

# CPRE, The Countryside Charity, Oxfordshire

## Campaigning to Protect our Rural County

Mr James Kirkham,  
Cherwell District Council

14<sup>th</sup> July 2022

By email to [james.kirkham@cherwell-dc.gov.uk](mailto:james.kirkham@cherwell-dc.gov.uk)

### Re Noke Solar Farm application 22/01682/F

Dear Mr Kirkham,

CPRE considers that the scale of the damage this development would cause would overwhelm any benefit it might provide and that this application should therefore be refused.

From walking the site, it is obvious that it lies within a wide, low lying, open Green Belt plateau of productive farmland on historic Otmoor, and beside the River Ray. There are extensive views into and across the site from the villages and Oxfordshire Way on the higher surrounding land, and from within the site and its public footpath towards the higher land, the Otmoor villages of Noke, Oddington and Beckley, and towards Islip. The video at <https://www.youtube.com/watch?v=P9KNaY5PFMk> is based on the Manor House at Noke and includes extensive aerial views of the area in which the applications site is situated.

THE SITE IS LARGELY FLAT WITH LOW PRODUCTIVITY ARABLE FIELDS OF NO PARTICULAR DISTINCTION, TYPICAL OF MANY AROUND OXFORD THE YOUTUBE VIDEO APPEARS TO BE A PROMOTIONAL VIDEO SHOT FOR PURPOSES OF SE LING THE MANOR HOUSE IT IS LARGELY SHOT FROM THE AIR AND GIVES NO IDEA WHAT A GOUND BASED PEDESTIAN WOULD SEE. THE SOLAR FARM WILL BE TOTALLY INVISIBLE FROM THE MANOR HOUSE ANY VIEWS OF THE SITE FROM HIGHER GROUND TO THE SOUTH AND WEST ARE VERY DISTANT

If the development were to be permitted, all the views into the valley would be blighted with inappropriate industrialisation, which it is not possible to satisfactorily shield, and views out of the site and from its public footpath across the countryside and towards the surrounding ridge would be blocked with nine foot hedging – itself inappropriate development in this rural setting.

THE SITE IS ALREADY INDUSTRIALISED BEING OCCUPIED BY THE FARMING INDUSTRY MUCH OF THE HEDGING IS ALREADY NINE FOOT OR MORE WHICH NO ONE HAS SAID IS PROBLEM

There would be severe damage to the Green Belt, its openness and to views into and within it, contrary to national and local policy, and loss of productive best and most versatile agricultural land, growing vital crops including renewable bio-mass. The core issue is whether the miniscule gain in terms of renewable energy goes anywhere near offsetting the damage from the development proposed.

THE LAND IS THE LOWEST GRADE OF ARABLE LAND AND HAS POOR PRODUCTIVITY

### **1. The Green Belt and Landscape**

The site is a model of people's vision of what the Green Belt should ideally be like, open, untouched, productive, agricultural land with extensive rural views into it, out of it, and across it. It is part of Broad Area 3 in the 2015 Green Belt Study in which it was given the maximum assessment for safeguarding the countryside from encroachment.

CPRE's policy is that ground-based solar farms should not be permitted in the Green Belt, where solar energy production should be confined to new or existing roofs.

The NPPF at para 155 notes that "When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental

In the Green Belt, the NPPF leaves the local authority to determine the balance between the inevitable harm such development would cause and any public benefit that might arise from the renewable energy it might provide (the very special circumstances).

The NPPF however also requires at para 2 that “applications for planning permission be determined in accordance with the development plan”.

The development plan in this case is Cherwell Policy ESD5. Policy ESD5 has predetermined that renewable energy is a general benefit but that it will be permitted on a particular site ONLY (our emphasis) where “any adverse effects can be addressed satisfactorily” and, in the Green Belt, “particularly visual impacts on openness”.

OPENNESS IS NOT A KEY CHARACTERISTIC OF THE GREEN BELT IT COULD E UALLY BE FORESTED AND NOT OPEN AT ALL. THE KEY PURPOSE OF THE GREEN BELT IS TO PREVENT URBAN SPRAWL, PRINCIPALLY HOUSING. THE USE OF LAND AS A SOLAR FARM IS VERY MUCH IN KEEPING WITH THE GREEN BELT'S OBJECTIVES THEREFORE THE CLAIMED ADVERSE EFFECTS ARE ENTIRELY SUB ECTIVE

That therefore is the test to be employed.

It is common ground that the development of a large scale solar farm on a wide open undeveloped site like this would of itself have substantial adverse effects.

The issue is whether these are, or even could be, addressed satisfactorily.

The applicant proposes that existing vegetation, and notably the wooded land beside the River Ray, would in part naturally conceal the development, and in the Design and Access report that this would be supplemented by nine foot high (the height of the panels) evergreen hedging around the site, and on each side of the public footpath through it.

THE VAST MA OIRITY OF THE NEW HEDGING IS NOT EVERGREEN

Looking first at the existing vegetation, this provides only partial screening, in some cases filtering rather than blocking views, in summer and, being deciduous, effectively no screening at all in winter. Even in summer it will not block views from higher ground surrounding the site as the angle of sight towards the panels will often be above the vegetation.

Secondly, the applicant acknowledges that the hedging within the site will take ten years to become effective, that is, to grow to a height and density at which it would shield the panels from nearby, including from the right of way. During that ten years it will have minimal value, and after it, even when fully grown, it will have no significant effect in shielding the panels from views from higher ground, the hedging being little higher than the vast expanse of panels themselves.

Meanwhile it will cause visual harm of its own in other ways.

Formal evergreen hedging is not only in itself alien and inappropriate in a deciduous countryside, but viewed from higher land would accentuate the urban nature of the project whilst doing nothing to conceal it. Conversely it would entirely eliminate the present wide views from the public right of way, effectively confining walkers to a green tunnel, instead of the wide vistas of waving grain and hilltop villages they now enjoy.

THE SUPPOSED GREEN TUNNEL IS SOME 20 25M WIDE AND THEREFORE NOT TUNNEL LIKE AT ALL. THE SAME FOOTPATH DOES NARROW AND PASS BETWEEN TALL HEDGES ONCE IT LEAVES THE SOLAR SITE TO THE SOUTH BUT THIS GREEN LANE EFFECT IS NEVER COMPLAINED OF

To some extent these effects could be reduced by choosing loose deciduous hedging rather than suburban evergreen, but then the panels would not be concealed at all for the winter months, half the year, from the footpath within the site.

The acknowledged adverse effects of the development on the Green Belt and on landscape views are therefore not addressed satisfactorily.

In any case, there is every likelihood that at the end of the term permission would be renewed if the site was in viable production. In any case granting permission for this industrial use could set a precedent for other applications. ANY DECISION AT THE END OF THE INITIAL TERM WOULD DEPEND ENTIRELY UPON CIRCUMSTANCES AT THE TIME. THOUGH IF IT IS RENEWED PART OF THE REASONING IS LIKELY TO BE THAT THE INITIAL TERM HAS IN FACT CAUSED LITTLE OR NO HARM

A

## 2. Agricultural Land Value

3a Moderate to high yields of narrow range of arable crops (e.g. cereals), or moderate yields of grass, oilseed rape, potatoes, sugar beet and less demanding horticultural crops. 3b Moderate yields of cereals, grass and lower yields other crops. bes it in the following terms:

The site is presently and obviously growing high yields of cereal, and of bio-mass linseed.

The applicants have assessed the site as primarily 3b on their consultant's incorrect assumption in the Land Quality Report that flooding would preclude spring sowing.

The actual farmers of the land however report 'At present the majority of the site is maturing wheat sown in the autumn (2021), directly into linseed stubble and bean stubble. A lesser area of linseed, now flowering, was sown this spring (2022). Last year (2021) spring sown beans and linseed were grown in these fields. In 2020 spring sown wheat was grown. Planting decisions depend on the weather at harvest time (whether it is a late or early harvest) and where we are in the crop rotation, not any limitations due to the soil'.

94% OF THE LAND IS GRADE 3B AND IS ONLY CAPABLE OF PRODUCING MODERATE CROP YIELDS AND THOSE ONLY WITH HEAVY USE OF ARTIFICIAL FERTILISER. MUCH OF THE LAND IS CERTAINLY WET WHICH CAN LIMIT BOTH SPRING AND AUTUMN CROPPING.

It is therefore strongly arguable that the grade of the site has been under-estimated in the application, and that a greater part of it, if not the majority of it, has the characteristics of Best and Most Versatile 3a.

THE LAND RESEARCH ASSOCIATES REPORT ON THE LAND RUNS TO 15 PAGES AND HAS INVOLVED SAMPLING THE SITE AT OVER 60 LOCATIONS. THIS SEEMS MORE LIKEY TO BE ACCURATE THAN CPRES A ASSERTION WHICH APPEARS TO BE BASED ON LITTLE MORE THAN HERESAY

Be that as it may, it is obviously in high yield production of important crops including wheat. of which there is a world-wide shortage. and linseed which is a bio-mass crop which is itself addressing carbon neutrality.

THERE ARE A NUMBER OF REFERENCES TO BIOMASS. BIOMASS IS NOT CARBON NEUTRAL. FOSSIL FUELS ARE USED TO CULTIVATE AND FERTILISE IT AND IF THE BIOMASS IS CONSISTENTLY REMOVED RATHER THAN BEING INCORPORATED AFTER HARVEST IT WILL DEGRADE THE SOIL PERMANENTLY LOWERING YIELDS

BIOMASS IS OVER THIRTY TIMES LESS PRODUCTIVE IN ITS LAND USE THAN SOLAR PANELS. THUS IF BIOMASS BECOMES AN AGRICULTURAL OB ECTIVE IT WILL RESULT IN MUCH LESS FOOD BEING PROCDUCED THAN AN OPTIMISED COMBINATION OF FOOD CROPS AND A MUCH SMALLER AREA OF SOLAR PANELS. UST AS IMPORTANTLY ALL BIOMASS RE UIRES TAX PAYER SUBSIDY. SOLAR DOES NOT.

The applicants advance the claim that agriculture will continue as sheep grazing will graze amongst the panels. Not only is sheep grazing Grade 5, the lowest grade of agricultural use where no other use is possible, but contrary to a carbon neutral strategy as a reduction in meat consumption is part of the adopted Pathways to a Zero Carbon Oxfordshire. SHEEP DO VERY WELL ON GRADE C B GRASSLAND AND ARE THE MAIN USE OF SEVERAL AD ACENT FIELDS IF LAMB IS NOT PRODUCED IN OXFORDSHIRE IT WILL SIMPLY BE IMPORTED INVOLVING FOOD

## MILES AND THE RISK OF LOWER ANIMAL WELFARE STANDARDS

However, the District has recently adopted a Climate Emergency resolution with an objective of energy supply across the District as a whole being zero carbon by 2030.

It is therefore relevant to consider what we believe to be the very minor extent to which the development might have assisted in that objective

The capacity of the site is variously claimed to be 25 megawatts and 26.6 megawatts, although these figures are the maximum capacity of the panels on the longest and sunniest day that they might experience, wherever in the world they might be located, and then only when they are new.

The applicants acknowledge in their Network Availability Assessment that the capacity of the panels will halve over the forty years proposed.

Output is constrained by the capacity of the grid connection to 18 megawatts but this is again a maximum unlikely to be achieved with any frequency, and could never be reached after the capacity of the panels fell below it in twenty years or so. THE SOLAR PANELS DEGRADE AT ABOUT 0.5% PA SO AFTER 20 YEARS MAX OUTPUT IS 90% OF THE ORIGINAL STILL WELL ABOVE THE 18MW FIGURE. MIDSUMMER IS OFTEN SLIGHTLY TOO HOT FOR SOLAR PANELS SO THIS IS NOT THEIR SEASON OF PEAK OUTPUT. THE ANNUAL OUTPUT OF THE FARM WILL BE CIRCA 26000 MW AND THIS TAKES ACCOUNT OF ALL THE SEASONAL VARIATION

It will be extremely rare that even the longest and sunniest day on Otmoor approached the maximum capacity of the panels, and a mid winter day has only a seventh of the irradiation of an average mid-summer one.

That means that there will be far less renewable energy during the winter than the summer, albeit winter is the time of maximum demand for heating.

THE PATTERN OF SEASONAL AND DIURNAL ELECTRICITY DEMAND WILL ALTER AS ELECTRIC VEHICLES AND AIR CONDITIONING BECOME WIDESPREAD AND DIFFERENTIAL PRICING ENCOURAGES DIFFERENT CONSUMPTION PATTERNS. THE RAPIDLY FALLING COST OF BATTERY STORAGE AND IN DUE COURSE THE ADOPTION OF A HYDROGEN ECONOMY MEAN THAT DAILY AND SEASONAL DEMAND/SUPPLY MISMATCHES WILL BECOME MUCH LESS IMPORTANT.

The solar industry expresses the output in terms of “homes powered”, in this case 7,000, which expresses the expected actual electricity output from the site in terms of multiples of the average annual electricity usage of a typical home.

The zero neutral objective is however concerned not just with electricity, but with all energy. More than two thirds of the energy that “powers” an average home is not electricity but gas, or, in the countryside, oil.

That means that the output from the solar farm actually “powers” the equivalent of 2,000 homes, not 7,000.

2,000 homes is 4% of Cherwell’s current housing stock, but it is not 4% of Cherwell’s energy usage.

Typically only a third of all energy is used in homes, the rest in transport, offices, factories and elsewhere. That means that the Noke solar farm – even if the claimed output was correct – would provide only 1.3% of Cherwell’s energy needs.

Additionally in their Network Availability Assessment the applicants say that by the end of the forty years of use the panels capacity and therefore output would have deteriorated from 25 megawatts to 10. That would mean that by the end of the permitted forty years they would be meeting less than 0.52% of the District’s current energy needs. SIMPLY NOT TRUE AS DISCUSSED EARLIER

On top of which, the energy use of the District will have grown over the same period. At the current rate of housing completions for instance, 1,000 a year, there could be 40,000 more households, and therefore employment, and energy use, reducing the 0.52% to 0.28%. ALL THIS IS SURELY A COMPELLING ARGUMENT FOR MUCH MUCH MORE SOLAR AS SOON AS POSSIBLE NOT LESS

Looking so far ahead these calculations are necessarily subject to wide margins of error, but are illustrative of the actual extent to which the Noke development would

#### 4. Other issues

##### a. Heritage and footpaths

There are concerns about the impact on heritage assets. The entry to St Andrews Oddington would be marred in winter by side views of the solar farm through the bare tree branches and views of listed Logg Farm would be similarly compromised. THE ODDINGTON CHURCH IS SEPARATED FROM THE SOLAR SITE BY SEVERAL HEDGEROWS THE COMPLEX OF MODERN AGRICULTURAL BUILDINGS AT LOGG FARM AND THE VERY WELL VEGETATED LAND BETWEEN THE NEW AND OLD RIVER RAYS. IT WILL NOT BE VISIBLE. THE LISTED FARMHOUSE AT LOG FARM IS ALREADY SURROUNDED BY MODERN FARM BUILDINGS ON THREE SIDES AND WILL NOT HAVE A VIEW OF THE SOLAR

General views of St Nicholas at Islip from the higher land would be blighted by the solar farm background and views from within the site would be marred by the tall and inappropriate evergreen hedging, even though it is understood the applicant intends to leave one sight line clear. BEING ELEVATED ST NICHOLAS WILL BE VISIBLE FROM ALL THE POSITIONS IT IS CUREENTLY

Views from the Oxfordshire Way over the presently open countryside would be compromised.

##### b. Bio-Diversity

If sheep are to be grazed amongst the panels, due to sheep's proclivity to eat almost anything, there will be little bio-diversity in comparison to that in the present agricultural use. BIODIVERSITY WILL BE IMMENSELY IMPROVED COMPARED WITH ARABLE ROTATION WITH THE ATTENDANT USE OF AGROCHEMICALS

#### 5. Summary and Conclusions

The fields presently have wide wildlife borders and the present woodlands beside the river are already wildlife friendly. The proposed solar farm would have a highly damaging impact on a glorious open rural landscape; on the Oxford Green Belt; and on the production of vital crops, including bio-mass. If it is proposed to leave a small corner of one field (outside the application site) uncultivated, but local opinion is that this will not offset the impact of the solar panels on the developed site, not least in blocking the sunlight on which fire depends. The resulting generation of renewable energy would be effectively insignificant in relation to the District's net zero objective.

Permission for a development such as this in this place would be demonstrably contrary to both Council Policy and the wider public interest, especially as rare cranes are now nesting. Hopefully you will ensure that RSPB CPRE consulted this application be refused.

Yours faithfully

Michael Tyce

Executive Committee Member