

## Comments on the Botley West Solar Farm Scoping Report

### Shipton-on Cherwell & Thrupp Parish Council

July 2023

#### Scope of Scoping

We were a little surprised that no reference is made to the UK Government Handbook for Scoping Projects available at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/296952/geho0411btrf-e-e.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/296952/geho0411btrf-e-e.pdf), especially with regard to the timing of the scoping - see p12 of the Handbook "It [scoping] should be carried out at a stage when **alternatives are still being considered** and mitigation measures can be incorporated into project designs.", which appears not to have been the case here. Also, some components (*feasible alternatives, list of stakeholders*) of the scoping process listed below (page 15) appear to be missing or given only brief treatment.

We recognise that a stakeholder consultation process has been undertaken - see Botley West Solar Farm Consultation Summary Report July 2023, but the credibility of this consultation process has been seriously undermined by the following website - <https://botleywestnimbys.com> - believed to be linked to the project proponents - seriously undermining the claim to consult meaningfully and treat all responses from the local community both seriously and respectfully.

It would have been useful, and clear best practice, if the scoping report had been more clearly organised along the widely accepted project impact mitigation hierarchy of Avoid, Minimise, Restore & Offset, especially with regard to community, landscape and wildlife impacts. This could be corrected in the full Environmental Impact Assessment and we recommend that the project proponent engages with the University of [Oxford Biodiversity Network](#) which has developed a Mitigation and Conservation Hierarchy to address University estate impacts through these actions:

1. Refrain – refrain from actions that damage biodiversity
2. Reduce – reduce the damage our remaining actions create
3. Restore – restore biodiversity that has been damaged
4. Renew – renew and enhance nature

#### Institutional Assessment

Although probably not an obligatory requirement for a scoping report, it would have been useful to have been provided with more information about the previous experience of RPS with environmental impact assessment (EIA) of large-scale solar power infrastructure - perusal of their website found only one example for just 25MWe compared with the 840MWe of Botley West Solar Farm (BWSF) – see <https://www.rpsgroup.com/projects/tuckey-solar-farm/>

In a similar manner, it would have been appreciated to see more information on the financial viability and funding stability of PVDP GmbH, especially in the light of recent media coverage - see <https://www.private-eye/issue-1599/in-the-back>.

## Strategic Environmental Assessment

The report contains information about this individual project, but provides little evidence on how the project fits into the broader government strategic policy response to the climate emergency, which our Parish Council has formally recognised. For example, large scale solar energy is not mentioned in the (former) Prime Minister's Ten Point Plan, as contained in the **Energy White Paper - Powering our Net Zero Future** - see

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/945899/201216\\_BEIS\\_EWP\\_Command\\_Paper\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf) and appears in the strategy document mostly in the form of household roof-top solar energy, which we support, even though England has, along with Ireland, the lowest solar energy potential in the world - see Figure 3.8 (Part 3) on page 31 of <https://documents1.worldbank.org/curated/en/466331592817725242/pdf/Global-Photovoltaic-Power-Potential-by-Country.pdf>.

The more recent UK Government policy document "**Powering Up Britain - The Net Zero Growth Plan**" (March 2023) states that "*We (UK Government) will establish a solar government/industry taskforce and we will publish a solar roadmap setting out a clear step by step deployment trajectory to achieve 70GW of solar by 2035*". We believe that such large-scale projects as Botley West Solar Farm should be assessed as part of a national roadmap, not precede it.

## Net Carbon Benefits

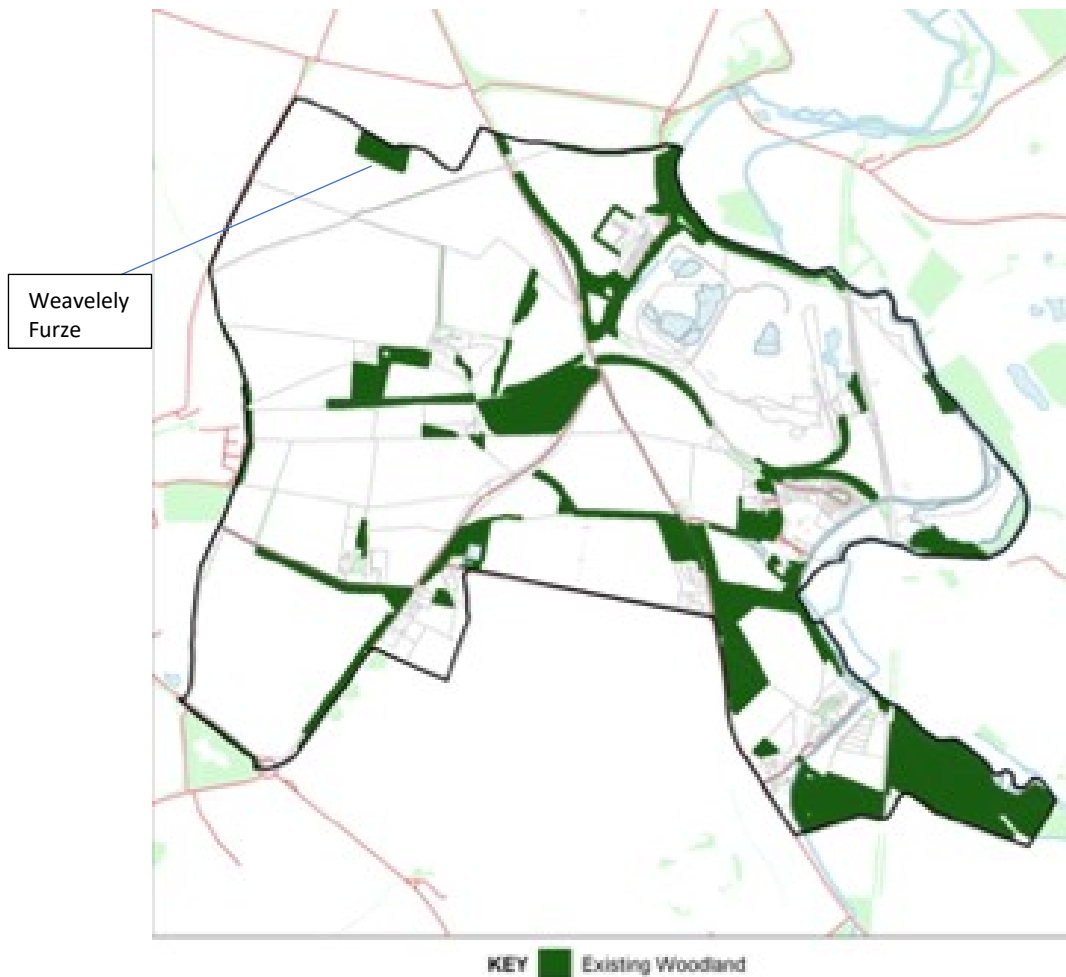
Solar panel product and power warranties usually run for 10-12 and 25 years respectively, with power warranty guaranteeing our performance of 80% at 25 years. The scoping report should require the EIA to provide more clarity on expected panel replacement and/or power drop-off in the second half miles me operational period. This could be included in an energy-return-on-energy-invested (EROEI) analysis to demonstrate how the project compares with other energy generation options.

Para.1.3.5 states that the solar farm will be operational for 42 years after which all infrastructure will be removed, as does para. 6.4.1, whereas Table 7.12 (page 88) states that "*retired infrastructure/equipment will **either be left in situ** or transported away from site in bulk*". Inconsistencies such as these undermine the credibility of the scoping report as project boundaries are not clearly defined.

## Local Community Impacts

Our main concerns about this project mainly revolve around loss of amenity value to the parish community due to the proximity of the 316ha. Northern site to the Shipton-on-Cherwell & Thrupp parish boundaries, especially to the mature woodland known as Weaveley Furze which is an important local biodiversity "hotspot", especially for fungi, which are not mentioned at all in the scoping reports, and is also an important nature recreational site for the parish. We would request that special attention is paid to this location in the EIA especially with regard to wildlife movement, light pollution, visual amenity and overall landscaping/proximity. Weaveley Furze is a marked component of the [UK Nature Recovery Map](#). We do not have access to the entire Nature Recovery map but recommend that this be included in the

landscape/biodiversity component of the EIA to assess potential overlap of proposed Nature Recovery areas with BWSF.



### Miscellaneous Comments

In places, the report reads more like an advocacy document, than a scoping report - see, for example, **Para 5.2.5**. This undermines the neutrality of the scoping consultant.

**Para 5.3.3** The Kyoto Protocol mentioned here is no longer operational and has been largely superseded by the 2016 Paris Agreement.

**Para 5.3.14** Carbon Capture Utilisation and Storage (CCU&S) cannot meet energy demand - maybe the reference is to Biomass Energy with Carbon Capture and Storage (BECCS)?

**Para 5.4.7** *"It is recognised that much of the Project is in the Green Belt. Very special circumstances will be set out to explain why the Applicant is siting the development in the Green Belt."*

The UK Government policy document “[Powering Up Britain - The Net Zero Growth Plan](#) (March 2023) states that: “Government seeks large-scale solar deployment across the UK, looking for development mainly on **brownfield, industrial and low/medium grade agricultural land**. The Government will therefore not be making changes to categories of agricultural land in ways that might constrain solar deployment.” We feel that the BWSF EIA should explicitly assess any alternative brownfield/industrial locations before using Green Belt land. **Para 5.4.5** indicates that “a high level site search was undertaken by PVDP” but no data are provided the support this statement. Also, no mention is made to potential clashes with the UK Government Environmental Land Management (ELM) policy - see <https://www.gov.uk/government/publications/environmental-land-management-update-how-government-will-pay-for-land-based-environment-and-climate-goods-and-services/environmental-land-management-elm-update-how-government-will-pay-for-land-based-environment-and-climate-goods-and-services>

**Para 6.1.1** Concern has been raised to the Parish Council by parishioners that invoking the “**Rochdale envelope**” should not be used to mask potential impacts at either the Scoping or full EIA stages.

**Para 6.2.17** See: Lambert, Q., Bischoff, A., Enea, M. & Gros, R. **Photovoltaic power stations: an opportunity to promote European semi-natural grasslands?** *Front. Environ. Sci.* **11**, 1137845 (2023); <https://www.frontiersin.org/articles/10.3389/fenvs.2023.1137845/full>

**Solar energy: managing biodiversity risks -**

<https://www.thebiodiversityconsultancy.com/fileadmin/uploads/tbc/Documents/Resources/Solar-energy-TBC-IBN-March-2020.pdf>

**Para 6.2.8** No explicit mention is made of the visual impact of the lighting and 200 CCTV cameras to be located along the fences and at the sub-station. This should be included in the visual amenity assessment, including privacy impacts for public rights of way, etc.

**Para 7.2.8** and **Para 7.2.9** We recommend that both summer and winter photography should be provided as visual evidence to support EIA and any proposed mitigation with regard to visual amenity.

**Para 7.3.8** We recommend the use of eDNA for Greater Crested Newt surveys; see: Biggs, J. et al. **Using eDNA to develop a national citizen science-based monitoring programme for the great crested newt (*Triturus cristatus*)**. *Biological Conservation* **183**, 19–28 (2015)

<https://onlinelibrary.wiley.com/doi/10.1002/ece3.1272>

Rees, H. C. et al. **The application of eDNA for monitoring of the Great Crested Newt in the UK**. *Ecology and Evolution* **4**, 4023–4032 (2014) <https://onlinelibrary.wiley.com/doi/10.1002/ece3.1272>

**Para 7.3.36** “Provision of new commuting routes for bats or new foraging habitat for birds, specific plots for skylark etc. **may** also be incorporated, based on the findings of the assessment as required”

We used the Conservation Evidence database to check the feasibility of the creation of new unlit [bat] commuting routes using planting and found 0 cases - see

<https://www.conservationevidence.com/actions/2034>

**Para 7.6.34** This part of the EIA should use the existing traffic baseline, but should also include the projected numbers for all other developments with traffic impacts (eg. Housing) as part of the cumulative impact on future traffic – and projected out for the next 40 years?

**Para 7.8.19** Should the EIA consider the potential impact of average temperature increases likely over the next 40 years? **The optimal temperature for solar panels is around 25°C (77°F)**. Solar panels perform best under moderate temperatures, as higher or lower temperatures can reduce efficiency. For every degree above 25°C, a solar panel's output can decrease by around 0.3% to 0.5%, affecting overall energy production.

Source: <https://blog.ecoflow.com/us/effects-of-temperature-on-solar-panel-efficiency/>

**Page 130:** Table 9.1: Summary of issues scoped in or out of the EIA.

See also Frischknecht, R. *et al.* (2020). **Life Cycle Inventories and Life Cycle Assessments of Photovoltaic Systems: Task 12: PV Sustainability.** <https://www.osti.gov/biblio/1561526/>