

7000 Acres

7000 Acres Response to the Gate Burton Energy Park Ltd Application on the subject of:

Socio-Economics and Land Use

Deadline 2 Submission – 8 August 2023

Executive Summary

Methodology – Study Area and Geographical Range Considered

Within the Environmental Statement (ES), the Applicant has, through careful selection of the Study Area and ranges of impact, sought to create an impression of limited impacts of the scheme on the area:

- The Study Area used by the Applicant to reference baseline conditions has been chosen very widely, thereby avoiding having to highlight the specific socio-economic difficulties of Gainsborough, the nearest town to the Gate Burton Energy Park (GBEP)
- The same breadth of area has been used by the Applicant as reference area for considering employment and economic activity, which has an averaging effect on the assessment, and therefore also fails to highlight the specific socio-economic difficulties of Gainsborough.
- By contrast, the Applicant has chosen to deliberately narrow the reference area for considering other impacts to within 500m of the development, e.g. impact on Amenities and Residential Properties, despite the fact that scale of the GBEP would make it the dominant feature of the immediate area, being 3.5km across, vastly larger than any of the nearby villages.

Deprivation:

To carry out a of socio-economic review of the area around the GBEP and not acknowledge or address the deprivation issues of the main population centre is either misleading, partial, or superficial, and should further serve to render the assessment inadequate.

- The ES is misleading in its description of the region, in terms of economic activity, unemployment rates and education levels, concluding these are similar to those in the East Midlands and England. Considering the area with a greater level of resolution shows the significant scale of deprivation issues facing the community of Gainsborough.

Employment:

The ES understates the likely impact of employment loss arising from the loss of agricultural land and lacks transparency in its assessment of any jobs lost, or the nature of any jobs created.

- Limited interpretation of likely roles would suggest that any job creation locally will be in lower skilled, lower paid roles, and be unlikely to sustain livelihoods in the same way that jobs lost from agriculture.
- There is little or no community benefit through employment from the development, in an area that is in desperate need of jobs and prospects. The loss of farming livelihoods therefore can only be seen as an erosion of opportunity.

Land Use:

The ES omits any consideration of efficiency of land use, nor does the ES consider the additional demands on agricultural land for planting trees, establishing peatlands and growing energy crops for biofuels, as identified by the UK Climate Change Committee in its 6th Carbon Budget. By omitting such important considerations, the sensitivity impacts of loss of land are understated.

- In addition, the Applicant uses a large area (the whole of West Lindsey) in an attempt to minimise the apparent impact of the development, quoting 0.8% of West Lindsey agricultural land being impacted. When considering the southwest section of West Lindsey in which the concentrated effects of 4 large-scale ground mounted solar schemes are proposed, this figure rises to 20% of farmland.

Local Plans

A significant amount of work has been carried out in the region to develop plans for the future of the region. This work has been extremely conscious of climate change and actions to decarbonise the economy, however neither makes any proposals for the development of large-scale ground mounted solar as a contribution to the development of the region.

- The industrialisation of an area of Lincolnshire through extensive deployment of large-scale ground mounted solar would serve to undermine the Agrifood ambitions of the Lincolnshire Industrial Strategy as well as the appeal for visitors and the ambition to improve areas of deprivation through the stimulation of the Visitor Economy.
- The Central Lincolnshire Plan sets out objectives for Land Use (protecting the resources of the county) as well as for Climate Change and Energy. Where solar does feature, it is primarily in relation to retrofit to buildings or incorporation into building design.
- The CLP sets out policies for Renewable Energy as well as the protection of landscapes. The criteria to be met for a renewable scheme to be acceptable are clear, including considerations of scale, impacts on landscape character, visual amenity amongst other issues. What is also clear is that meeting these criteria would be impossible for a scheme at the scale of GBEP.

Overall

Within the ES, having followed its own carefully crafted methodology, the Applicant concludes that the scheme will have only minor adverse or beneficial effects, and completely fails to appreciate the significant impact development at this scale – particularly in combination with the other NSIP scale solar developments within the same immediate area.

It is clear that the ES fails to take a sufficiently holistic view in almost every respect, and it would seem to be fundamentally incredulous for development at this scale to have minor consequential impacts.

GBEP is inconsistent with local plans and ambitions for the future development of the region.

1 Methodology – Study Area and Geographical Range Considered

Chapter 12 of The Gate Burton Energy Park Environmental Statement (GBES12) considers Socio-Economics and Land Use. A significant part of the document is dedicated to describing the methodology by which assessments will be carried out, and how various dimensions will be evaluated using a qualitative methodology.

In the first instance, this methodology defines the Study Area for the purposes of establishing baseline conditions as being West Lindsey and Bassetlaw. This includes elements such as population, deprivation, employment and economic activity.

In selecting such a broad area, the Applicant was able to conclude that, in most respects, the study area is broadly similar to the East Midlands and, or England as a whole, such as in relation to education, economic activity, unemployment.

This approach brushes over the very specific circumstances of the local area, in particular the socio-economic difficulties of the nearest town, Gainsborough, some 3 miles from the proposed GBEP. The Applicant refers to neighbouring villages, Gate Burton, Knaith, Marton, Willingham by Stow and Kexby, up to 1.8km away.

Gainsborough is, however, by far the largest population centre in a 10mile radius of the proposed development, and is not considered in the Environmental Statement, therefore the Study Area for the assessment is insufficient.

In addition, when considering the geographical range of different impacts, the Applicant has clearly made selections of range as a basis for the development that provide a similarly partial approach. For Employment and GVA, a range of 60 minutes has been selected, which would have a similar effect to the broad selection of West Lindsey and Bassetlaw as scope for the Study Area, in that it would fail to describe the impact on the areas closest to the development.

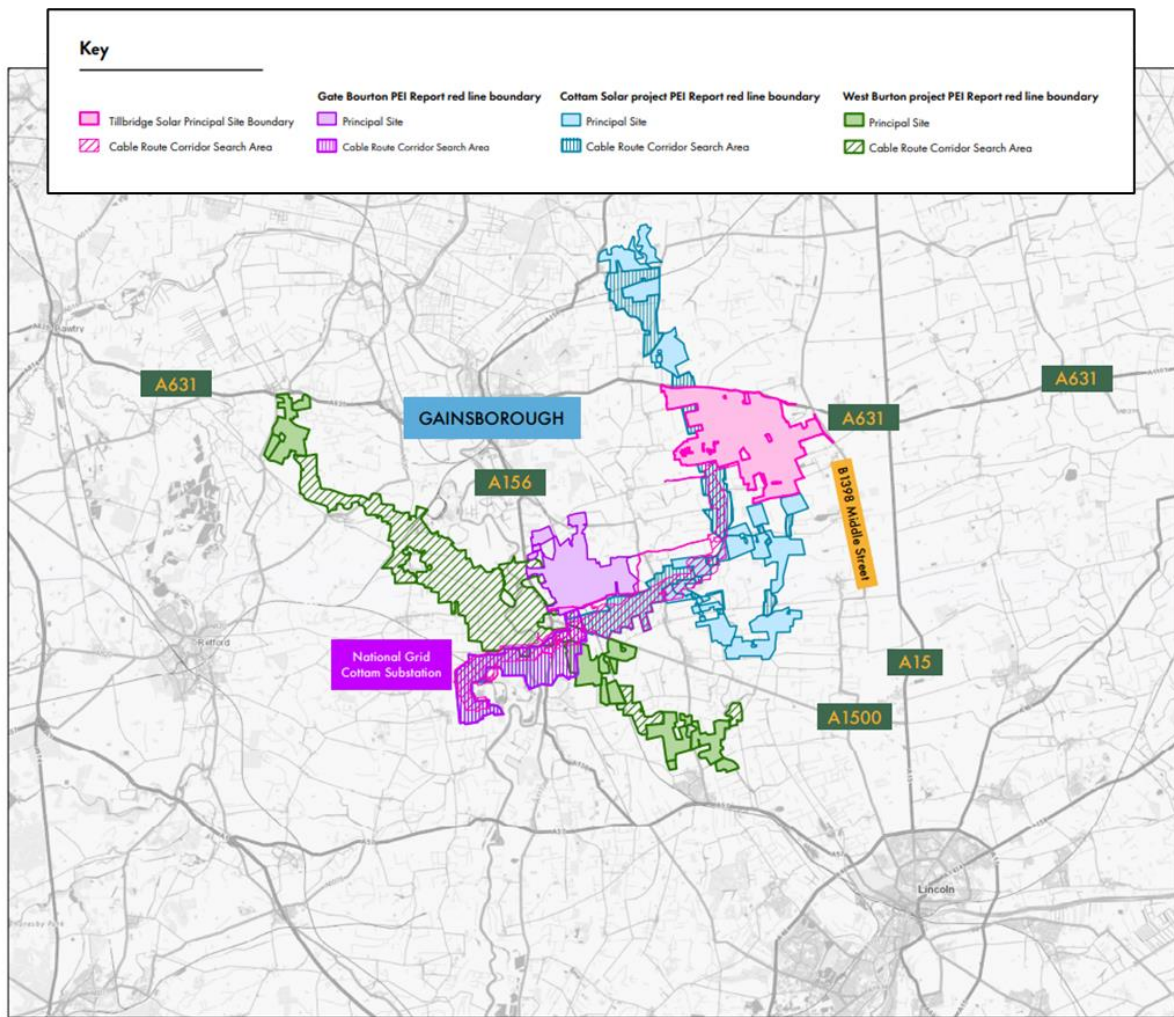
By contrast, other impacts have been selected by the Applicant according to a much more restricted range (see table on next page) – where this clearly suits the Applicant. For instance, the impact on Residential Properties is limited to 500m from the development, which serves to reduce the apparent number of properties considered to be impacted by the scheme. Many of the villages between Lincoln and Gainsborough are very small, and, at its broadest, the GBEP is over 3.5km wide and would become a dominant feature of the region, so limiting the range of impact to 500m, a fraction of the size of GBEP, does not properly consider the concentrated area due to be affected large scale solar development.

In practice, it will be difficult to consider the impact of solar development at the scale of GBEP, particularly as it is one of 4 similar scale NSIP solar developments within the same region, that will surround villages and fundamentally change the character of a wide area between Lincoln and Gainsborough. (See combined diagram on next page, from Tillbridge Solar).

In this way, within the Environmental Statement, the Applicant has, through careful selection of the Study Area and ranges of impact, sought to create an impression of limited impacts of the scheme on the area.

The approach is used to cynically create a veneer of professional objectivity, with which to mislead the reader, and should render the fundamental basis of the ES to be inadequate.

Extract from ES Table 12.1 Geographical Area of Impact ranges for different Impacts.	
Impact	Range
Employment	60 minutes
GVA	60 minutes
PRoW	500m
Agriculture / Soils	Site
Amenities / Residential Properties	500m
Amenities / Business Premises	500m
Amenities / Community Facilities	2km
Development Land	500m



2 Deprivation

Considering GVA per head, the Applicant comments that figures are “slightly lower in West Lindsey”. The Applicant goes on to quote the GVA figure for West Lindsey as £15,558, which is only 70% of the figure quoted for the East Midlands of £21845 and 55% of the figure for England given as £28096. It is clear that such differences are material, rather than slight.

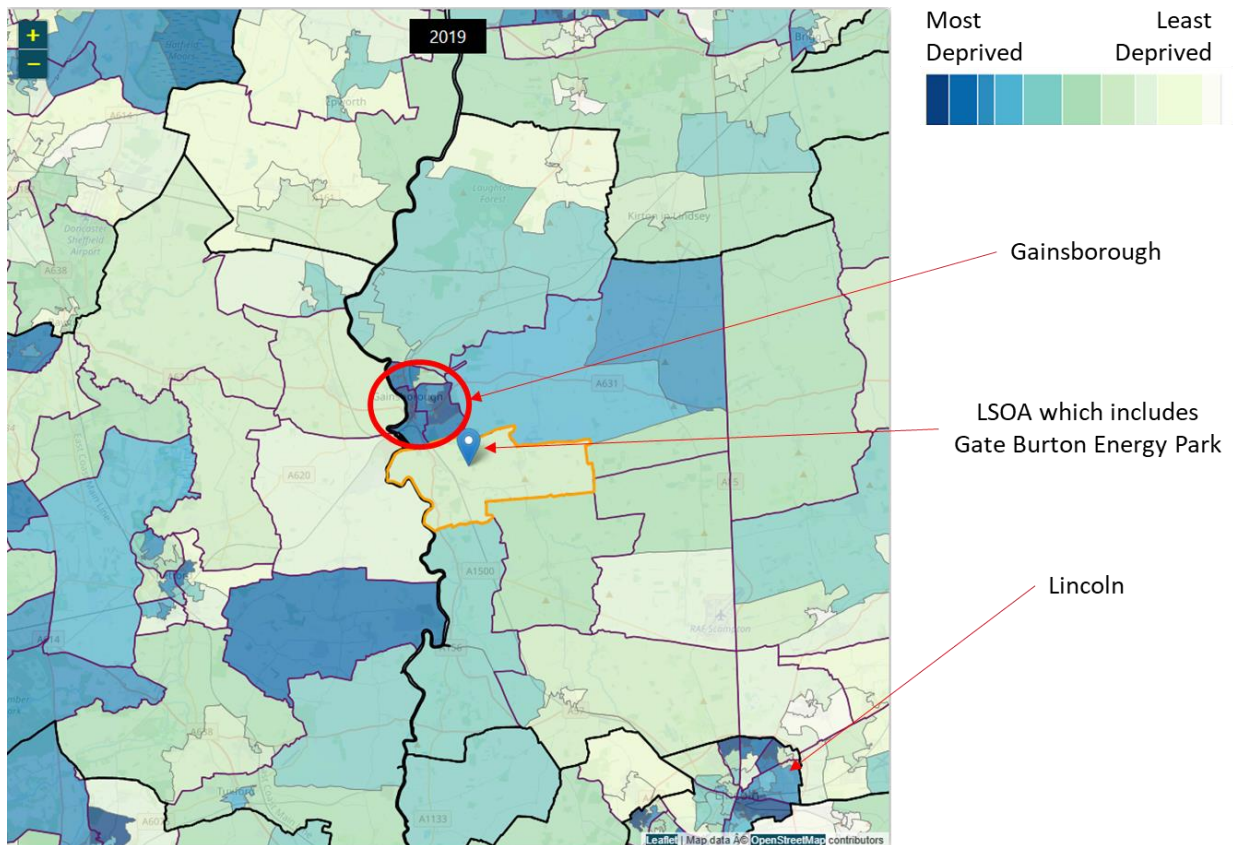
Regarding deprivation, the Applicant refers to the 2019 Indices of Multiple Deprivation (IMD), and the Local Authority District areas, West Lindsey and Bassetlaw being 146th and 108th most deprived areas in England, respectively, of 317 districts. The Applicant uses this to conclude economic activity rates, unemployment and education “generally align with averages” of East Midlands & England.

At the next level of resolution, the Lower Layer Super Output Areas (LSOA's), the Applicant observes 4 West Lindsey areas are within the top 10% most deprived areas in England. In this commentary, the Applicant fails to make any conclusion about deprivation in the region. Each LSOA has an average population of around 1500, so the cluster of 10 LSOA's in Gainsborough represent the largest population in the area.

The Applicant does not make clear that all 4 of these areas are in Gainsborough, which is in the cluster of LSOA's immediately north of the proposed GBEP. One of these areas is ranked 24th most deprived areas of the 32,844 LSOA's in England. In addition, although 4 are within the 10% most deprived areas, two more of the 10 Gainsborough LSOA's are only just outside this, within the 11th percentile. The Lincolnshire Industrial Strategy states that Gainsborough has low levels of employment (lowest 4% in England) and living standards (lowest 2% in England).

Index of Multiple Deprivation (IMD), for Gainsborough area, from IoD 2019.					
Gainsborough LSOA's	Rank 2015	Rank 2019	Percentile most deprived	Deprivation since 2015	Population
West Lindsey 004E	149	24	0.07%	Worsened	1402
West Lindsey 004F	2157	1333	4.06%	Worsened	2039
West Lindsey 006A	2186	1547	4.71%	Worsened	1678
West Lindsey 006B	3507	2690	8.19%	Worsened	1976
West Lindsey 004A	4420	3312	10.08%	Worsened	1815
West Lindsey 006C	2936	3554	10.82%	Improved	1918
West Lindsey 004D	5438	4603	14.01%	Worsened	1858
West Lindsey 004C	8275	5248	15.98%	Worsened	1696
West Lindsey 004B	10507	5030	15.31%	Worsened	1921
West Lindsey 006D	10264	8901	27.10%	Worsened	2251

The main population area in the immediate vicinity of GBEP faces serious deprivation challenges, as evidenced by its standing in the IMD rankings, and its general trend towards worsening deprivation from 2015 to 2019. (See table above, with data from The English Indices of Deprivation 2019 (IoD2019), Ministry of Housing, Communities and Local Government).



The IMD (annotated screenshot above) covers several dimensions of deprivation, including Income, Employment, Education Skills & Training, Health & Disability, Crime, Housing, Living Environment, Income affecting children, Income affecting older people. Of these dimensions, the only dimension that is “favourable” to Gainsborough measures the financial accessibility of housing – which is largely because in all other respects the indicators rank Gainsborough as being significantly deprived.

It is clear, therefore that the closest town immediately associated with, and most directly impacted by GBEP development is significantly deprived in terms of income, employment, and education, which is in direct contradiction to the claims made in the ES.

To carry out any sort of socio-economic review of the area around the GBEP and not acknowledge or address the deprivation issues of the main population centre is either misleading, partial, or superficial, and should further serve to render the assessment inadequate.

3 Employment

As has been described above, the Applicant has used a travel time of 60 minutes as a reference area as the basis for assessing employment, referencing a CIPD report from 2107.

In conducting its assessment, the Applicant applies the methodology sourced from the Homes & Communities Agency Additionality Guide, using technical factors such as leakage, multipliers and displacement to calculate the net employment during the operation of the scheme.

By contrast, the Applicant estimates that 1.5 jobs would be lost because of ceasing agricultural activities on the site, but there are no details as to how this has been determined. According to Agricultural Facts: East Midlands Region (DEFRA), an average sized farm would be 2.8 people, with a size of 101 Ha. The GBEP is some 684Ha, and therefore displaces a much larger area than an average sized farm in the region, therefore the number of jobs lost appears to be significantly underestimated, perhaps by a factor of 10 or more. There is also no definition of the types of role that are lost, the level of skills they require or the financial contribution they may make. There is also no consideration of the variation in the number of roles over the year, or the multiplier effects from associated services, as has been considered for new roles.

Equally, there are no details about the nature of the new roles, particularly during the operational phase, other than the indication of “leakage”, i.e. the extent to which employment benefits leak from outside the area being considered. The figure of 43% is used by the Applicant, which indicates that the remaining 57% of employment will be from the very broad West Lindsey and Bassetlaw region. There is no assessment of what benefit maybe felt more locally.

It is likely that there will be a spread of roles, ranging from security and grounds maintenance, through to technical specialist roles and financial roles overseeing the management and settlement of the scheme. It would be reasonable to assume that the rates of pay will start at the lower end, with security and grounds maintenance, and therefore these roles are most likely to be sourced locally – as it is less feasible for people on low pay to travel the 60 minutes each way, as has been assumed in the ES. There is insufficient detail within the ES to make an assessment, but such roles are unlikely to sustain families or provide rewarding jobs with potential for progression, growth, and development.

Roles that demand specialist engineering and financial skills may not need to be full time in the on the project and given the deprivation rates regarding skills and education in the region, these roles are therefore more likely to be those subject to “leakage”.

By contrast, within the region, Farming is very much considered a way of life and a rewarding, although challenging, vocation, that has sustained families for generations. The ES does not consider the weighted impact of the type of jobs lost and gained by the creation of the development. The ES treats all roles the same and is deficient in this regard.

The ES concludes that potential impacts on employment are a marginal increase in employment that is not expected to be significant. This assessment has potentially failed to adequately assess the roles lost. In addition, given the leakage consideration, the scheme is far more likely to provide lower skilled, lower paid jobs more locally, than the higher skilled roles, and at the cost of losing rewarding jobs that provide a livelihood in farming. There is little or no community benefit through employment from the development, in an area that is in desperate need of jobs and prospects. The loss of farming livelihoods therefore can only be seen as an erosion of opportunity.

4 Land Use

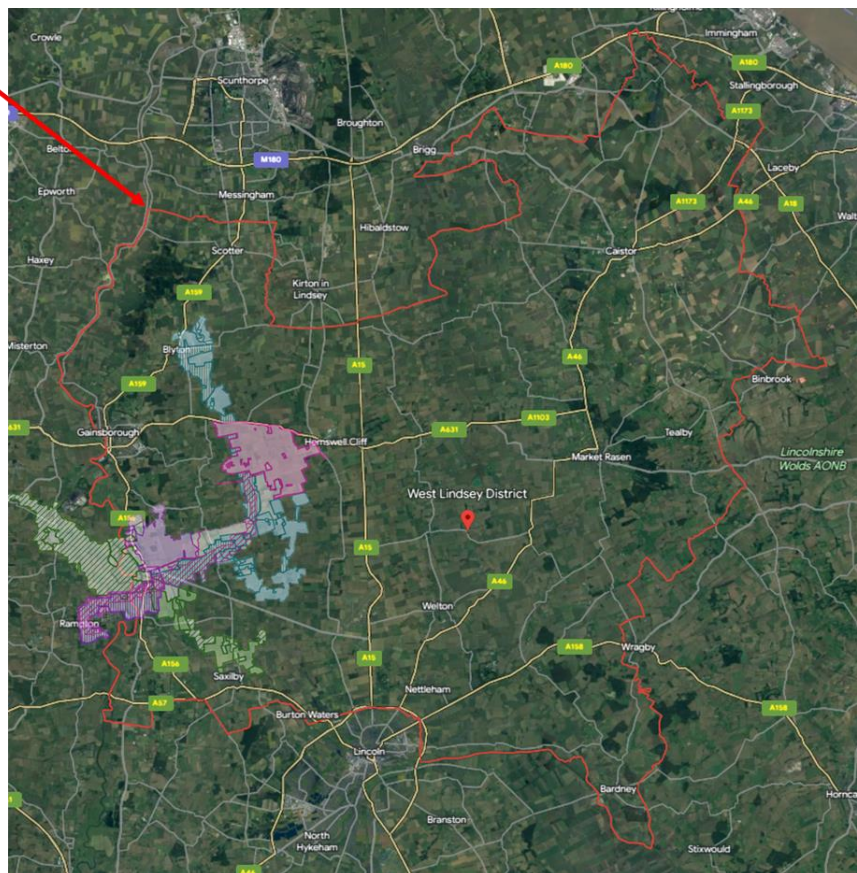
The land use assessment by the Applicant tends to focus on the amount of agricultural land affected and Agricultural Land Classifications (ALC) of the land, making the argument that only a small proportion of agricultural land will be used, on a temporary basis (although an operational life of 60 years can hardly be considered to be temporary), and only a small fraction of that will be considered Best and Most Versatile (BMV).

The Applicant describes the West Lindsey area as having 106,474Ha of farmland, and that only 0.8% of the farmland in the region will be used by GBEP. Again, by making the comparison to a wide regional area, the ES does not consider the concentrated impact of development in the immediate area of the development. West Lindsey covers a huge area, stretching north almost to Scunthorpe, and east almost to the coast, most of which is agricultural land. From a visual approximation, the southwest corner of West Lindsey, from Gainsborough to Hemswell Cliff to Lincoln is approximately 20% of the region. Assuming this as a proportion of farmland for West Lindsey overall, this area would have around 21,295Ha. With 4 NSIP solar schemes in this concentrated area, covering almost 4400Ha with solar panels, this will change the impact from 0.8% as reported by the ES, to 20.6% of the farmland in the area – before any future solar developments are considered. This represents a significantly disproportionate effect on a small area of the county.

Map from Google Earth Showing West Lindsey District Boundary (red outline)

Gate Burton Energy Park, Cottam, West Burton and Tillbridge schemes superimposed on same scale

Scale – 15km



More significantly, the treatment by the ES omits any consideration of efficiency of land use, nor does the ES consider the additional demands on agricultural land for planting trees, establishing peatlands and growing energy crops for biofuels, as identified by the UK Climate Change Committee in its 6th Carbon Budget.

By omitting such important considerations, the sensitivity impacts of loss of land are understated. In addition, by bundling land grades 3b, 4 and 5 as having “very low” impact, this oversimplifies the classification, leaving no room to consider the separate impacts of loss of 3b land in the face of these other significant land use challenges.

Apart from understating the local impact of the scheme, in these important regards, the ES regarding Land Use is deficient and inadequate.

5 Consideration of Local Plans

A significant amount of work has been carried out in the region to develop plans for the future of the region, notably the Central Lincolnshire Local Plan (CLLP) (April 2023) and the Local Industrial Strategy (LIS) (2021). Both documents are extremely conscious of climate change and actions to decarbonise the economy, however neither makes any proposals for the development of large-scale ground mounted solar as a contribution to the development of the region.

The LIS includes 6 main dimensions, Agrifood, Energy, Ports and Logistics, Defence, Health and Care, as well as Visitor Economy. Large scale ground mounted solar development has the potential to impact the Agrifood, Energy and Visitor dimensions in particular.

In terms of Agrifood, the ambition is to “become the UK’s Food Valley and contribute to the UK’s reliance on food imports.” The sector contributes 18% of Lincolnshire’s GVA (in comparison with 3% nationally), therefore this is an important sector that the region can ill afford to neglect.

With regard to Energy, the focus of the region is on supporting the development of offshore wind as well as carbon capture and storage to support decarbonisation of gas infrastructure. Solar is considered briefly in terms of localised generation along with anaerobic digestion. Solar development at the scale of GBEP or any other NSIP scheme is not envisaged.

Regarding the Visitor Economy, the aspiration is to “develop the tourism sector levelling up and supporting some of the more deprived parts of the region by providing higher-quality and more reliable employment for workers”.

Considering these three together, it would be logical to conclude that the industrialisation of an area of Lincolnshire through extensive deployment of large-scale ground mounted solar would serve to undermine the Agrifood ambitions of the LIS as well as the appeal for visitors and the ambition to improve areas of deprivation through the stimulation of the Visitor Economy.

The CLLP considers the growth and regeneration of the region over 20 years from 2023. Within the CLLP, there are a number of objectives, including for Land Use (protecting the resources of the county) as well as for Climate Change and Energy. During the evolution period of the plan, developers have been working on their proposals and consulting on large-scale ground mounted solar projects. It is notable that such projects do not feature explicitly within the plan. Where solar does feature, it is primarily in relation to retrofit to buildings or incorporation into building design.

Within Policy S14 Renewable Energy, the Council sets out the criteria to be met for a renewable scheme to be acceptable, including considerations of scale, impacts on landscape character, visual amenity amongst other issues. It is clear that meeting these criteria would be impossible for a scheme at the scale of GBEP, and while the Policy declares a presumption in favour of ground-based photovoltaics, given this policy governs local planning decisions, it would be used to determine schemes up to 50MW, i.e. a fraction of the size proposed by GBEP.

Local Plans have identified locally designated Areas of Great Landscape Value (AGLV) which are considered to be of high landscape value to the local areas with strong distinctive characteristics which make them particularly sensitive to development. Known locally as the “Cliff Road”, the B1398 runs north from Lincoln, providing stunning views west across the Trent plain. This is included as an AGLV. Similarly, the A1500, Tillbridge Lane, from the junction with the B1398 provides tremendous

views over the plain. It is clear that these views would be significantly altered by the placement of extensive ground-mounted solar developments, such as GBEP.

Policy S62 covers Area of Outstanding Natural Beauty and Areas of Great Landscape Value, stating that “A high level of protection will be afforded to AGLV reflecting their locally important high scenic quality, special landscape features and sensitivity.” Development is therefore required to “conserve and enhance the qualities and distinctiveness of locally important landscapes”, amongst other requirements covering wildlife, character and landscape quality and minimising adverse visual impacts. It is clear that wholesale development of large scale ground mounted solar can not meet these clear requirements.

It is clear, therefore that GBEP is inconsistent with local plans and ambitions for the future development of the region.

References:

Gate Burton Energy Park, Environmental Statement, Chapter 12

[*Gate Burton ES Chapter 12 \(gate-burton-consultation.s3.eu-west-2.amazonaws.com\)](https://gate-burton-consultation.s3.eu-west-2.amazonaws.com)

Tillbridge Solar Consultation Leaflet 2023:

[Tillbridge Solar Consultation Leaflet.pdf](#)

The English Indices of Deprivation 2019 (IoD2019), Ministry of Housing, Communities and Local Government)

[Indices of Deprivation 2015 and 2019 \(communities.gov.uk\)](https://communities.gov.uk)

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Homes and Communities Agency, Additionality Guide 2014

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UK Climate Change Committee, 6th Carbon Budget.

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[GLLEP Local Industrial Strategy \(2021\).pdf \(greaterlincolnshirelep.co.uk\)](https://greaterlincolnshirelep.co.uk)