

CPRE, The Countryside Charity, Oxfordshire

Campaigning to Protect our Rural County

Mr James Kirkham,
Cherwell District Council

14th July 2022

By email to james.kirkham@cherwell-dc.gov.uk

Re Noke Solar Farm application 22/01682/F

Dear Mr Kirkh

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 developmen

THE SITE IS MAINLY FLAT WITH LOW HILLS IN THE DISTANCE ON TWO SIDES. ANY VIEWS INTO THE SITE ARE THUS VERY DISTANT. THE SITE IS ALREADY INDUSTRIALISED BEING USED BY THE AGRICULTURAL INDUSTRY

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 PATH WILL RETAIN A WIDE OPEN FEEL AND VIEWS OF HILLTOP VILLAGES WILL BE ENTIRELY UNOBSTRUCTED. THE PATH DOES CURRENTLY ENTER A CORRIDOR BETWEEN TWO HEDGES SOUTH OF THE PROPOSED SITE BUT THIS ATTRACTS NO CRITICISM

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 HEDGING IS PRINCIPALLY DECIDUOUS BUT THIS PROVIDES PRETTY GOOD SCREENING IN WINTER

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

Given the “bowl” within which the development is located, and the higher viewpoints surrounding it, they are almost certainly not capable of being satisfactorily addressed. Therefore the application must be refused in line with Cherwell Policy ESD5.

Little if any weight should be given to the fact that the application is for temporary use, as forty years of blight is more than a whole generation.

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.

2. Agricultural Land Value

The applicant assesses the land as being in small part Best and Most Versatile Grade 3a with the larger balance being 3b, the half grade below. The difference between the two sub-grades is narrow and subjective. The Welsh Government describes it in the following terms:

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.

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'.

I A THE FARMER OF THE LAND AND HAVE PROVIDED NO SUCH INFORMATION. OTHER PARTS OF THE SITE IS 3B AND THIS HAS BEEN ASSESSED BY PROFESSIONAL SOIL SAMPLES. THE DEFRA DEFINITION OF 3b is

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

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 GRADE HAS BEEN ACCURATELY MEASURED NOT ESTIMATED

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 SEVERAL REFERENCES TO BIOMASS IN THE SUBMISSION. BIOMASS IS NOT A REALISTIC ALTERNATIVE TO SOLAR PANELS. SOLAR PANELS PRODUCE OVER THIRTY TIMES THE ENERGY OUTPUT PER ACRE OF BIOMASS. BIOMASS IS FAR FROM CARBON NEUTRAL. HAS TO BE TRANSPORTED BY ROAD AND BURNED IN INEFFICIENT BOILERS BEFORE IT CAN GENERATE ELECTRICITY. THE USE OF BIOMASS REQUIRE GOVERNMENT SUBSIDY, INCREASING ENERGY COST FOR EVERYONE. SOLAR PANELS ARE SUBSIDY FREE. CONSTANTLY HARVESTING THE STRAW FROM BIOMASS CROPS REDUCES SOIL FERTILITY INCREASING DEPENDENCE ON ENERGY INTENSIVE ARTIFICIAL FERTILISERS.

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 CAN GRAZE ON MANY GRADES OF LAND BUT WILL DO BETTER ON BETTER SOILS. THE RESIDENTS OF OXFORDHIRE WILL EAT THE SAME AMOUNT OF LAMB AND WILL JUST SHIP IT IN INVOLVING FOOD MILES IF IT IS NOT SOURCED LOCALLY.

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 OUTPUT OF THE FARM IS CIRCA MW. THIS CAN BE EXPECTED TO DECLINE AT HALF A PERCENT PER ANUM MEANING THERE IS STILL OF THE ORIGINAL CAPACITY AFTER YEARS. HOW MANY CHERWELL HOUSE HOLDS NEEDS ARE COVERED BY THIS WE ESTIMATE IS NOT REALLY THE POINT. ELECTRICITY CONSUMPTION IS SET TO GROW RAPIDLY AS ELECTRIC CARS ARE INTRODUCED AND HOME HEATING SWITCHES TO HEAT PUMPS AND WE NEED ALL THE RENEWABLES GENERATION WE CAN GET PARTICULARLY IF IT IS CLOSE TO ITS POINT OF USE AND DOES NOT INVOLVE EXPENSIVE GRID UPGRADES OR HIGH TRANSMISSION LOSSES.

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. SOLAR PANELS DO NOT GIVE THEIR MAXIMUM OUTPUT IN THE SUMMER WHEN IT IS SLIGHTLY TOO HOT FOR THEM. THE FIGURE OF MWH P A TA ES ACCOUNT OF ALL THIS SEASONALITY.

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.

ELECTRICITY DEMAND IN THE SUMMER IS SET TO INCREASE WITH ELECTRIC VEHICLES, TIME OF DAY PRICING AND AIR CONDITIONIN WHICH IS NOW A STANDARD REQUIREMENT IN OFFICES.

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.

SURELY ALL THIS IS AN ARGUMENT FOR BUIDING AS MUCH SOLAR AS POSSIBLE. WHATEVER THE ENERGY SOURCE OR USE IT ALL NEEDS TO BE DECARBONISED

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.

In achieving net zero, it may be said that “every little helps”, but the help from the Noke solar farm is very little. Instead of helping to meet the district’s energy needs, the output of the solar farm would be 49,000 tonnes of CO2 per year, which is 10% of the district’s current CO2 emissions. The district’s energy needs are 49,000 tonnes of CO2 per year, so the solar farm would only meet 10% of the district’s energy needs. The district’s energy needs are 49,000 tonnes of CO2 per year, so the solar farm would only meet 10% of the district’s energy needs.

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 LISTED LOG FARM IS SURROUNDED ON THREE SIDES BY MODERN AGRICULTURAL BUILDINGS SO IT IS NOT CLEAR WHAT VIEW IS BEING REFERRED TO. THE SOLAR PANELS ARE NOWHERE NEAR THE LOGG FARM CURTILAGE

b.

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

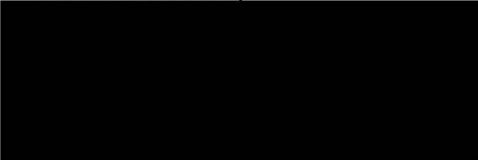
c. **Bio-Diversity**

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. THERE WILL BE SIGNIFICANT BIODIVERSITY AND ENVIRONMENTAL GAINS FROM TAKING THE LAND OUT OF ARABLE PRODUCTION. THE USE OF SPRAYS AND FERTILISERS WILL ALL BE REDUCED. THIS IS BEFORE TAKING ANY ACCOUNT OF THE ADDITIONAL AREAS SET ASIDE FOR WILDLIFE.

d. **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. 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 the resulting generation of renewable energy would be effectively insignificant in relation to the District's net zero objective. Permission for development potential as a field 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

