## Solar Farms & Biodiversity Protection

According to the World Wide Fund for Nature...

150 species of living creatures become extinct each day possibly up to 10,000 times the expected natural rate

Over the last 40 years, we have lost more than half the world's population of birds, reptiles, amphibians, fish and (non-human) mammals. Habitat loss, pollution and climate change are the key reasons why.

#### The solutions lie in our hands, but we must take action – today!

#### Farmland wildlife under threat

The UK's farmland has changed greatly over the last 50 years. The old patchwork of mixed-use farms, with small fields surrounded by hedgerows and wild margins, provided abundant food and shelter for a wealth of wildlife. Today's farmland is dominated by industrial-scale monoculture, often blanketing large expanses with crops such as cereals that provide little succour to wildlife — even to the pollinating insects on which other crops rely. Hedges have been torn up and field margins minimised.

In the UK, some of the biggest wildlife losses have been among farmland creatures, particularly birds. Once common species such as grey partridges, linnets, starlings and tree sparrows have declined so alarmingly that they are now officially "red listed". Conservationists view these losses as symptoms of a wider malaise in our countryside.

Starling numbers in the UK have fallen by 66% since the mid-1970s and no one knows exactly why. They have declined more in the countryside than in towns — but they seem quite happy on solar farms.

#### Solar farms put life back into our countryside

Solar farms inject clean renewable energy directly into the grid network. We feel they should be enthusiastically embraced as not only a core part of the long-term solution to securing our national energy supply and meeting international climate change targets, but also as a boon for biodiversity.

A little known fact about solar farms is that less than 5% of the land underneath has anything physical attached to it, meaning that more than 95% can be used throughout its lifetime to support wildlife. This can be done even with areas remaining in agricultural production — for example by grazing the site, particularly during the autumn months, and through growing schemes between certain rows of panels.

#### **Planning for nature**

With every solar farm we develop, we work with experts to implement a local habitat management plan made up of measures to encourage biodiversity. Some of these measures, like planting hedges and wildflower meadows, provide food and shelter for many types of birds and small mammals. Others may focus on supporting individual species that are present locally but rare nationally, helping to build up healthy populations capable of spreading back into the surrounding countryside.



Wildflower meadows provide forage for pollinating insects such as honey bees, and food and shelter for birds and small mammals



Planting hedges with native species such as hawthorn provides food and nesting sites for birds, and sheltered 'wildlife corridors' that allow small animals to roam safely across the countryside

Solar energy is a gift from nature. Solar farms help to give back to nature.

#### Homes for honey bees

Our honey bee populations have come under pressure in recent years from 'colony collapse disorder', which is poorly understood but has been linked to a combination of loss of habitat, pests, diseases and possible immune system deficiencies. Declines have also been noted in other species of pollinating insect. Because farmers depend on insects to fertilise their crops, there is a real threat to food security in the UK.

We work with the British Beekeepers Association (BBKA) and many of its members to establish and maintain honey bee colonies on all our solar farms. Besides providing wildflower meadows and other wild areas with valuable bee forage, our solar farms are secure sites where bees (and other creatures) can thrive free from human interference.

Elizabeth Truss, Secretary of State for Environment, Food & Rural Affairs, on pollinating insects:

"Their work is valued at around £430m – four times the salaries of the top 10 players in the Premier League. Like the football players, they require excellent accommodation ... and the best diet and nutrition..."

... Exactly what they find on our solar farms!

Get in touch to get involved with our solar farms: diversity@belectric.co.uk





### Solar farms offer a diverse range of benefits

Solar farms help hard pressed farmers to diversify their incomes through harvesting energy — and agriculture does not have to stop when the solar panels go in. Sheep and poultry can graze beneath and around the solar arrays — they even appreciate the shelter, according to some farmers. On some of our solar farms we organise community growing projects, providing fresh organic produce for local consumption.

We also use our solar farms as a platform for education about biodiversity protection and the transition to a low carbon economy. Local schools and community groups are invited to take part.



# *"We need to divert investment away from the causes of environmental problems and toward the solutions."*

WWF Living Planet Report 2014

Solar farms by:







#### www.Big60Million.co.uk

Thorney Weir House, Thorney Mill Road, Iver, Bucks SL0 9AQ T: +44 1895 452640 E: diversity@belectric.co.uk