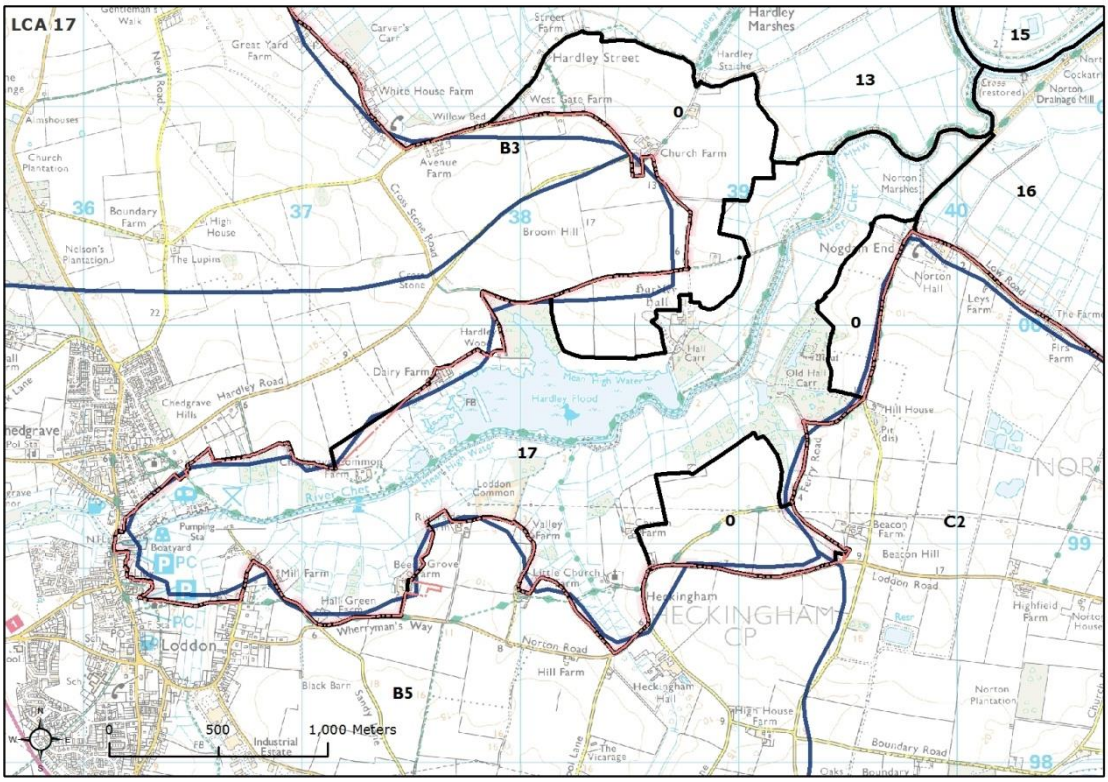
LCA 17: The Chet Valley

Location and landscape character context



Landscape Sensitivity Assessment for Wind Turbines

Criteria	Lower sensitivity	⟷	Higher sensitivity
1.Scenic and special qualities			Special qualities sensitive to wind turbines and which are represented in this area is as follows – the habitat diversity is indicative of an intricate landscape mosaic which would be sensitive to turbines in terms of scale. The winding waterways and large expanse of open water at Hardley Flood relates to sensitive special qualities such as the wide open landscape. As such, these special qualities would have a high sensitivity to the introduction of turbines.
2.Enclosure and scale			The sense of enclosure created by valley sides and carr woodlands in area 17 increases sensitivity to turbines in these terms. Given the above, sensitivity to turbines in terms of enclosure and scale is high.
3.Landscape and land cover pattern			Much of this character area exhibits a varied landscape mosaic and landcover pattern which would be sensitive to wind turbines due to the potential effect they would have on the cohesiveness of such landscape patterns. For example, the intricate mix of wetland landscape elements such as open water, reed, wet fen, grazing and carr woodland, which would have a high sensitivity to wind turbines.
4.Skylines			Skyline character is largely undeveloped, being formed by woodland fringed valley sides and ridges, and occasional open, smooth arable farmland in the adjacent South Norfolk District. The few intrusions are small scale, such as telegraph poles and wires. Considering all elements together, area 17 is highly sensitive to turbines in skyline terms.
5.Perception and experience of the landscape			This area has a mostly tranquil, enclosed rural character which would be sensitive to wind turbines. Aspects which would locally reduce sensitivity are the staithe and waterside development at Loddon, although this affects only a small proportion of the area – highly sensitive to turbines in terms of perception overall.
6.Historic landscape character			Aspects of historic landscape character in this area which would be sensitive to solar PV development include the historic staithe at Loddon plus intact areas of rectilinear dyke patterns in the valley floor. Such aspects would be sensitive due to the effect that wind turbines could have on the coherence of these historic landscape features.
7.Visual sensitivities and intervisibility with areas outside the Broads			The presence of carr woodlands to large parts of the valley side provide visual containment. Whilst there is some intervisibility with adjacent areas in South Norfolk District, views are framed. This creates a moderate-high sensitivity to turbines in visual terms.
Discussion on landscape sensitivity			Overall landscape sensitivity of this area to wind turbine development is judged to be high. This is due to the sensitive special qualities represented in the area such as sense of tranquillity, the habitat mosaic and the large expanse of open water at Hardley Flood, together with the largely undeveloped skyline character. Other factors important to this sensitivity

	judgement are the varied landscape and historic landscape patterns, the coherence of which would be vulnerable to turbines. This judgement also applies to large infrastructure for off shore wind farm schemes, such as pylons.

Sensitivity to different turbine heights

Land within the character area		Land outside the Executive Area	
Small (15-20m)	**M-H**	Small (15-20m)	**M-H**
Medium (20-50m)	**H**	Medium (20-50m)	**H**
Large (50-70m)	**H**	Large (50-70m)	**H**
Very large (70m+)	**H**	Very large (70m+)	**H**

Commentary:

Small turbines would relate more closely to existing skyline/scale references such as buildings within Loddon and would be perceptibly less dominating in relation to skylines. However, the larger turbines in the typology would appear to dominate such elements as well as the landscape and historic pattern, hence the highest sensitivity rating.

Landscapes outside the Executive Area

Relevant landscape character areas and sensitivities are:

South Norfolk -

B3 Rockland Tributary Farmland: Fieldwork confirmed distant views out over the Yare Valley and into the Broads indicating a greater vulnerability to visual intrusion associated with tall elements.

B5 Chet Tributary Farmland: Fieldwork confirmed the visual relationship with the Broads where views of the area's rising ridges are evident.

Turbines at the smallest end of the range (15 -20 metres to tip height) would have less effect on landscape character and perceptual aspects within the Broads, due to closer relationship to existing landscape scale elements (i.e. carr woodland). However, fieldwork confirms that filtered intervisibility with the adjacent areas means that larger turbines could appear more dominant in relation to the Broads, resulting in a high landscape sensitivity.

Commentary on different cluster sizes

Single turbine Small clusters (<5 turbines)

Land within the character area		Land outside the Executive Area	
Single turbine	**M-H**	Single turbine	**M-H**
<5 turbines	**H**	<5 turbines	**H**
6-10 turbines	**H**	6-10 turbines	**H**

Medium (6-10) ***Large (11-25)*** ***Very large (>26)***	11-25 turbines	**H**	11-25 turbines	**H**
	>26 turbines	**H**	>26 turbines	**H**
	Commentary: Single turbines would respond more closely to existing skyline elements such as buildings within Loddon, although larger groups of turbines would create visual clutter in relation to open landscapes and simple skylines of these areas, hence the highest sensitivity rating. ***Landscapes outside the Executive Area*** Relevant landscape character areas and sensitivities are: South Norfolk - B3 Rockland Tributary Farmland: Fieldwork confirmed distant views out over the Yare Valley and into the Broads indicating a greater vulnerability to visual intrusion associated with tall elements. B5 Chet Tributary Farmland: Fieldwork confirmed the visual relationship with the Broads where views of the area's rising ridges are evident. Fieldwork confirms that the filtered intervisibility with adjacent areas as they overlook the Broads means that multiple turbine clusters could be more dominant in relation to skyline character, resulting in a high landscape sensitivity. Single turbines would however have less effect on landscape character and perceptual aspects within the Broads, due to closer relationship to existing landscape scale elements (i.e. carr woodland).			