

# FAQ.

## 1. **Why is this only a temporary development?**

It is typical that solar farms are temporary structures. This is so that planning conditions on any planning permission can be used by the Local Planning Authority (LPA) to ensure that it is removed when no longer in use and the land is restored to its previous condition prior to the solar farm installation. In approximately 30-40 years time, PV technology will likely be superseded, the land will then be returned to green fields. Any temporary planning permission makes it no more likely in planning law that the site will be developed for housing or other non-renewable uses in the future.

## 2. **Does the solar farm need to be this large?**

The truth is that today, in order for a solar farm to be commercially viable in a subsidy free environment (requiring no government funding), it needs to be large-scale in order to repay the significant cost of connection to the electricity network alongside the initial outlay of the infrastructure and equipment.

## 3. **Will the solar farm be noisy?**

In short, no, it will not be noisy. The predicted noise impact of a typical solar farm is considered to be low to negligible and non-intrusive, therefore, no additional specific mitigation is usually considered to be required. Subsequently, a project specific Noise Impact Assessment (NIA) must be conducted as part of the planning application process which will evaluate the likely impact associated with the proposed solar farm. There will of course be some noise during the construction phase.

## 4. **How will the solar modules be cleaned?**

Module dirt build up varies from location to location; proximity to trees, agriculture, quarries, the coast and so forth all present different problems. There is no hard rule on cleaning, however, this can be expected to be completed between one to four years as required. Modules are monitored for dirt residue monthly. To clean the modules on mass a rotary brush would be mounted onto the back of a tractor, however, spot cleaning by hand can occur if the performance of an individual or small cluster of modules is considered low [typically because of bird droppings].

## 5. **Why not install a solar farm on a brownfield site?**

Tackling climate change requires unprecedented and urgent action. The transition to powering our homes and businesses with low cost, low-carbon electricity generated from renewable energy sources is an essential part of the UK's climate change strategy and needs to be delivered at pace and scale. Brownfield land will always be considered for new solar farm developments, however, due to the limited availability of suitable sites, brownfield sites alone cannot deliver the transition at the pace nor scale required. Many brownfield sites are not available for development or may not be suitably located for connection of an electricity generation project into the high voltage electricity grid, for example.

It will therefore be a mixture of projects on suitable and available brownfield sites together with carefully selected and designed projects on greenfield sites, which will be required to deliver the energy transition in the UK.

## **6. What is battery storage?**

Battery storage technology has a key part to play complimenting renewable energy sources such as solar and wind. The complete battery system is extremely advanced with cutting edge technology, but when broken down, the individual lithium-ion battery cells are exceptionally similar to those found in many products, such as battery drills, battery hoovers and even battery cars, the difference being that there are many thousands / millions of them grouped and managed together.

Battery storage is either coupled to renewable energy sources or it is directly connected to the electricity network. At times when there is surplus electricity available, the batteries are charged, this allows the energy to be discharged or called upon by the electricity network on demand for both emergencies and grid balancing (keeping the grid stable, responding to sudden changes or fluctuations). Additionally this would be to simply meet the daily peak demand, usually around 6pm when most cookers, kettles and even 1st generation battery cars and chargers all start demanding electricity.

## **7. Will a solar farm change the land classification?**

A solar farm is part of a temporary farm diversification strategy. It will not change the land classification.

## **8. Will the local wildlife and biodiversity be impacted?**

We recognise the importance of environmental protection and betterment as part of our commitment to operating sustainably and responsibly. We procure independent qualified ecologist advice to measure the biodiversity value of each project, and to design enhancements to deliver a net biodiversity gain. At our solar farms, this generally results in improvements to natural habitats for a range of invertebrates, small mammals, reptiles and birds.

Arable land is generally intensively farmed which can have an adverse impact on soil quality over time. The transition to grassland, introduction of areas of meadow around the external fencing and sheep grazing allows the soil quality to improve. This also provides suitable habitat and food sources for wildlife throughout the food chain. Bird boxes, log piles for invertebrates and improved or new areas of trees and hedging are just a few examples of methods used to deliver a biodiversity net gain. Significant benefits are also gained through the eradication of fertilizer and pesticide use, advancing the quality of both the land and waterways surrounding the site.

## **9. What are the carbon costs of producing the solar modules for a project?**

Recent technology advances have significantly reduced the carbon costs of producing solar modules. As solar module manufacturing becomes more efficient, its carbon footprint shrinks vastly. While the manufacturing of solar modules produces greenhouse gas emissions, solar farms are still much better for the environment than alternative options. The overall greenhouse gas emissions involved in solar energy is still considerably lower than coal or natural gas.

For more information visit: <http://news.energysage.com/solar-panels-toxic-environment/>

**10. Will a solar farm catch fire?**

The unmanned solar farm is considered to be at very low risk of catching fire and has several safety features to disconnect the electricity upon fault detection. This would be the same for every substation connected to the electricity network of which there are many hundreds of thousands across the UK, effectively the same as a substation supplying electricity to a house/street/village.

**11. Will a battery storage facility catch fire?**

The unmanned battery storage system is considered to be very low risk of catching fire - the battery systems used in our projects have automatic fire detection and suppression systems which incorporate redundancy in the design to provide multiple layers of protection. There are always measures built into the designs to contain and restrict the spread of fire through the use of fire-resistant materials, including adequate separation between the elements of the battery system. Similarly to a petrol tank under a car, battery systems have many protection mechanisms making the risk of failure very low.

**12. Will you compensate me for any impact to my property?**

The impact on house prices is not considered a material planning consideration, therefore, falls outside the remit of any planning application.

**13. Will this ruin our landscape and become a blot in the countryside?**

As part of the planning application, a Landscape and Visual Impact Assessment (LVIA) is prepared which is submitted to the council which is designed to mitigate any impact on the landscape. Once new hedgerows are established and maintained any visual impact will be minimalised. Any Public Right of Ways (PRoW) will continue to exist. Whilst there is an initial change to the countryside, the unmanned solar farm will fast become a haven for wildlife whilst providing electrical generation.

**14. Are solar farm components recyclable?**

Yes, all of our components are supplied from manufacturers that are registered and strictly comply with the EU WEEE Directive (Waste from Electrical and Electronic Equipment) which aims to contribute to sustainable production and consumption.

We as a company are committed to supplying the best possible solution when it comes to recycling. We use registered licensed specialists to recycle all components, from PV modules, solar inverters, and transformers right down to the cabling.

To find out more about our trusted and approved specialists, please visit: [www.recyclesolar.co.uk](http://www.recyclesolar.co.uk)