



The countryside charity  
Cambridgeshire  
and Peterborough

**EN010127 Application by Mallard Pass Solar Farm Limited for an order granting development consent for the Mallard Pass Solar Farm**

**Statement made to Public Inquiry on Environmental Matters**

**Introduction**

My name is Alan James. I am the chairman of CPRE Cambridgeshire & Peterborough. My profession is in the development and supply of specialist software management systems, including the management of environment, health and safety in industry. I have a PhD in materials science and I am a Chartered Environmentalist.

I would like to make a short statement about the environmental concerns that CPRE Cambridgeshire & Peterborough has about this and other large solar installations many of which arise from actual and proposed installations in our county as well as this one just across the county border.

These are matters which we have raised in our written submission.

**Sustainability**

CPRE are very concerned about the long-term sustainability of silicon solar panels. These are made, like silicon chips, in high energy processes using particular types of silica sand which, according to the Institute of Materials, Metals and Mining of which I am a member, is in increasingly short supply.

There is serious doubt that the solar panels will continue to operate effectively and efficiently over the now proposed lifetime of the site and it is likely they will need to be replaced during that time. For the reason given above replacement material may not be available.

Furthermore, speaking as a person with a degree and a doctorate in materials science from the University of Sheffield which included considerable study of metallurgy, I believe that over the proposed lifetime of the site it is probable that the metal frames and stands on which the panels will be mounted will suffer serious corrosion, probably leading to structural collapse and a further need for replacement with all the additional carbon emissions that this will entail. This requires full independent investigation.

As far as we are aware there is no established process or industry for dealing with disposal and/or recycling of waste solar panels. Although it is possible that such a new industry may emerge. Currently, it is just an aspiration that by the time these sites cease to operate, an industry recycling solar panels might exist.

We consider that formal carbon lifecycle analysis (CLA) should be used to prove that during their whole lifecycle - construction, operation, decommissioning and disposal/recycling - this installation will actually save more carbon emissions than it creates. The standard evaluation used by the applicant is not a complete CLA. Without a robust carbon lifecycle analysis, the development cannot be said to be sustainable.

We believe that a clear, funded, plan for the decommissioning, removal and recycling of the materials from these sites must be in place before their development is allowed to proceed.

### **Effects on Farm Land**

In our written submission, we made clear our concerns about the use of good food-growing land for solar installations at a time when climate change is causing increasing risks to national food security and government has been advised that we must grow more food within the UK. I won't repeat those details today.

However, we are very concerned about the long-term effects of solar panel management on the land where they are installed and doubt that these are good or as environmentally friendly as claimed.

The maintenance of solar panel installations on open land requires regular cleaning with chemical cleaners or distilled/de-ionised water. Their production uses energy and the use of chemical cleaners causes land contamination.

In our experience, the vegetation under and between panels is not controlled by grazing sheep. Sheep itch. Itching makes them want to rub and scratch and where better than a solar panel support or low-mounted corner for a good scratch?

Instead, the normal maintenance regimes include both regular mechanised mowing and treatment of roadways with weedkiller and the treatment of sub-panel areas with weedkiller. The normal weedkiller used is glyphosate.

In our written submission we listed several companies which specialise in providing these solar panel maintenance services. I won't repeat that list here. They were after all just examples.

CPRE Cambridgeshire & Peterborough is very concerned by the cumulative impact of damage to the soil over a period of 40 years from the combination of shielding from daylight, regular spraying with weedkiller and routine tracking of panel-cleaning and grass-cutting vehicles and equipment.

We are not aware of any applicable long-term studies which either support or negate our concerns. In 40-years we could be leaving significant resulting problems to another generation.

### **Effects on Ecology**

This is not a subject that we are expert in.

We recognise that undisturbed hedgerows and verges may well bring some ecological benefits.

However, these will be semi-industrial sites with large central areas where the mess that wildlife can make may not be welcome.

What will happen when a badger family decides to set up home under a solar array?

Will over-flying birds, scattering panels with their mess, be welcomed or shot?

What effect on wildlife movement and corridors will the security fencing have?

How will growing trees over-hanging and shading the site be managed? By removal?

Many modern farming practices have had a negative effect on the ecology of our countryside and this is something that is now recognised and that the government, the farming industry and various environmental bodies are seeking to change through various measures. These include a new structure for farm support payments and the encouragement of wildlife areas, tree-planting and re-wilding.

Many of these changes we support.

Although many claims are made by the solar panel industry, we remain sceptical at best that an industrial landscape of solar panels will be good for the ecology of the countryside in the long term.

As a professional planning ecologist friend of mine said to me "The best way of ensuring bio-diversity net gain is not to cover the land in man-made artifacts in the first place."

We consider that the alternative of solar generation on roof-tops and car parks is a much better solution. It has no effect on farmland or the countryside and its ecology and alternative solar generators can be used such as light-weight thin-film solar, solar tiles and solar roofing panels according to the location.

It appears that government supports the view that rooftop solar should be increased. An email received this morning from one of our local MPs stated:

*"You may be interested to know that the Government held a consultation seeking views on simplifying planning for installing rooftop solar. This includes proposals for a new permitted development right, which would enable the construction of solar canopies in ground-level non-domestic car parks without a full planning application. In addition, the Government is seeking to bring more properties into the scope of existing permitted development rights to install rooftop solar panels on domestic and non-domestic buildings. I look forward to reading the consultation outcome."*

Thank you for listening.

**Note:**

Due to the schedule and structure of the meeting, not all of the above comments were made at the same time during the meeting. However, I believe this is a reasonable summary of what was said on behalf of CPRE Cambridgeshire and Peterborough by myself.

Alan James.