.</p> <p>Development Capacity: Brief comment on landscape capacity and on current developments and future proposals in relation to landscape capacity.</p> <p>Where relevant, the most significant non-landscape constraints are highlighted for areas. As the study is focussed on landscape matters, details of these constraints are for information only and do not constitute a comprehensive list.</p>
Assessment of landscape sensitivity and value of the landscape character area or sub-area (from detailed assessment in Appendix 5)				Assessment of landscape capacity for different turbine sizes derived from the sensitivity and value assessment and mapped in Figures 6.1a-e . This represents the 'underlying' capacity of the landscape and does not take into account the cumulative effects of existing/ consented wind energy development.													
									Max. Numbers in Group	1-3	1-3						
									Min Group Separation Distances (km)	2-4	3-5						

Figure 6.1 (i) - Midland Valley Regional Area

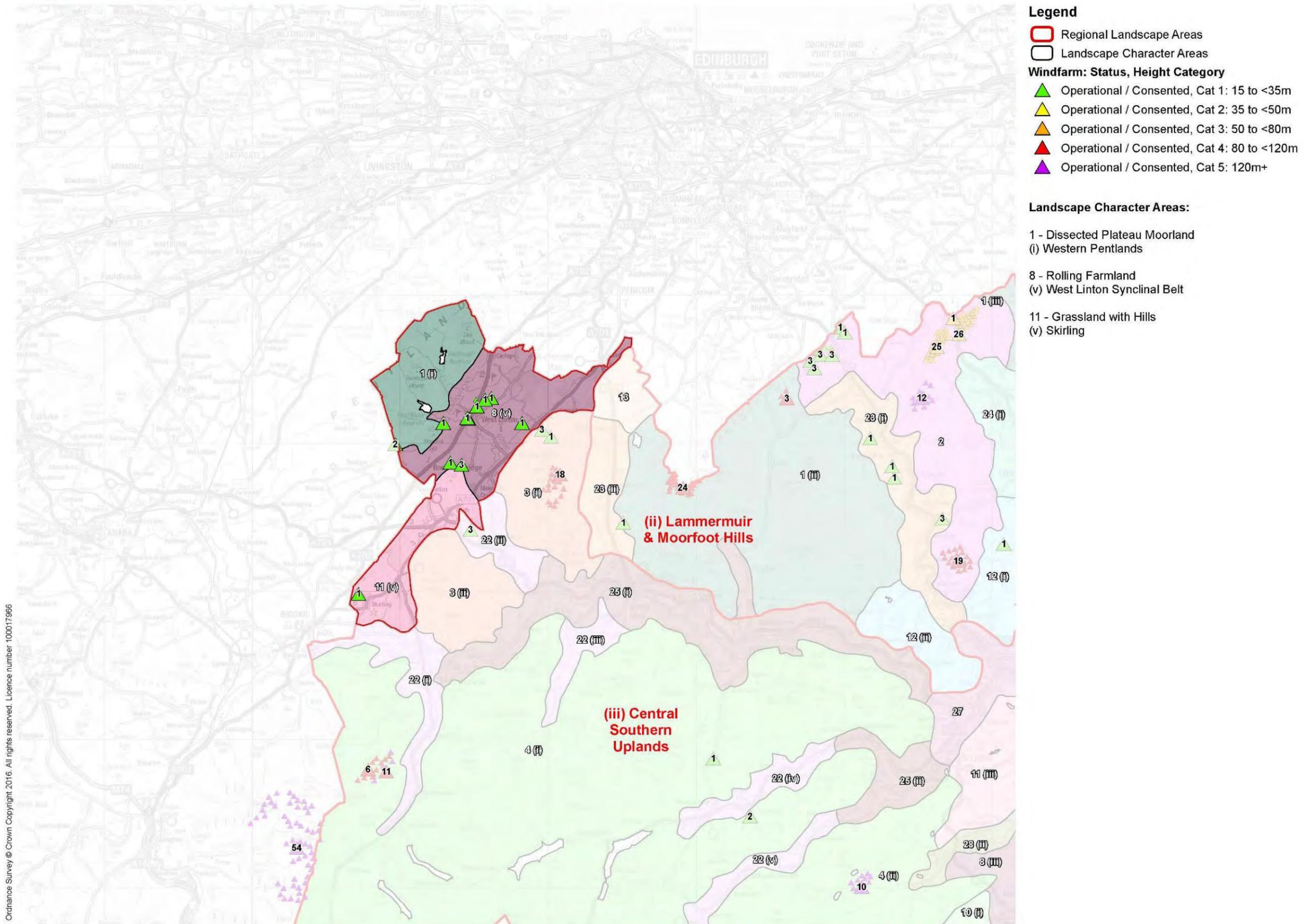


Figure 6.1 (ii) - Lammermuir & Moorfoot Hills Regional Area

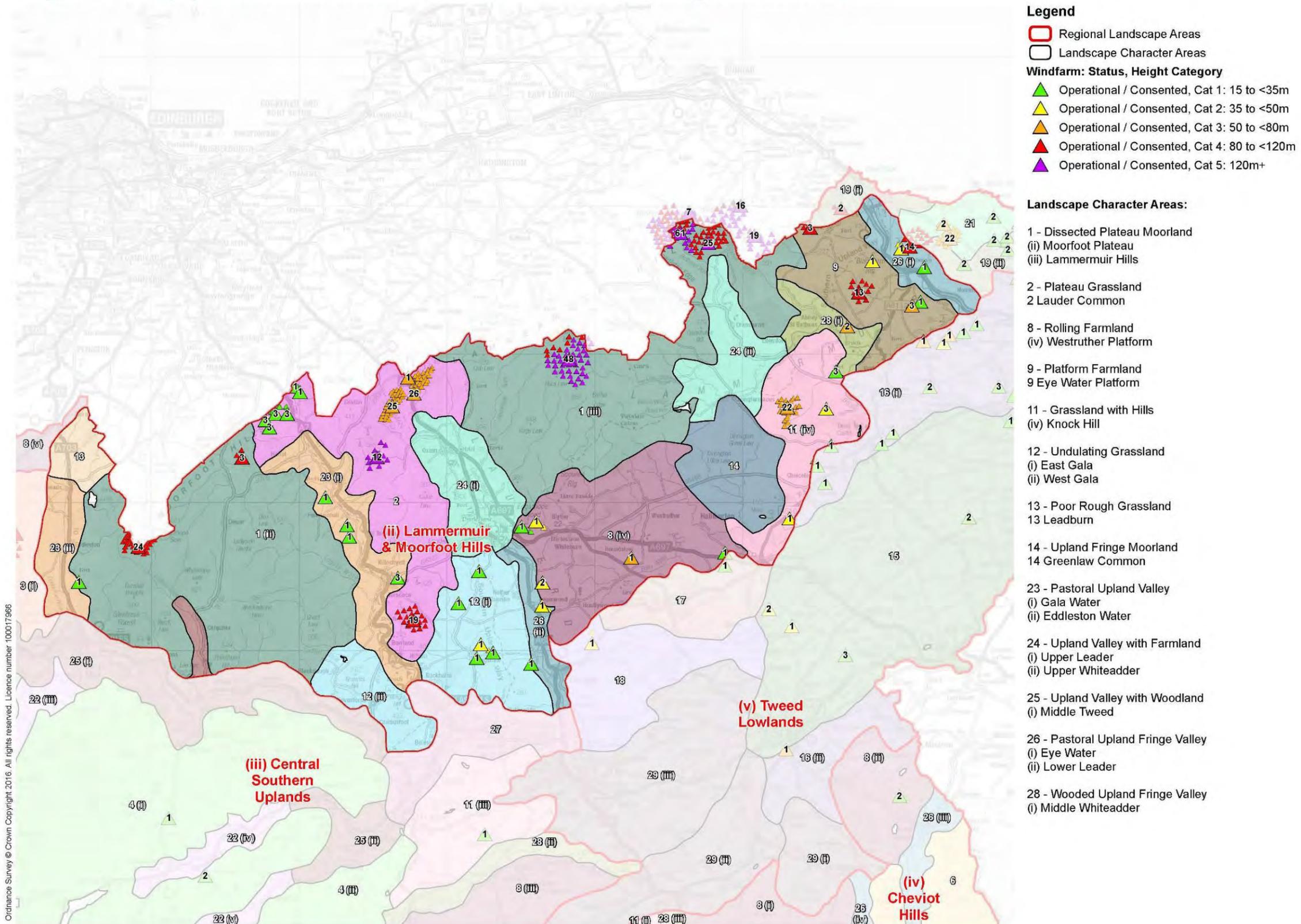


Table 6.1(ii). Summary of Landscape Capacity and Cumulative Effects and Guidance for Future Wind Energy Development – Lammermuir and Moorfoot Hills

Key: ○ No Capacity ○ Low Capacity ○ Medium Capacity ● High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
1. Dissected Plateau Moorland: (ii) Moorfoot Plateau																	
Low/Med	Med	Med	Med/High	○	○	○	○	○	The Moorfoot Plateau is relatively undeveloped, there are two windfarms: Bowbeat has 24x86m turbines and Carcant has 3x110m. There is also one consented turbine under 35m high.	Upland with No Wind turbines/ Occ. Wind Turbines	Uplands with Wind Turbines/ with Occasional Wind Turbines	○	○	○	○	○	Landscape Analysis: The Moorfoots are a range of large scale rolling and undulating moorland hills dissected by steep sided valleys. Largely unforested except to the south. They form a prominent escarpment and skyline above the Esk valley seen from Edinburgh and the Midlothian towns to the north and form the backdrop to the Tweed valley and its settlements to the south. The range is divided into western and eastern halves by a steep sided cleft containing the B709 road to Innerleithen. The southern edge of the Moorfoot Hills lie in the Tweed Valley SLA and the northern escarpment is locally designated in Midlothian.
																	Development Capacity: The LCA could accommodate further larger scale wind energy development. Turbines of 120m+ could be accommodated in smaller numbers where topography aids screening. Careful design consideration should be given to extensions/ repowering of existing developments. Turbine developments should not adversely encroach onto the visually prominent escarpment and skyline facing Edinburgh or the setting of the Tweed Valley to the south. There is capacity for smaller sized turbines in lower areas, best accommodated in association with farmsteads and dwellings and visually read as domestic/ farm scale generation.
																	Significant non Landscape Constraint: The large Moorfoot Hills SSSI and SAC in the eastern area, designated for birds, blanket peat and heath.
1. Dissected Plateau Moorland: (iii) Lammermuir Plateau																	
Low/Med	Med	Med	High	○	○	○	○	○	Extensive large scale windfarm development within and adjacent to this area. There is an extensive cluster of windfarms (Crystal Rig/ Aikengall) on the border of ELC and SBC in the east of the LCA with 127 turbines between 100 and 145m tall operating or consented. Fallago Rig windfarm has 48 turbines at 110/125m. Dun Law windfarm with 61 turbines of 67-75m and Pogbie and Keith Hill (11 turbines) are located	Wind Turbine Landscape/ Uplands with Wind Turbines /Occasional Wind Turbines	Wind Turbine Landscape/ Uplands with Wind Turbines /Occasional Wind Turbines	○	○	○	○	○	Landscape Analysis: The Lammermuir Hills is an extensive area of undulating heather moorland plateau with deeply-riven valleys straddling Scottish Borders and East Lothian between the A68 and the coastal fringes of the North Sea. The northern and eastern escarpments form a backdrop with wide undulating skylines to the surrounding lowland and coastal areas. The vast majority of this LCA is covered by local landscape designation in Scottish Borders and East Lothian. The long distance Southern Upland Way runs along the south of this LCA in Scottish Borders. Extensive large scale wind energy developments are located within and adjacent to the LCA: the northern part of the LCA on the boundary with East Lothian is reaching capacity and becoming a <i>Landscape with Wind Turbines</i> with areas of <i>Wind Turbine Landscape</i> around Crystal Rig/Aikengall and Fallago Rig.
																	Development Capacity: The Lammermuir Plateau has been subject to extensive windfarm development and much of its underlying capacity is occupied. There is capacity for limited additional development of larger turbines provided this is associated with existing windfarms. Extensions should maintain significant separation between the established wind energy clusters, taking advantage of areas with topographical containment and lower intervisibility to avoid increasing the overall prominence of existing windfarms beyond the LCA. There is capacity for smaller sized turbines in

Key: No Capacity Low Capacity Medium Capacity High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
									immediately to the west and have some visual influence on the LCA.							peripheral areas or valleys where sited alongside farmsteads and dwellings, and read as domestic/agricultural generation, well separated from the larger developments in the highest areas.	
2. Plateau Grassland: <i>Lauder Common</i>																	
Med	Med	Med	Low/Med						Currently 61 turbines of 67-75m at Dun Law in the north of the LCA and Pogie and Keith Hill (11 turbines) are located immediately to the north in East Lothian. To the south/ south west of this there are 12x125m turbines at Toddleburn and in the south of this LCA Long Park has 19x110m turbines. There is also a cluster of approximately 14no turbines under 35m in the north west along the border with Midlothian.	Uplands with Wind Turbines/ Uplands with Occasional Wind Turbines. Wind Turbine Landscape in the north	Uplands with Wind Turbines/ Wind Turbine Landscape in the north.						Landscape Analysis: This is the only area of <i>Plateau Grassland</i> in Scottish Borders. It forms a broad ridge of gently rolling hills separating the Gala and Leader Waters between the Lammermuir and Moorfoot Hills, and forming a prominent northern escarpment at Soutra Hill. This is a large scale landscape but is lower than the surrounding <i>Dissected Plateau Moorland</i> and of significantly lesser extent. There is limited heather moorland and a much greater proportion of grassland, much of which is enclosed and improved with surrounding coniferous shelterbelts and plantations. There are scattered farms around the edges. The area east of the A68 lies on the edge of the Lammermuir Hills SLA, otherwise there are no landscape designations. Development Capacity: This landscape could accommodate limited additional windfarm development. However, given existing developments, overall cumulative impact and potential 'saturation' of underlying capacity is a major consideration. Larger scale wind energy development should be well-separated from other clusters and located away from sensitive locations including around the B6362 Lauder-Stow road and the visually prominent outer slopes, taking advantage of the topographical containment in wider sections of the elevated plateau. Smaller turbines could also be accommodated, but in more limited group sizes more closely associated with farmsteads and enclosed fields. Cumulative considerations also apply and smaller turbines should be located away from areas with larger turbines. Repowering or further extension of the Dun Law cluster would need to take very careful account of existing turbine sizes and the visual sensitivity of the skyline in views from north or south.
											<i>Max. Numbers in Group</i>	1-3	1-3	50	25	25	
											<i>Min Group Separation Distances (km)</i>	1-2	2-4	5-10	5-10	10	
8. Rolling Farmland: (iv) <i>Westruther Platform</i>																	
Med/High	Med/High	Med/High	Med/High						There are several single/ paired turbines under 35m or 50m located mainly on the western fringes of this LCA, with one 67m turbine centrally located.	Upland Fringe with Occ./ no Wind Turbines	Upland Fringe with Occ. Wind Turbines						Landscape Analysis: Medium scale rolling farmland and small settlements set between the Lammermuir Hills to the north and the Tweed Lowlands to the south. Some more prominent hills to the west and occasional small scale valleys. The northern edge rises to meet the <i>Dissected Plateau</i> of the Lammermuirs. Development Capacity: Due to the undulating upland fringe, settled farmland character of this landscape there is limited capacity only for turbines below 50m, with no capacity for larger turbines due to scale issues and the potential for wide visibility. Capacity is locally constrained by a number of landscape and visual sensitivities:
											<i>Max. Numbers in Group</i>	3	2				<ul style="list-style-type: none"> the presence of numerous individual farmsteads and small settlements more prominent landforms such as Boon and Knock Hill and smaller scale valleys draining west in the west by the presence of important transport routes (A68 just outwith the LCA) and the SuW that increase visual sensitivity and recreational value.
											<i>Min Group Separation Distances (km)</i>	1-2	2-4				

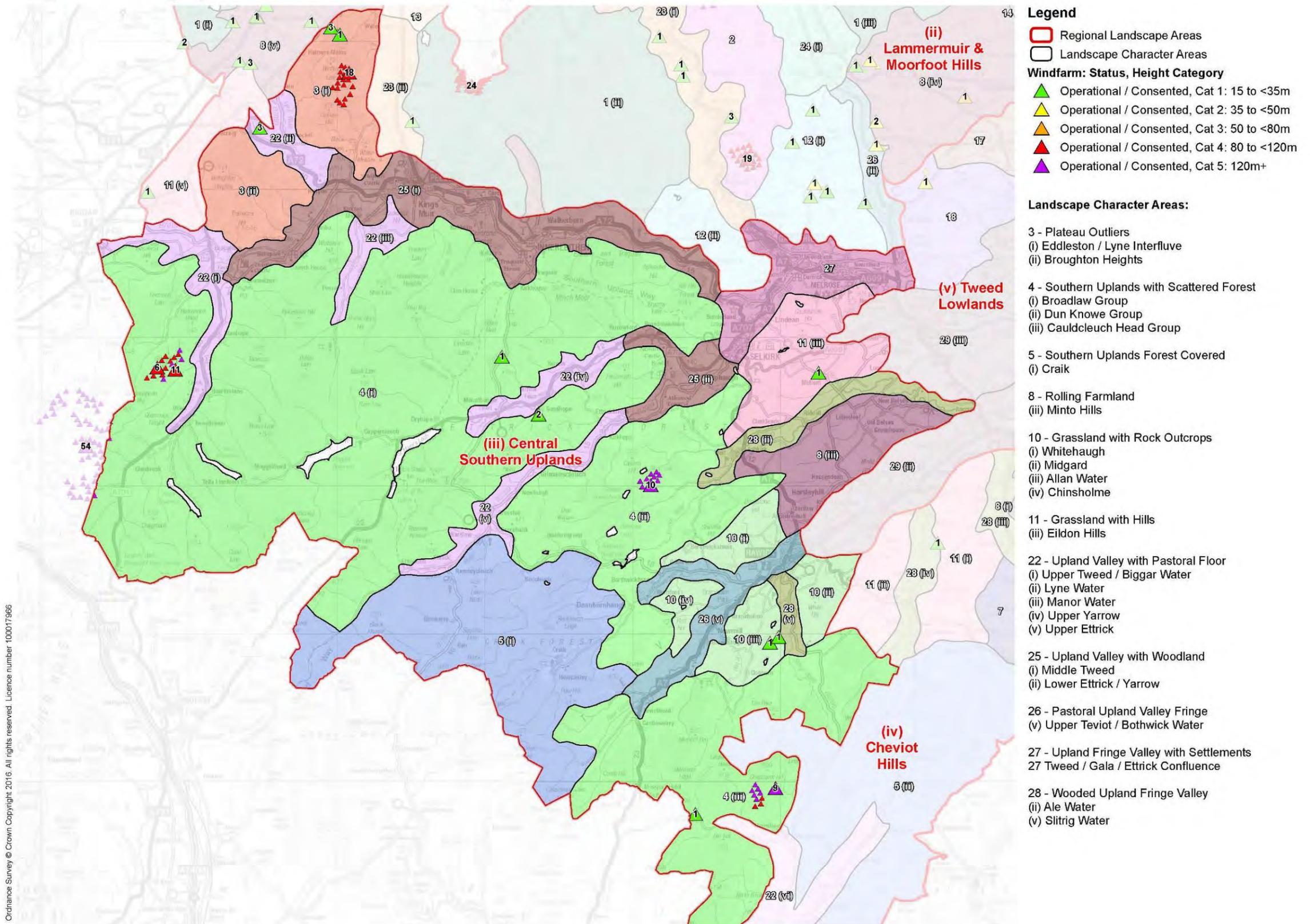
Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
																Black Hill. If additional windfarms are added to this landscape it is at risk of becoming a <i>Landscape with Wind turbines</i> . Additional turbine development within this LCA should be sited to minimise cumulative effects on the Southern Upland Way and effects on the setting of Cockburn Law hillfort, Edin's Hall Broch and Abbey St Bathans.	
12. Undulating Grassland: (i) East Gala																	
Med	High	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Currently there are 5no. 15-30m and one 30-50m turbine. The 19 turbines of Long Park windfarm lie within 1-3km in <i>Plateau Grassland</i> to the west.	<i>Upland Fringe with Occasional Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: A medium to large scale landscape of undulating hills with steep sided valleys. Mainly comprising enclosed grazing land with drystone dykes, shelterbelts and small areas of forestry. Small settlements and farmsteads linked by minor roads. The eastern area forms the northern backdrop to Galashiels and the southern backdrop to Lauder. The southeastern corner overlaps with the Eildon Hills & Leaderfoot NSA and the Southern Upland Way passes north through the area. Development Capacity: There is no underlying capacity for larger turbines or commercial windfarms due to proximity to settlements and the area having a higher visual sensitivity. There is limited capacity for individual turbines below 50m tall within the more isolated or rural areas of the LCA, sited away from settlements and the Southern Upland Way and outside the NSA.
											<i>Max. Numbers in Group</i>	3	1				
											<i>Min Group Separation Distances (km)</i>	1-2	2-4				
12. Undulating Grassland: (ii) West Gala																	
Med	High	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within the West Gala LCA. The closest turbines are at Long Park, some 3km to the northeast.	<i>Upland Fringe with Occasional Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: See above. The western area is smaller than the east and contains the village of Clovenfords. It forms the western backdrop to Galashiels. The southern and southeastern parts lie in the Tweed, Ettrick and Yarrow Confluence SLA and the Fairlie GDL. The SUW passes across the southeastern end. Development Capacity: Areas in the northwest and centre of West Gala have capacity for individual or small clusters of turbines below 50m tall, associated with farms and relating to agricultural landuse patterns. Care should be taken with the settings of Galashiels, Clovenfords, Fairlie and the Southern Upland Way.
											<i>Max. Numbers in Group</i>	3	1				
											<i>Min Group Separation Distances (km)</i>	1-2	2-4				
13. Poor Rough Grasslands: Leadburn																	
Med	Med/High	Med	Low/Med	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within or near this LCA.	<i>Upland Fringe with No Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: Much of this area is a large scale simple upland fringe landscape. However it is constrained in area and has smaller scale landscape references in terms of tree belts, farms and smaller topographic features in the west. It lies between two visually sensitive hill ranges of the Pentlands and Moorfoots and close to settlements. Development Capacity: This landscape has the scale and landform to accommodate larger size turbines. However it is constrained by limited area and visual sensitivities. There is scope for smaller size turbines (up to 50m) but very limited capacity for larger turbines below the height of 80m without turbines beginning to dominate the area, as was determined by the dismissal of Mount Lothian windfarm appeal (9x102m turbines) in neighbouring Midlothian.
											<i>Max. Numbers in Group</i>	5	5	1			
											<i>Min Group Separation Distances (km)</i>	1-2	2-4	3-5			

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
14. Upland Fringe Moorland: Greenlaw Common																	
Low/Med	Med/High	Med	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within this LCA. Black Hill windfarm with 19x75m turbines lies within 1-3km to the northeast.	<i>Upland Fringe with No Wind Turbines</i>	<i>Upland Fringe with No/ Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: A large scale simple moorland landscape, but limited in area. The landform is tilted to the south and visibility across it is widespread. Most of the area is part of the extensive Lammermuir Hills SLA and is characterised by the two distinctive and prominent Darrington Law hills.</p> <p>Development Capacity: This LCA could accommodate smaller sized turbines associated with farms close to roads and around the edges. Turbines should be sited close to individual farmsteads and properties to reflect the domestic scale. The area on and around the Darrington Laws has very limited capacity due to the distinctive smooth rounded profile of these prominent hills and their limited height.</p> <p>Significant Non Landscape Constraint. The large Greenlaw Moor SSSI south of the B6456, designated for geology, raised bog and birds.</p>
										Max. Numbers in Group	3	1					
										Min Group Separation Distances (km)	1-2	3-5					
23. Pastoral Upland Valley: (i) Gala Water																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3 turbines below 35m tall near Fountainhall and 3 near Stow. Toddleburn and Long Park windfarms in adjacent <i>Plateau Grassland</i> LCA are visible in parts of the valley.	<i>River Valley with Occasional/ No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: A medium scale, flat bottomed, tightly meandering valley with rounded enclosing slopes. Well settled with villages and farms, enclosed farmland and many small woodlands and shelterbelts creating diverse framed views. The Gala Water LCA contains the A7 tourist route and the Borders Railway Line. The southernmost part of the LCA borders the town of Galashiels.</p> <p>Development Capacity: This LCA has limited capacity for smaller sized turbines as individuals or small groups of 3 or fewer. No capacity for larger commercial scale turbines or windfarms due to the modest scale of the landscape and its diverse character together with the sensitive A7 tourist route and Borders Railway. The steep valley sides can be highly prominent from the valley floor and turbines should be carefully and sparingly located.</p>
										Max. Numbers in Group	3	1					
										Min Group Separation Distances (km)	1-2	3-5					
23. Pastoral Upland Valley: (ii) Eddleston Water																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within this LCA. Bowbeat windfarm lies within 3km to the east but is only visible from higher areas.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: A medium scale, flat bottomed valley with rounded enclosing slopes, steep on the eastern side and the south. Well settled with Eddleston village, large houses and farms, enclosed farmland and many small woodlands and shelterbelts. The Eddleston LCA contains the busy A703 and southernmost part lies within the Tweed Valley SLA close to the town of Peebles.</p> <p>Development Capacity: Limited capacity for smaller sized turbines as individual turbines or small groups of 3 or less turbines. There is no capacity for larger commercial scale turbines or windfarms due to the modest scale of the landscape and its diverse character together with the sensitive A7 tourist route and Borders Railway. The steep valley sides can be highly prominent from the valley floor and turbines should be carefully and sparingly located.</p>
										Max. Numbers in Group	3	1					
										Min Group Separation Distances (km)	1-2	3-5					

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
24. Upland Valley with Farmland: (i) Upper Leader																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within this LCA. Dun Law windfarm lies within 1km to the north and Toddleburn 1.5km to the west. These are visible from northern areas.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: A medium to large scale broad open valley with gently rounded enclosing slopes. Well settled with villages and farms and enclosed farmland with small woodlands and shelterbelts. The LCA contains the busy A68 and A697 roads. The eastern side lies within the edge of the Lammermuir Hills SLA and the southernmost part includes the town of Lauder and Thirlestane Castle. The southern area contains the Southern Upland Way</p> <p>Development Capacity: The central, wider less prominent areas of this valley LCA have capacity for individuals or groups of up to 3 smaller sized turbines. These will be better accommodated if the turbines are visually associated with agricultural patterns, farmsteads and individual properties or with existing settlement. Siting of turbines in the north should avoid the potential for cumulative effects with the neighbouring windfarms and care should be taken with the settings of Oxton and Lauder.</p>
										Max. Numbers in Group	3	1					
										Min Group Separation Distances (km)	1-2	3-5					
24. Upland Valley with Farmland: (ii) Upper Whiteadder																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within this LCA. Crystal Rig windfarm lies within 1km to the north and turbines of this and Black Hill are visible from higher areas.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Two (Whiteadder and Dye) medium scale open valleys with rounded enclosing slopes. Settled with villages, farms and enclosed farmland with small woodlands and shelterbelts. The LCA contains B and minor roads. Almost all lies within the Lammermuir Hills SLA and the southernmost part includes the village of Longformacus. The southern area of this LCA contains the Southern Upland Way</p> <p>Development Capacity: These valleys are of a smaller scale and width than the Upper Leader and less busy. There is capacity for individuals or groups of up to 3 smaller sized turbines; best accommodated if visually associated with agricultural patterns, farmsteads or individual properties. Turbines in the north and south of the LCA should be sited to avoid the potential for cumulative effects with the neighbouring Crystal Rig and Black Hill windfarms and care should be taken with the setting of Longformacus.</p>
										Max. Numbers in Group	3	1					
										Min Group Separation Distances (km)	1-2	3-5					
25. Upland Valley with Woodland: (i) Middle Tweed (Leithen Water)																	
High	High	High	High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently no wind turbines or windfarms within or near this part of the LCA.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with No/Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: The Leithen Water is a side valley to the Tweed (see Figure 6.1(iii) and table below for main area). Small scale meandering valley set in <i>Dissected Plateau Moorland</i> hills with steep rounded enclosing slopes. Occasional farms and enclosed farmland with shelterbelts and plantations. The LCA contains B709 to Edinburgh. Southern end is within the River Tweed SLA</p> <p>Development Capacity: the intimate enclosed scale of the valley means capacity is restricted to individual turbines up to 20m tall, visually associated with agricultural patterns, farmsteads and individual properties.</p>
										Max. Numbers in Group	1						
										Min Group Separation Distances (km)	2-3						

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel't'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
26. Pastoral Upland Fringe Valley: (ii) Lower Leader																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are currently one <35m and three 35-50m wind turbines within or near this LCA.	<i>River Valley with No/Occasional Wind Turbines</i>	<i>River Valley with No/Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium scale well settled pastoral valley set between low grassland hills with shallow enclosing slopes. The Lower Leader LCA contains A68 to Edinburgh and the southern end lies within the Leader and Eildon Hills NSA. The settlement of Earlston lies just north of the NSA.</p> <p>Development Capacity: This LCA has limited capacity for individual smaller turbines only. There is no capacity for commercial scale developments. Capacity is reduced by the important transportation links between England and Scotland (A68) increasing visual sensitivity of this area. The southern area of the LCA has no capacity due to the NSA designation.</p>
										Max. Numbers in Group	1	1					
										Min Group Separation Distances (km)	2-3	3-5					
26. Pastoral Upland Fringe Valley: (i) Eye Water																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	One <35m and one 35-50m wind turbine within this LCA. Three 100m turbines of Penmanshiel windfarm lie within the northeastern edge and others have a visual influence.	<i>River Valley with No/Occasional Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium scale well settled pastoral valley with shallow enclosing slopes set between low grassland hills. The LCA contains the A1 trunk route and West Coast mainline to Edinburgh and the northern end lies within the Berwickshire Coast SLA and is crossed by the Southern Upland Way.</p> <p>Development Capacity: This LCA has limited capacity for individual or small groups of smaller turbines only. There is no capacity for commercial scale developments. Capacity is reduced by the important transportation links between England and Scotland, increasing visual sensitivity of this area and by the potential for cumulative effects with nearby Penmanshiel windfarm.</p>
										Max. Numbers in Group	1-3						
										Min Group Separation Distances (km)	2-3						
28. Wooded Upland Fringe Valley: (i) Middle Whiteadder																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Two consented 54m wind turbines within upper edges of this LCA. Three 19.5m turbines lie just to the southwest.	<i>River Valley with No/Occasional Wind Turbines</i>	<i>River Valley with No/Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Small scale narrow meandering valleys (Monynut Water and Middle Whiteadder) with steep densely wooded enclosing slopes. Set between the eastern slopes of the Lammermuir Hills and rounded farmland hills. Two small settlements at Abbey St Bathans and Ellemford. The LCA overlaps with the Lammermuir Hills SLA and is crossed by the Southern Upland Way. There are a number of hillforts and brochs in or adjacent to the area, including Edin's Hall and Cockburn Law.</p> <p>Development Capacity: This small scale intimate sheltered character of this LCA has limited capacity for individual smaller turbines only. Turbines should be located on the outer edges of the LCA to minimise effects on the valley floor. There is no capacity for commercial scale developments. The setting of the settlements hillforts/ brochs should be respected.</p>
										Max. Numbers in Group	1						
										Min Group Separation Distances (km)	2-3						

Figure 6.1 (iii) - Central Southern Uplands



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Table 6.1(iii). Summary of Landscape Capacity and Cumulative Effects and Guidance for Future Wind Energy Development – Central Southern Uplands

Key: No Capacity Low Capacity Medium Capacity High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
3. Plateau Outliers: (i) Eddleston/ Lyne Interfluve																	
Med	Med/High	Med/High	Med/High						Cloich Forest (18x115m consented by appeal.4no. consented 15-35m turbines in the north eastern part of the LCA.	<i>Uplands with Wind Turbines/ No Wind Turbines</i>	<i>Uplands with Wind Turbines/ Occasional Wind Turbines</i>						<p>Landscape Analysis: A compact range of large scale rolling hills separated from the main upland areas by steep sided river valleys. Settlement and enclosed land is located around the edges with internal areas open grazing or forestry. The southeastern corner is designated as an SLA and Upper Tweeddale NSA, providing the setting for Peebles and the Tweed Valley. All sides are surrounded by main roads and the northwestern edge is visible from the main roads between Edinburgh and the Clyde Valley.</p> <p>Development Capacity: Due to higher visual sensitivity and landscape value, the Eddleston/ Lyne Interfluve area has a low underlying capacity for turbines at the lower end of the 50-80m range in small groups within the central areas of the LCA. However, the consent of Cloich Forest windfarm has occupied all capacity for larger turbines; this being underlined by the simultaneous dismissal of nearby Hag Law windfarm. Turbines <50m should be sited around the edges, where they are well removed from the consented windfarm and can be visually associated with farmsteads, individual properties and small settlements or where they follow agricultural patterns in the landscape. No turbines in the southeastern corner due to landscape designations and distinctive fortified hills.</p>
										Max. Numbers in Group	1-3	1-3					
										Min Group Separation Distances (km)	1-2	3-5					
3. Plateau Outliers: (ii) Broughton Heights																	
Med	Med/High	Med/High	High						There are no turbines or windfarms within the Broughton Heights LCA.	<i>Uplands with No Wind turbines</i>	<i>Uplands with Occasional Wind Turbines/ No Wind Turbines</i>						<p>Landscape Analysis: Similar to Eddleston/ Lyne Interfluve but with higher hills and less forestry. All of the LCA is designated: as part of the Tweedsmuir Uplands SLA in the north and Upper Tweeddale NSA in the south. The John Buchan Way passes through the LCA. All sides are surrounded by main roads and the northwestern edge is visible from the main roads between Edinburgh and the Clyde Valley.</p> <p>Development Capacity: Due to higher visual sensitivity and high landscape value, Broughton Heights has no capacity for larger scale turbines and only low capacity for turbines under 50m, due the SLA and NSA designations and prominent outer slopes forming the skyline from lower elevations around the LCA. The outer slopes are prominent and visible from the valleys below, especially to the south and west of the LCA where they form the skyline of the NSA to the south and from the lower elevations to the west. These more prominent areas have no capacity for turbine development.</p>
										Max. Numbers in Group	1-3	1-3					
										Min Group Separation Distances (km)	1-2	3-5					
4. Southern Uplands with Scattered Forest: (i) Broadlaw Group																	
Med	Med/High	Med	High						Currently Glenkerie windfarm (11x100/115m operational turbines and 6x125m consented) located within the	<i>Uplands with Occasional Wind Turbines and Uplands with no Wind Turbines (small</i>	<i>Mostly Uplands with No Wind Turbines. Small area in west Uplands with Wind Turbines and Wind</i>						<p>Landscape Analysis: A large scale rolling hill landscape with steep sided valleys and scattered coniferous forest. Several lochs/ reservoirs. The north eastern area of this LCA contains part of a NSA, the vast majority is covered by the extensive Tweedsmuir Uplands SLA and there is the Talla-Hart Fell Wild Land Area. The Southern Upland Way passes through the central/ eastern area of the LCA.</p>

Key: No Capacity Low Capacity Medium Capacity High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
									western area of the LCA near the border with South Lanarkshire to the north of Tweedsmuir. Clyde and extension windfarm lies on the western boundary with 3 turbines lying within Scottish Borders. 3nr 15-35m turbines above the Yarrow Valley in the east.	western area of Landscape with Wind Turbines)	Turbine Landscape						<p>Development Capacity: The western edge of this LCA is a <i>Landscape with Wind Turbines/ Wind Turbine Landscape</i> influenced by Clyde windfarm lying mainly outwith the SBC area. The majority of the internal area has topographical containment created by a large upland area and as a result has lower intervisibility. However, spur like landforms between river valleys increases prominence of eastern areas, with visual sensitivity increased by the presence of the Southern Upland Way. Extensive landscape designations, wild land qualities, prominent hilltops and recreational use reduces the capacity of this landscape for windfarm development, as demonstrated by the refusals on appeal of the Minch Moor and Broadmeadows proposals between the Tweed and Yarrow valleys. This large area with no windfarms or turbines should remain as a largely undeveloped gap between clusters of upland turbine development to the west and in the north and east of Scottish Borders. Capacity for the largest turbines only exists to the west of the A701 where these would be seen as an extension to the existing Clyde windfarm cluster within South Lanarkshire. The remaining area has very limited capacity for smaller size turbines as individuals or small groups associated with lower ground at farmsteads, individual properties and small groupings of properties.</p> <p>Significant Non Landscape Constraints:</p> <ul style="list-style-type: none"> • The southern tip of the LCA lies within the Eskdalemuir EKA Seismological Array 10km exclusion zone and the rest lies in the Statutory Safeguard Area • The large Tweedsmuir Hills SSSI lies east of the upper Tweed
											Max. Numbers in Group	1-3	1-3	1-3	5-10	5-10	
											Min Group Separation Distances (km)	1-2	3-5	3-5	5-10	5-10	
4. Southern Uplands with Scattered Forest: (ii) Dun Knowe Group																	
Med	Low/Med	Med	Med						Currently one medium sized windfarm consisting of 10x121m turbines to the west of Hawick (Langhope Rig).	Central area of Uplands with Occasional Wind Turbines surrounding area is Uplands with No Wind Turbines	Uplands with Wind Turbines/ Occasional Wind Turbines						<p>Landscape Analysis: This LCA, while extensive open hill country, is considerably lower and less wild or dramatic than Broad Law LCA. Most of the forest is concentrated centrally and highest hills to the west. There are no designations or long distance footpaths and there is little human settlement within and nearby.</p> <p>Development Capacity: The Dun Knowe Group has limited existing turbine development and could accommodate additional development with larger size turbines. The surrounding topography provides a degree of topographical containment for the largest turbines and intervisibility within the area is generally fairly low. However significant separation from Langhope Rig and careful siting would be required to avoid the cumulative issues leading to the dismissal of the Barrel Law application. Forestry removal should be mitigated, preferably through compensatory planting. Smaller scale turbines can be accommodated as individual turbines or as small groups or 3 or less and should be located alongside farmsteads and residential properties and associated with farm/domestic generation.</p> <p>Significant Non Landscape Constraint: The LCA lies within the Eskdalemuir EKA Seismological Array Statutory Safeguard Area</p>
											Max. Numbers in Group	1-3	1-3	1-3	5-10	5-10	
											Min Group Separation Distances (km)	1-2	3-5	3-5	5-10	5-10	

Key: No Capacity Low Capacity Medium Capacity High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel't'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
4. Southern Uplands with Scattered Forest: (iii) Cauldcleuch Head Group																	
Med	Low/Med	Med	Med						Windy Edge windfarm (7x125m/ 2x110m) has been consented on appeal.	Uplands with Wind Turbines/ No Wind Turbines	Uplands with Occasional Wind Turbines, western area Uplands with Wind Turbines						<p>Landscape Analysis: This LCA is extensive open hill country with rolling hill landform and steep sided valleys. The hills are more defined and taller than in Dun Knowe LCA, However, they are of a significantly lesser scale than Broad Law LCA. There is relatively little forestry, with extensive areas visible in neighbouring LCAs. There are no designations or long distance footpaths and there is little human settlement within or nearby. The area has a low intervisibility.</p> <p>Development Capacity: There is remaining capacity for larger turbines in the more elevated upland areas well separated from Windy Edge windfarm and where topographical containment reduces intervisibility. However, the steepness of landforms may restrict the potential for successfully accommodating larger groups and for turbines >120m. Particular consideration must also be given to the setting of Hermitage Castle. There is capacity for smaller scale turbines as individual turbines or small groups of 3no or less sited alongside farmsteads and individual properties in lower areas, to be seen as domestic or farm scale energy generation.</p> <p>Significant Non Landscape Constraints:</p> <ul style="list-style-type: none"> • The area south of Hermitage contains a large SSSI/ SPA • The southern tip of the LCA lies within the Eskdalemuir EKA Seismological Array 10km exclusion zone and the rest lies in the Statutory Safeguard Area
												1-3	1-3	1-3	5-10	5-10	
												1-2	3-5	3-5	5-10	5-10	
5. Southern Uplands Forest Covered: (i) Craik																	
Med	Low/Med	Low/Med	Med/High						No wind turbines lie within or close to this area.	Uplands with No Wind Turbines	Uplands with Wind Turbines						<p>Landscape Analysis: LCA is extensive area of rolling hill landform and steep sided valleys cloaked with commercial coniferous forestry. There are no designations or long distance footpaths and there is little human settlement, although the Southern Uplands Way passes along the northwestern edge. The area has a low internal intervisibility, although the edges are visible from surrounding hill areas.</p> <p>Development Capacity: This LCA contains no landscape designations, low internal intervisibility and is a sparsely populated area of the Scottish Borders. Due to these factors there is capacity for groups of larger turbines. Forestry removal should be mitigated, preferably through compensatory planting. Smaller sized turbines should be sited alongside individual farmsteads and properties and visually be read as domestic/ farm scale power generation. Larger turbines can be accommodated in the larger scale elevated upland areas and take advantage of the topographical containment created by the landscape and screening by trees. The presence of the Southern Upland Way reduces capacity in the western part of this LCA.</p> <p>Significant Non Landscape Constraint: The eastern half of the LCA lies within the Eskdalemuir EKA Seismological Array 10km exclusion zone and the rest lies in the Statutory Safeguard Area</p>
												1-3	1-3	1-3	5-10	5-10	
												1-2	3-5	3-5	5-10	5-10	

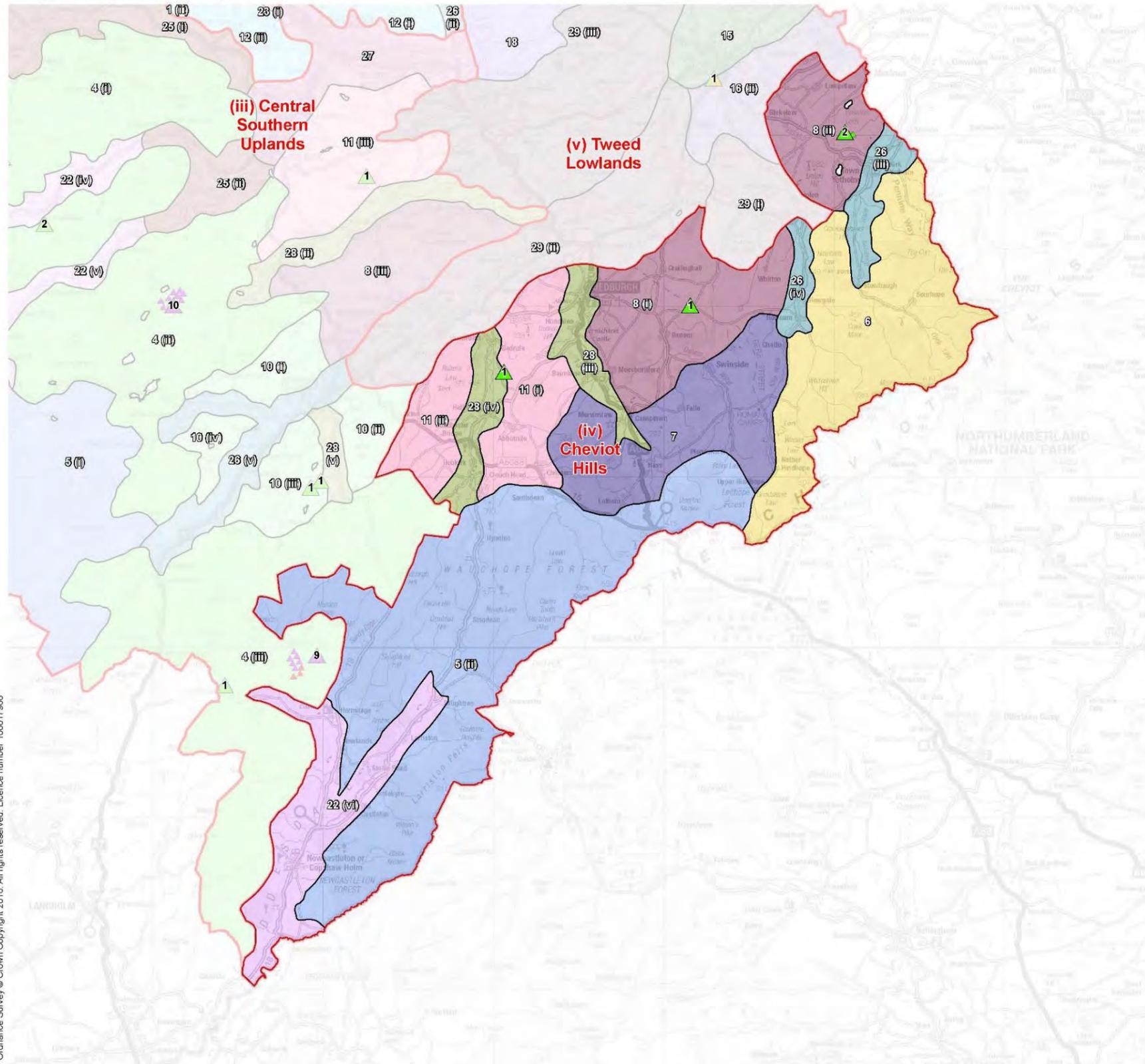
Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
8. Rolling Farmland: (iii) Minto Hills																	
Med/High	Med/High	Med/High	Med/High	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No wind turbines lie within or close to this area.	<i>Upland Fringe with No Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium scale farmland with undulating topography and large rectilinear fields enclosed by walls or hedges. Boundary trees, shelterbelts and small woodlands. Distinctive Minto Hills on SE edge are part of the Teviot Valley SLA. Network of lanes, tracks and scattered farms and houses. The A7 tourist route passes through the western edge.</p> <p>Development Capacity: Due to the medium scale, open and relatively elevated lowland/ upland fringe character of this LCA there is no capacity for larger wind energy schemes. Occasional smaller turbines could be accommodated as individuals or small groups, especially when associated with a farmstead. There is no capacity for turbines in the vicinity of the distinctive Minto Hills</p>
																	<p><i>Max. Numbers in Group</i></p>
																	<p><i>Min Group Separation Distances (km)</i></p>
10. Grassland with Rock Outcrops: (i) Whitehaugh																	
Med	Med	Med	Med	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No wind turbines lie within or close to this area.	<i>Upland Fringe with No Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: These LCAs together with their separating valleys provide a setting for Hawick, lying between the town and larger scale upland areas. Medium scale farmland of diverse character with small scale enclosed areas between ridges and knolls. Landform has characteristic angular ridged and rocky undulations. Varied size fields of mainly improved pasture enclosed by stone dykes, fences and hedgerows. Field boundary trees, shelterbelts and small woodlands. Crossed by often winding lanes. Scattered farms and hamlets.</p> <p>The Whitehaugh LCA lies north and west of Hawick. It is more open and rocky than the other LCAs and has views south over Hawick and Teviotdale to the Southern Uplands and The Cheviot. The area is crossed by an electricity transmission line.</p> <p>Development Capacity: There is medium capacity for smaller turbines individually or as small groups. There is less capacity on the prominent and open south eastern slopes above Hawick and turbines should have a visual connection with a farmstead or dwelling. Avoid proximity of turbines to the transmission line. Due to high intervisibility within this LCA there is no capacity for larger turbines.</p>
																	<p><i>Max. Numbers in Group</i></p>
																	<p><i>Min Group Separation Distances (km)</i></p>
10. Grassland with Rock Outcrops: (ii) Midgard																	
Med	Med	Med	Med	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No wind turbines lie within or close to this area.	<i>Upland Fringe with No Wind Turbines</i>	<i>Upland Fringe with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: See above for type description</p> <p>The Midgard LCA lies southeast of Hawick. It is more tree covered and has more pronounced rock outcrops and knolls than the other <i>Grassland with Rock Outcrop</i> LCAs. It has a high number of hillforts. Teviot Valley SLA designation overlaps the northern corner of the LCA.</p> <p>Development Capacity: There is medium capacity for smaller turbines in the central, eastern and southern area of this LCA in areas with less external visibility, away from</p>
																	<p><i>Max. Numbers in Group</i></p>

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
											Min Group Separation Distances (km)	2-3	3-5				open undulating areas of the LCA and the St Cuthberts Way through the Eildon Hills. An electricity transmission line passes through the middle of the LCA, close to the NSA. Development Capacity: There is no capacity for development on or around the NSA due to the designation. However, there is limited capacity for individual and small groups of smaller turbines across the rest of the area; particularly towards the south and west. Turbines will be better accommodated in this landscape if situated alongside farmsteads and individual properties and sited to reduce impacts. Avoid proximity of turbines to the transmission line or in the line of key views to the Eildon Hills.
22. Upland Valley with Pastoral Floor: (i) Upper Tweed/ Biggar Water																	
Med/ High	Med/ High	Med/ High	High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are no turbines within the valley, although the turbines of Glenkerie windfarm are visible less than 1km to the west of the Tweed valley.	River Valley with No Wind Turbines	River Valley with No Wind Turbines/ with Occasional Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: Medium to small scale valleys strongly enclosed with steep sides of rough pasture grading into uplands; with flat floors of enclosed improved pasture. Well settled with farms, houses and occasional villages. Some are important transport corridors. The Upper Tweed/ Biggar Water is broader and more open than most of the type at the Biggar Water end but becomes narrower and more dramatically enclosed at the southern end of the Tweed. The central part, including the village of Broughton, lies in the Upper Tweeddale NSA and most of the rest within the Tweedsmuir Uplands SLA. Development Capacity: This area has very limited capacity for only the smallest scale of single turbine development below 20-25m due to the openness of the landscape, views from Tinto Hill and due to the scenic qualities as recognised by designation as part of a larger SLA and NSA. Turbines should be associated with farms or dwellings.
											Max. Numbers in Group	1					
											Min Group Separation Distances (km)	3-4					
22. Upland Valley with Pastoral Floor: (ii) Lyne Water																	
Med/ High	Med/ High	Med/ High	Med/ High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Three 15-35m turbines at western end of Scotstoun Bank.	River Valley with No Wind Turbines/ Occasional Wind Turbines in W.	River Valley with Occasional Wind Turbines/ southern section No Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: see above for type description. The Lyne valley is broader than some others at the northern but becomes narrow and enclosed at the southern end, which lies in the Upper Tweeddale NSA. The slopes south of the A72 lie within the Tweedsmuir Uplands SLA. Development Capacity: This area has no capacity in the southern area for turbines due to the NSA designation. However the northern area has capacity for individual or small groups of smaller turbines where these are visually read as part of a farmstead development.
											Max. Numbers in Group	1-3					
											Min Group Separation Distances (km)	2-3					
22. Upland Valley with Pastoral Floor: (iii) Manor Water																	
Med/ High	Med/ High	Med/ High	High	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines within this area.	River Valley with No Wind Turbines	River Valley No Wind Turbines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: see above for type description. This valley is narrower and much more enclosed by the surrounding hills. It has only a

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT			PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)									
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
											Max. Numbers in Group	1					characterise the hillsides. The valleys contain smaller settlements and numerous individual dwellings and farmsteads and are traversed by roads passing west. The valleys afford medium distance views along the valley floor and lie mainly within the Tweed, Ettrick and Yarrow Confluence SLA.
											Min Group Separation Distances (km)	2-3					Development Capacity: Due to the SLA designation and presence of designed landscapes capacity is limited to individual smaller turbines. These should be located on the valley floor where they can be associated with individual farmsteads and must be sited to reduce visual impacts, there is no capacity for turbine development on the more elevated slopes or within the Yarrow Valley due to increased prominence and the more enclosed nature of the Yarrow valley.
26. Pastoral Upland Fringe Valley: (v) Borthwick Water/ Upper Teviot																	
Med/ High	Med/ High	Med/ High	Med/ High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area.	River Valley with No Wind Turbines	River Valley with Occasional Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: Medium scale well settled pastoral valley set between low grassland hills with shallow enclosing slopes. The Teviot contains the town of Hawick and the busy A7 trunk road to Carlisle, as well a high voltage overhead line. The Borthwick contains a minor road and is quieter, more enclosed and less developed. There are no landscape designations.
											Max. Numbers in Group	1					Development Capacity: There is limited capacity for individual smaller sized wind turbines within the broader simpler areas of the valley landscape. There is no capacity for turbines on the more prominent steeply sided slopes of the valley or within the more enclosed areas of the Borthwick Water Valley. Turbines should be sited in the landscape so they are associated with a farmstead or individual property. Care should be taken to avoid cumulative effects with the overhead lines.
											Min Group Separation Distances (km)	2-3					
27. Upland Fringe Valley with Settlements: Tweed/ Gala/ Ettrick Confluence																	
High	Med/ High	Med/ High	High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area.	River Valley with No Wind Turbines	River Valley with Occasional/ No Wind Turbines	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Landscape Analysis: Medium to large scale densely settled flat bottomed enclosed by the slopes of grassland hills and is a well ordered patchwork of settlement, mixed farmland and woodland. It is the central population, transport and river drainage hub for the Borders. The eastern area lies within the Eildon and Leaderfoot NSA and part of the west within the Tweed, Ettrick and Yarrow Confluence SLA. Several long distance paths including the Southern Upland Way pass through and the area is overlooked by the Eildon Hills and Scott's View.
											Max. Numbers in Group	1	1				Development Capacity: Due to the amount of settlement, landscape designations and views within and across this broad valley landscape, there is only very limited capacity for smaller sized wind turbines. For these reasons the area has only very limited capacity for individual smaller turbines located outside the NSA. Turbine development will be best accommodated alongside industrial/ business facilities or farmsteads and avoiding the narrowest parts of the valleys such as the Tweed at Fairniee.
											Min Group Separation Distances (km)	2-3	3-5				

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
28. Wooded Upland Fringe Valley: (ii) Ale Water																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Small scale often narrow meandering valley with enclosing slopes increasingly shallow as the Ale Water drains from the Southern Uplands to the Tweed Lowlands. Valley floor is small to medium scale farmland with extensive tree cover on steeper slopes and by the river. Set between rounded grassland and farmland hills. Small settlements at Ashkirk, Lilliesleaf and Ancrum. The LCA has no landscape designations although there are a number of designed landscapes.</p> <p>Development Capacity: This small scale intimate sheltered character of this LCA has limited capacity for individual or small groups of smaller turbines only. Turbines should be located away from the smallest scale most intimate valley floor areas and away from the more prominent sideslopes. The area around and west of the A7 is of a particularly intimate scale and well settled. Turbines should not exceed 20-25m. There is no capacity for commercial scale developments. The setting of the settlements and designed landscapes should be respected.</p>
											Max. Numbers in Group	1-3	1				
											Min Group Separation Distances (km)	2-3	3-5				
28. Wooded Upland Fringe Valley: (v) Slitrig Water																	
Med/High	Med/High	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area, but 2nr 15-35m lie to the west.	<i>River Valley with No Wind Turbines</i>	<i>River Valley with Occasional Wind Turbines</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Small scale narrow meandering valley with particularly steep enclosing slopes to the east. Valley floor is small to medium scale farmland with extensive tree cover on steeper slopes and by the river. Set between rocky grassland hills. There are numerous individual farmsteads and properties and the landscape is tightly meandering with spurs and trees interrupting views. There are no settlements except for the southern end of Hawick at the lower end. The LCA has no landscape designations although there are a number of core paths and cycle routes, including an abandoned railway.</p> <p>Development Capacity: The small scale tightly enclosed character of this LCA has limited capacity for individual smaller turbines only. Turbines should be located away from the smallest scale most intimate valley floor areas and away from the more prominent sideslopes. There is no capacity for commercial scale developments. The setting of the settlements and designed landscapes should be respected.</p>
											Max. Numbers in Group	1-3					
											Min Group Separation Distances (km)	2-3					

Figure 6.1 (iv) - Cheviot Hills



Legend

- Regional Landscape Areas
- Landscape Character Areas
- Windfarm: Status, Height Category**
- ▲ Operational / Consented, Cat 1: 15 to <35m
- ▲ Operational / Consented, Cat 2: 35 to <50m
- ▲ Operational / Consented, Cat 3: 50 to <80m
- ▲ Operational / Consented, Cat 4: 80 to <120m
- ▲ Operational / Consented, Cat 5: 120m+

Landscape Character Areas:

- 5 - Southern Uplands Forest Covered
- (ii) Wauchope / Newcastleton
- 6 - Cheviot Uplands
- 6 Cockslaw Group
- 7 - Cheviot Foothills
- 7 Falla Group
- 8 - Rolling Farmland
- (i) Oxnam
- (ii) Lempitlaw
- 11 - Grassland with Hills
- (i) Bonchester / Dunion
- (ii) Rubers Law
- 22 - Upland Valley with pastoral Floor
- (vi) Liddel Water
- 25 - Upland Valley with Woodland
- (i) Middle Tweed
- (ii) Lower Ettrick / Yarrow
- 26 - Pastoral Upland Fringe Valley
- (iii) Bowmont Water
- (iv) Kale Water
- 28 - Wooded Upland Fringe Valley
- (iii) Jed Water
- (iv) Rule Water

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Table 6.1(iv). Summary of Landscape Capacity and Cumulative Effects and Guidance for Future Wind Energy Development – Cheviot Hills

Key: ○ No Capacity ○ Low Capacity ○ Medium Capacity ● High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel't'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
5. Southern Uplands Forest Covered: (ii) Wauchope/ Newcastleton																	
Med	Low	Low/ Med	Med	○	○	○	●	○	No wind turbines lie within or close to this area.	Uplands with No Wind Turbines	Uplands with Occasional Wind Turbines/ No Wind Turbines near Crater Bar	○	○	○	●	○	Landscape Analysis: An extensive area of large scale rolling or undulating hill landform and occasional small valleys cloaked with commercial coniferous forestry. Occasional prominent conical hill landforms. There is little human settlement and two or three minor roads together with the A68 in the east. Most of the area is not designated although the eastern end is part of the Cheviot Foothills SLA, the border crossing of Carter Bar and is adjacent to the Northumberland National Park. The area has a low internal intervisibility, although the edges are visible from surrounding hill areas.
																	Development Capacity: Much of this LCA has the potential to accommodate occasional well-separated windfarms with larger turbines due to the upland topography creating containment, a sparse population and a lower degree of intervisibility from settlements, transport routes and viewpoints. There is also limited scope for siting individual or small groups of smaller sized turbines alongside individual farmsteads. This should not become a <i>Landscape with Wind Turbines</i> , therefore individual windfarms and turbines should be well separated. Care should be taken to avoid siting next to prominent hilltop landforms or viewpoints. The eastern part has a much more limited capacity due to its SLA designation and its location relatively close to the Northumberland National Park. The Carter Bar Border viewpoint has a much higher local sensitivity with no capacity in the area immediately in the vicinity of this iconic viewpoint or in the short to mid-range view looking north. In the south, there are tourism related sensitivities along the border near the Kielder area. Finally, significant windfarm development would require extensive felling of forestry, which would require compensatory planting.
																	NB. The LCA lies within the Eskdalemuir EKA Seismological Array Statutory Safeguard Area
6. Cheviot Uplands: Cocklaw Group																	
Low/ Med	Med/ High	Med/ High	High	○	○	○	○	○	No wind turbines lie within or close to this area.	Uplands with No Wind Turbines	Uplands with Occasional Wind Turbines/ No Wind Turbines in higher or northern areas	○	○	○	○	○	Landscape Analysis: Large scale distinctive dome and cone shape hill ranges, often with rugged peaks and rocky sides, dissected by small steep sided valleys and drainage lines, rising to the English border. Land cover is mainly rough grassland with patches of bracken and scrub, with occasional blocks of woodland. There is scattered settlement and only minor dead end roads. The area falls entirely within the Cheviot Foothills SLA, is adjacent to Northumberland National Park and the regional high point of The Cheviot. The most northern section of the Pennine Way passes through the northern end.
																	Development Capacity: There is no capacity within any part of this LCA for larger turbines or a windfarm. This is due to the distinctive nature of the landform, the

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
											Min Group Separation Distances (km)	3-5	3-5				proximity of Northumberland National Park and key visual receptors including the Pennine Way, The Cheviot Hill and the nearby Carter Bar viewpoint on the A68 England – Scotland border which provide popular panoramic viewpoints over this area. There is however limited capacity for smaller sized turbines. This capacity is very much restricted to the lower enclosed land where these would be associated with individual farmsteads and properties and read as small scale local energy generation.
7. Cheviot Foothills: Falla Group																	
Med/ High	Med/ High	Med/ High	Med/ High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No wind turbines lie within or close to this area.	Uplands with No Wind Turbines	Uplands with Occasional Wind Turbines	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Large scale undulating/ rolling landscape with occasional prominent dome shape hills and rocky outcrops. Land cover is mainly grassland with a mixture of enclosed improved pasture separating hills of open and rough pasture. There are also large blocks of forestry. There is scattered settlement and mainly minor roads, although the A68 passes through ascending to Carter Bar. The southeastern area falls within the Cheviot Foothills SLA and the western tip within the Teviot Valleys SLA. This relatively open landscape has high internal and external visibility. The Carter Bar viewpoint has an open panoramic view across the area.</p> <p>Development Capacity: There is only low capacity for smaller turbines, individually or in small groups. Turbines should be sited away from distinctive steeper landforms and sensitive visual receptors around the approach to Carter Bar. Turbines should be sited in areas with lower intervisibility and associated with individual farmsteads and dwellings where they can be read as small scale local energy generation.</p>
											Max. Numbers in Group	1-3	1				
											Min Group Separation Distances (km)	2-3	3-5				
8. Rolling Farmland: (i) Oxnam																	
Med/ High	Med	Med/ High	Med/ High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	One 15-35m wind turbine lies within this area.	Upland Fringe with No Wind Turbines	Upland Fringe with Occasional Wind Turbines	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium scale farmland with undulating/ rolling topography and large rectilinear fields of mixed agriculture enclosed by fences and/or hedges. Tree cover comprises conifer shelterbelts and plantations. Network of lanes, tracks and scattered farms, houses and hamlets. Eastern area is higher and more open with few houses, larger fields and poorer pasture. Limited internal visibility but the area is overlooked by higher ground to the south and the edges are seen from surrounding valleys. Largely undesignated although western edge overlaps the Teviot Valleys SLA, overlooking Jeburgh and the Jed Water valley.</p> <p>Development Capacity: Due to the medium scale, open and relatively elevated lowland/ upland fringe character of this LCA there is no capacity for larger wind energy schemes. Smaller turbines could be accommodated as individuals or small groups, especially when associated with a farmstead. Occasional larger turbines, below 80m height, could be accommodated in the higher, larger scale areas to the east. However, further to the refusal of the proposed Whitton windfarm (5x110m) there is no capacity for a commercial size scheme. There is very limited scope for siting anything more than the smallest turbines on the outer edges of this area where the landform is more complex and they could affect the setting of settlements.</p>
											Max. Numbers in Group	1-3	1-3	1-3			
											Min Group Separation Distances (km)	1-2	3-5	5-10			

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
8. Rolling Farmland: (ii) Lempitlaw																	
Med/High	Med	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Two 15-35m wind turbines lie within this area.	Upland Fringe with No Wind Turbines	Upland Fringe with Occasional Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium scale farmland with undulating/ rolling topography and large rectilinear fields of mixed agriculture enclosed by fences and/or hedges. Tree cover comprises conifer shelterbelts and deciduous boundary trees. Network of lanes, tracks and scattered farms, houses. Two natural waterbodies. Southeastern area towards Yetholm is higher and more distinctively rolling than the northwestern, with distinctive Yetholm Law. Limited internal visibility but the area is overlooked by higher ground to the south and the edges are seen from surrounding valleys. Largely undesignated although southern corner overlaps the Cheviot Foothills SLA and the Northumberland National Park lies 2km to the east.</p> <p>Development Capacity: This area has limited capacity for smaller sized turbines only as individual turbines or as small groups of turbines. There is no capacity for wind farms or for larger turbines. Capacity is reduced in the southeast due to the more distinctive landforms and proximity of settlements and landscape designations.</p>
										Max. Numbers in Group	1-3	1-3					
										Min Group Separation Distances (km)	1-2	3-5					
11. Grassland with Hills: (i) Bonchester/ Dunion																	
Med/High	High	Med/High	Med/High	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There is one 15-35m turbine lying on the western fringe.	Upland Fringe with No Wind Turbines	Upland Fringe with Occasional Wind Turbines/ No Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: A diverse landscape type characterised by varied landforms from elongated ridges to occasional prominent round or conical hills. Dunion Hill provides part of the setting to Jedburgh and Bonchester Hill to Bonchester Bridge. Landuse is mainly pasture, varying from improved enclosed pasture on lower ground to open semi-improved on the highest hills and poorly drained areas. Occasional conifer plantations and shelterbelts. Settlement is mainly scattered houses and farms linked by small roads, although the A6088 and the hamlet of Chesters lie in the southern end. There is high visibility across and to this area. The majority of this area, excepting the southern end, is within the Teviot Valleys SLA.</p> <p>Development Capacity: Larger turbines and windfarms are not suitable to this landscape as they will be visible from Jedburgh, the Teviot and Rule Valleys. There is low capacity for individual or small groups of smaller turbines, visually associated with farmsteads and individual dwellings and sited sensitively away from prominent slopes and hilltops to reduce visual impacts.</p>
										Max. Numbers in Group	1-3	1-3					
										Min Group Separation Distances (km)	2-3	3-5					
11. Grassland with Hills: (ii) Rubers Law																	
High	High	High	High	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	There are no wind turbines within or close to this area	Upland Fringe with No Wind Turbines	Upland Fringe with No Wind Turbines /Occasional Wind Turbines in fringes and south	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Simpler and less diverse than most of the type; comprising an undulating plateau to the south and the single, regionally prominent, conical hill of Rubers Law in the north. Landuse is mainly pasture, varying from large rectilinear fields of improved pasture on lower ground around Rubers Law to open unimproved areas on Rubers Law and poorly drained plateau to the south. Occasional conifer plantations</p>

Key: <input type="radio"/> No Capacity <input type="radio"/> Low Capacity <input type="radio"/> Medium Capacity <input type="radio"/> High Capacity																	
UNDERLYING LANDSCAPE CAPACITY (i.e. not taking account of current wind energy development)					CURRENT CONSENTED DEVELOPMENT					PROPOSED LIMITS TO FUTURE DEVELOPMENT (i.e. proposed acceptable level of wind energy development)							
Landscape Sensitivity to Wind Energy Development				Landscape Capacity (Related to turbine size)					Existing/ Consented Developments (July 2016)	Current Wind Energy Landscape Type(s)	Future Wind Energy Landscape Type(s)	Remaining Landscape Capacity (Rel'd to turbine size)					Analysis & Guidelines (Refer to Detailed Guidance for Further Information on Siting and Design)
Landscape Character Sensitivity	Visual Sensitivity	Landscape Sensitivity	Landscape Value	15-<35m	35-<50m	50-<80m	80-<120m	Over 120m				15-<35m	35-<50m	50-<80m	80-<120m	Over 120m	
26. Pastoral Upland Fringe Valley: (iv) Kale Water																	
Med/High	Med	Med/High	Med/High	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area.	River Valley with No Wind Turbines	River Valley with Occasional Wind Turbines	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Medium to small scale well settled pastoral valley set between grassy hills. Broad and open at the northern end, providing a setting for Morebattle; with increasingly steep enclosing slopes as it penetrates south into the Cheviot Uplands. The hamlet of Hownam lies at the southern end, enclosed by hills. A minor road passes through. The east side lies within the Cheviot Foothills SLA.</p> <p>Development Capacity: There is limited capacity for individual smaller sized wind turbines within the broader simpler areas of the valley landscape. There is no capacity for turbines on the more prominent steep side slopes or within the more enclosed areas. Turbines should be sited in the landscape so they are associated with a farmstead or individual property. Protect the setting of the two villages and sensitive visual receptors.</p>
											Max. Numbers in Group	1					
											Min Group Separation Distances (km)	2-3					
28. Wooded Upland Fringe Valley: (iii) Jed Water																	
Med/High	High	Med/High	High	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	No turbines lie within or close to this area.	River Valley with No Wind Turbines	River Valley with Occasional Wind Turbines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Small scale meandering valley with undulating enclosing slopes. Highly varied scenery: valley floor is small to intimate scale farmland with extensive tree cover on steeper slopes and by the river. Distinctive sandstone cliffs cut along the river Set between rounded grassland and farmland hills. Jedburgh dominates the northern end, with other small settlements/ farms/ houses throughout. All but the southern end lies within the Teviot Valleys SLA.</p> <p>Development Capacity: The small scale intimate sheltered character of this LCA includes the setting of the historic town of Jedburgh and distinctive riverside cliffs. Due to the scale and character and designations there is no capacity for wind turbines over 15m.</p>
											Max. Numbers in Group						
											Min Group Separation Distances (km)						
28. Wooded Upland Fringe Valley: (iv) Rule Water																	
Med/High	Med/High	Med/High	Med/High	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	One 15-35m turbine lies on the eastern edge of this area.	River Valley with No Wind Turbines	River Valley with Occasional Wind Turbines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Landscape Analysis: Small scale meandering valley with varied character; broader and more open in the middle. Set between rocky grassland hills. Enclosing slopes varied but typically not steep although overlooked by distinctive hills: Rubers Law west and Bonchester Hill to the east. There are numerous individual farmsteads and properties, with the small settlements of Bedrule and Bonchester Bridge. The area north of Bonchester Bridge lies within the Teviot Valley SLA and there are a number of non-inventory designed landscapes. The Borders Abbey Way passes through the north.</p> <p>Development Capacity: This LCA has a small scale intimate character. There is no capacity for wind turbines over 15m.</p>
											Max. Numbers in Group						
											Min Group Separation Distances (km)						