The countryside charity
Oxfordshire

Campaigning to protect our rural county

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By email:
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Dear Sir/Madam,

**RE: CPRE Oxfordshire response to Botley West Phase 2 Consultation, February 2024**

## Overview

CPRE Oxfordshire remains opposed in principle to the Botley West Solar Farm proposal as this is an entirely inappropriate location for solar energy generation in terms of its impact on the Green Belt, productive farmland, the countryside and ecology, and local communities.

The Pathways to Zero Carbon Oxfordshire report, produced by Oxford University, says we need the equivalent of 1% of Oxfordshire's land surface for solar. Since Oxfordshire's domestic and commercial roofs provide three times as much space as that, CPRE Oxfordshire believes this is where the County's future solar power should be accommodated, and the priority should be investing in the appropriate infrastructure to deliver this.

We once again urge both PVDP and Blenheim Estate to reconsider their approach and instead work with both local authorities and local communities to develop a more appropriate and sustainable renewable energy strategy for the area.

## Inadequacy of the consultation

We note that despite specific requests from CPRE Oxfordshire and the Stop Botley West campaign group to avoid the Christmas period, this consultation was launched on 30 November and ran over exactly that timeframe.

We also note that despite providing many thousands of pages of material, much of it inconsequential, there are a significant number of key areas where information is yet to be provided.

Just as examples:

- Failure to set out the Applicant's grounds for establishing the 'very special circumstances' required to justify building on the Green Belt
- Failure to provide a Biodiversity Net Gain Assessment

- Failure to provide an Environmental Management Plan
- Failure to provide a Construction Traffic Management Plan
- Failure to provide an impact assessment on the Blenheim World Heritage Site
- A very limited and inadequate selection of photomontages, including omission of many of the most significant view-points.

Although much of this information is promised at a later stage, CPRE Oxfordshire does not believe that the public currently has enough detail to engage properly in this Phase 2 consultation. We therefore request that the consultation is re-run when the appropriate information is available and that submission of the proposal to the Planning Inspectorate is delayed until after this has taken place.

**Green Belt**

Over 76% of the proposed land take for Botley West would be in the Oxford Green Belt. This would represent 3.1% of the Oxford Green Belt, marking almost certainly the biggest ever single loss of Green Belt land within the County. It would also cover over a 1/4 of the Green Belt within West Oxfordshire (451Ha out of total 1,610Ha).

Whilst the need to demonstrate very special circumstances to justify the development in the Green Belt is acknowledged, the case for this is not yet provided (PEIR 5.4.1.22). At this point, we find it hard to conceive what justification could exist for such a significant loss.

The Green Belt is valued for its permanence and openness. This is not just about the visual impact but also the landscape resource, in line with this recent Appeal judgement:

> *"…Green Belt is a spatial planning designation and not a landscape policy. That said, it is clear that the openness of the Green Belt has a spatial as well as a visual aspect, so assessment of openness is not just a matter of comparing the current nature of the land – in this case undeveloped pasture - with the proposal."*[1]

According to the same judgement, arguments about the 'temporary' nature of the development should also carry little weight:

> *"Although the proposal is for a limited period, the length of that period is very substantial. But even more importantly, the fundamental aim of national Green Belt policy is to prevent urban sprawl by keeping land permanently open. With that well established policy background it cannot be right that the fact that approval is sought for a 40-year period is accorded more than very limited weight in favour of the scheme in relation to the loss of openness. To do so would go against the concept of permanence."*

[1] Appeal Decision 3317818 - https://www.shropshire.gov.uk/media/26968/cd103-appeal-ref-app-a1910-w-23-3317818-little-heath-lane-little-heath-berkhamstead.pdf

**Inefficient use of land/over-sizing**

We understand that PVDP is looking at 1,307MW at peak output, compared to National Grid maximum capacity of 840MW.

We appreciate that this is to ensure generation of as much power as possible across less efficient months, even if 'wasting' power in the summer, and that such oversizing is standard in the industry perhaps to a factor of 30-35%.

However, here the over-sizing is 60%. We ask that PVDP provide justification for this exceptionally high level of oversizing along with clarification of how much land this impacts. If the over-provision was brought down to the more normal 30%, how many hectares of countryside could remain untouched by this development?

**Need, National Planning Policy & Alternatives (Preliminary Environmental Information Report - PEIR Chap 5)**

We reject entirely the justification set out by PVDP in 5.2.1.4. Many of the constraints subscribed to rooftop renewables apply just as much to the Botley West scheme eg impact on conservation areas, competing land uses. In addition, large-scale solar farms create energy away from the point of use, with subsequent loss of energy through distribution.

The Pathways to Zero Carbon Oxfordshire report, produced by Oxford University, says we need the equivalent of 1% of Oxfordshire's land surface for solar. Since Oxfordshire's domestic and commercial roofs provide three times as much space as that, CPRE Oxfordshire believes this is where the County's future solar power needs should be accommodated. The priority should be investing in the appropriate infrastructure to deliver this, including creation of a distributed network that supports community-based solar.

In terms of consideration of alternatives, the options presented appear to rest between 'do nothing' or 'build the biggest solar farm you can imagine'. There is no reasonable consideration given to other alternatives, such as a network of rooftop/brownfield based smaller sites established by engaging with local communities or, for example, to exploration of the former power station site at Didcot that presumably has good transmission capacity. We have been told verbally by PVDP representatives that this latter site was explored and ruled out, but no explanation or justification is provided here.

*Can it really be true that there are no feasible alternatives to building a 1,400 hectare solar farm on productive agricultural land, in the Green Belt, between a world renowned historic city and a World Heritage site, in an area that would directly impact the amenity of many thousands of residents? We are inclined to think that, in any reasonable judgement, this is perhaps one of the last places in the world that one would select!*

**Historic Environment (PEIR Chap 7)**

This preliminary report fails to provide a good initial outline, even at a generic level, of the nature and scale of impacts and how they would be avoided, prevented or reduced and, if possible, offset, both in themselves and with regard to heritage and interactions with other factors, including the settings of heritage assets.

For example, the sections dealing with the 'Magnitude of Impact' make no reference at all to the total ground disturbance or its distribution within different components. The statement that '*It is anticipated that the footprint of activities associated with decommissioning will not exceed the footprint required for construction'* is not credible unless all footings were to be left in the ground or could be extracted with no additional disturbance: neither is remotely likely.

The full significance of archaeological sites that would be affected has yet to be established. Three scheduled monuments are adjacent to or surrounded by the development including cable runs which would be deep enough to disturb archaeology. The immediate surroundings (ie 'setting') would be physically disturbed, potentially destroying buried remains highly relevant to their significance, and prior archaeological investigation would clearly be warranted.

Information on the effects on the Blenheim World Heritage Site (which includes a landmark monument visible from well outside the WHS and therefore has a wide setting) is not yet provided.

There are four Conservation Areas (CAs) that are immediately adjacent to the proposed locations of solar panel arrays, and in two cases the development impinges on the CA. Conservation Areas seek to maintain the historic character of rural villages that have been set amongst fields throughout their existence. Where they have been extended by more recent suburban development the areas where CAs are still abutted by fields is where their setting is best preserved. This applies in several cases and the loss of the remaining open farmland to industrial development would be a major change to their setting and how their historic role relates to their surroundings.

In order to establish the full 'likely significant effects' in terms of setting issues and identify suitable mitigation measures to avoid, prevent or offset any harm it will be necessary to establish the future use of listed farmhouses and associated historic farm buildings and their future viability.

The coverage of Historic Landscape Character issues in the report only looks at the importance of the main Historic Landscape types affected in terms of age and rarity within the county, not the nature and scale of the impact. Thus, there is nothing about the nature of the impact being a fundamental change of historic landscape character from agriculture (since at least the Middle Ages and in some cases demonstrably Roman and earlier) to industrial energy generation (in the Oxon HLC terminology, 'Civic Amenity Utilities').

Contrary to the methodology proposed there is no discussion of historical importance of different Historic Landscape character types, only their relative rarity which is not the same.

**Cumulative Impacts (PEIR Chap 7 – Historic landscape)**

The approach here is flawed in that the only reference to the scale of impact is the bizarre suggestion that the numerous other solar and housing developments considered as cumulative effects would not noticeably add to the impact of the proposal because it is so large!

This claim is not supported by any figures for the total areas concerned, nor their locality both of which are key to the overall cumulative effect. The map of cumulative projects (which is very limited in spatial scope to the immediate surroundings of the proposed development) shows that a key effect of the cumulation of solar and other (mainly housing) developments would be to create an urbanised swathe of countryside from Wootton in the north east almost to Cumnor in the south west. But this fails to consider further cumulative effects – for example the major developments proposed around Didcot, Harwell and Abingdon, including the proposed Abingdon Reservoir; or further east around Bicester, whose proximity all fall well within the overall length of this development.

**Cumulative Impacts (PEIR Chap 8 - Landscape & Visual Resources)**

As well as over 2 million solar panels, the project proposes 156 power converter stations each up to 12m long and 3m high, six high voltage transformers each 18m long and 6 m high, and over 100km of 2m high security fencing.

CPRE Oxfordshire does not consider it possible to mitigate to any substantial degree the dramatic landscape and visual impacts that would occur as a result of a project of this scale. It would effectively transform a vast swathe of rural Oxfordshire into an industrial landscape, on a scale never previously seen.

The cumulative effects assessment here either fails to mention or does not appear to take due account of:

a) The 19,000 houses currently coming forward in the Oxford Green Belt through Local Plan allocations – see graphic/map: https://www.cpreoxon.org.uk/care/oxford-green-belt/ (plus other relevant allocations such as the Salt Cross Garden Village)

b) The number of ground-mounted solar farms already allocated on Oxfordshire land, totalling over 1,000 hectares – see: https://www.google.com/maps/d/viewer?mid=1KnG6KFyRE-i_oI8bZytYY43EKZ0TvGmW&ll=51.816848538843196%2C-1.2894128699999996&z=9

**Ecology (PEIR Chap 9)**

We note that there is still a considerable amount of information not yet provided that is relevant to this issue, including a Biodiversity Net Gain statement, an environmental management plan, and specific surveys eg on owls. We would not expect the project to be submitted to the Planning Inspectorate prior to a pre-application consultation where this information is publicly available.

What is clear is that the land in question provides a rich mosaic of habitat, including farmland, hedges and woodland (incl. Ancient woodland) and rivers. As one would expect, it is therefore rich in biodiversity. The wildlife surveys of reptiles, wintering birds and badgers indicate that actually the land affected is of considerable importance in the wildlife it supports. Badger activity is particularly concentrated in the central section. The bird survey indicates the land is of importance to many red-listed and amber listed species, such as yellow hammers and linnets. The bat survey shows very high numbers of bats especially over the land north of Cassington.

Our concerns include (but are not limited to):

- How comparisons of benefits will be made – will Biodiversity Net Gain benefits be assessed on the basis of how the agricultural land has been previously managed, or against how it *could* be managed (eg regenerative farming, introduction of Environmental Land Management Schemes, ELMS)
- The ecological isolation that would be caused by over 100km of fencing. We note that Thames Valley Police are now calling for high security fencing at all large-scale solar installations to help combat rural crime.
- Buffers and connectivity – in particular, the buffer zones for Ancient woodlands still look to be inadequate, and more thought should be given to connectivity between these areas.
- Impact of cabling route on the extremely rare ancient wildflower floodplain meadows around Swinford
- The ability to deliver an extensive wildflower area under the panels. What commitments will be made in terms of avoid of use of herbicides?
- The claims re sheep and grazing – our information from industry insiders is that despite all the promises, the use of sheep rarely lasts more than one season, as they are curious and disruptive (eating cables, escaping etc).

Our view is that the scientific evidence on the biodiversity benefits of large-scale solar farms is still patchy and contradictory. Notwithstanding CPRE Oxfordshire's overall opposition to Botley West, if it were to receive consent, we would consider it vital that a full-scale, robust and <u>independent</u> scientific survey were put in place so that lessons could be fully learnt and appreciated.

**Hydrology & Flood Risk (PEIR Chap 10)**

It is clear that there is the potential for increased flood peaks, erosion and degradation of water courses following the installation works and during the operational phase of this project. Given the sensitivity of the downstream villages (and indeed Oxford City) to flooding this would clearly be unacceptable. From the limited evidence presented (based on a single study) it seems possible that these impacts could be mitigated (it is even possible, but not proven, the flood response could be improved). We do note that within site filter strip SUDS and Swales are proposed. But to ensure there are no adverse effects we recommend:

1. Strict protocols are developed, and monitored, during, and after, the installation phase, particularly with regard to the piling, the use of heavy machinery on site and during the installation of the connecting cabling.
2. A more comprehensive and critical literature search is undertaken on the impact of solar farms on the local hydrology.
3. The proposed filter strips and swales are installed in a timely manner.
4. A comprehensive land and water management and monitoring plan for the operational phase is agreed and implemented.

**Climate Change (PEIR – Chap 14)**

Based on the best-case scenario presented, recouping the carbon costs of this project will take at least 10 years, but more realistically over 13 years.

In fact, using the 'long run marginal' - assuming the CO2 intensity of electricity generation decreases over time, following Government policy – construction 'cost' is *never* recouped (although we accept that this is a Catch 22 with investment needed in renewables to ensure CO2 intensity decreases).

The question which clearly is not addressed here is a comparison with the construction cost of other low carbon electricity sources, like wind or nuclear. *Is this really the most emission efficient technology for achieving low carbon electricity?*

The World Bank states that in fact the UK is the 239th worst location out of 240 countries for the potential output of solar power.[2]

Notwithstanding the above comments, if the project were to go ahead we would expect to see a robust lifetime maintenance plan to ensure maximum long-term efficiency of the panels, without being subject to investor pressure if the predicted returns do not materialise.

[2] https://documents.worldbank.org/en/publication/documents-reports/documentdetail/466331592817725242/global-photovoltaic-power-potential-by-country

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**Best & Most Versatile Land (PEIR Chap 17 Agricultural Land)**

Nearly 40% of the land in question is identified by the PEIR as 'Best & Most Versatile' (PEIR 17.5.2.2) ie Grades 1 – 3a, which Government policy seeks to protect from "significant, inappropriate or unsustainable development proposals"[3]. We note that the UK is already the world's third largest importer of food, behind only China and Japan[4], relying on imports to provide almost half of our food[5]. The Climate Change Committee has not surprisingly found that climate change will 'make it harder for the government to ensure the resilience of the UK's food supply'[6].

Although precise information on how this figure breaks down across the three site sections has not been provided, the maps (p5-7 Chap 17 Agricultural Land & PRoW figures) make it clear that the northern section and the western area of the central section have a particularly high concentration of BMV.

Whilst CPRE Oxfordshire would maintain that none of the land in question should be ceded for this development, the BMV land (especially where it is also part of the Green Belt) should be prioritised for protection and the landtake reduced accordingly.

**Public Rights of Way (PEIR Chap 17)**

CPRE Oxfordshire supports the stated intention to retain all the public rights of way affected and to improve their connectivity notably by extending the cul-de-sac Cassington FP6 to reprovide a lost footpath link between Cassington and Church Hanborough and by providing new cycle paths between Bladon and Begbroke, along Lower Road, Church Hanborough and between Sansom's and Hordley and a number of other permissive paths.

However, this cannot disguise the fact that most of the public rights of way concerned would be æsthetically ruined by being encased between high fences and solar arrays totally alien to the Oxfordshire countryside. However much care has therefore been taken to assuage the practical concerns of rights of way users, this overlooks *why* people use public rights of way – namely to enjoy the natural countryside and not simply to perform some physical ritual.

[3] https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land

[4] https://www.fao.org/3/cb9928en/cb9928en.pdf

[5] https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-introduction

[6] https://lordslibrary.parliament.uk/impact-of-climate-change-and-biodiversity-loss-on-food-security/#heading-4

**Cable routing across the Thames**

CPRE Oxfordshire strongly opposes any cabling route that would compromise the Long Mead Wildlife Site and other nearby SSSIs. This ancient floodplain wildflower meadow comprises some of the rarest habitat in the UK, 98% of which has been lost in the past 100 years. The remaining fragments now together comprise only 4sq miles in the UK.

**Overall land use & spatial strategy**

The damaging nature of this proposal highlights the urgent need for our Oxfordshire local authorities to work together to produce an overall land use framework for the county, including a spatial strategy for renewables that prioritises a brownfield first approach.

**CONCLUSION**

The landscape and visual impact of the Botley West solar farm would be enormous, completely transforming almost 1,400 hectares of countryside into an industrial area.

Development on this scale would have a radical impact on local ecology. Providing a few plots for growing local food would do little to replace the agricultural land which would be lost, much of which has been identified as 'Best and Most Versatile' land which should not be built on. Over three quarters of the land in question is also in the Oxford Green Belt, which is valued precisely because of its openness and permanence.

The Pathways to Zero Carbon Oxfordshire report, produced by Oxford University, says we need the equivalent of 1% of Oxfordshire's land surface for solar. Since Oxfordshire's domestic and commercial roofs provide three times as much space as that, CPRE Oxfordshire believes this is where the County's solar power should be accommodated - leaving the green fields unblighted, to grow food to feed our bodies and to provide landscape to feed our souls.