

# Witherington Farm Solar Park proposal Frequently Asked Questions

# Who is Hive Energy?

We are an entrepreneurial British company that specialises in solar energy. Founded in 2010 by Giles Redpath, we started life installing rooftop solar on barns and farm buildings. From there, we then began creating solar parks on brownfield and greenfield sites, and have established a strong track-record of creating clean and renewable energy for both urban and rural users.

# Why does the UK need solar energy?

Britain is facing an energy challenge – up to 25% of the UK's current generation of power stations are closing between now and 2018. They need replacing with new cleaner, affordable sources. Solar panels are a reliable, silent way of making clean, home-grown energy that everyone in the UK can use.

#### How have you chosen the site at Witherington Farm?

We've carefully evaluated the site at Witherington Farm and are confident that it would be a great place to make clean solar energy for everyone. For every project we progress, there are dozens of others we reject.

Before we brought this site forward for approval, we considered a wide range of factors including:

- Local environment and wildlife
- How visible it might be, and how we could screen it from view with hedgerows and trees
- The quality of the land and what it is currently used for
- Any archaeological remains or heritage sites
- Hydrology e.g. floodplains
- A good local grid connection nearby
- · How the construction could happen as smoothly as possible

Once operational, only around 30% of the land would actually have solar panels on it and livestock could easily graze between the panels.

A solar park is essentially temporary and reversible, and once dismantled the site can be easily returned to its former use. During the typical 25-year life of the solar park, the land would be rested from chemicals and fertilisers and over time would revert to organic status.

#### How much energy would the solar park at Witherington Farm create?

The solar park would have the capacity to produce 40 MW of clean energy, enough energy for as many as 12,000 homes. It will also save over tonnes of 17,200 CO<sub>2</sub> emissions every year.

To reach government solar targets by 2020, 10GW of power would need to come from ground-mounted solar parks. This would require around 60,000 acres of land, about 0.1% of UK land. This is less than the area used for non-food crop like linseed and a fraction of the estimated 660,000 acres currently occupied by golf courses in England alone.

#### Is the UK's climate suitable for producing solar power?

Britain receives as much as 60% of the solar irradiation as at the Equator, making it a good place to capture the power of the sun. As you would expect, summer is better than winter for producing energy but solar panels don't need bright sunshine to make energy – just sunlight.

#### What would I see?

We have worked hard to design the solar park making sure it would be well integrated with the scenery behind new and existing trees and hedging. We would source native species of trees and hedging, from local nurseries wherever possible, to supplement existing hedging.

The proposed solar park at Witherington Farm would be set well back from homes and businesses and at least 1.5km away from Downton.

#### What would I hear?

Solar panels themselves are completely silent. The only sound that comes from a solar park is a quiet hum from the on-site inverters which convert the energy produced into usable power. The hum is equivalent to 35db – the same as a whisper in a quiet library. Our inverters are placed inside a cabin the size of a long single garage, to protect them from weather and make sure any noise is minimised, and finished to blend in with existing buildings in the local countryside.

#### Do solar panels reflect the sun?

Solar panels are designed to absorb the sun, not reflect it. They don't create any glare that could cause a disturbance to people, wildlife or aircraft. In fact, there are many operational solar parks at and around airports across the UK and the world.

#### What benefit would the solar park bring to people living locally?

We are committed to being a good neighbour for the lifetime of the project. That is why we want to support initiatives in the local community. As part of people's feedback, we would welcome ideas on how we could make a positive financial contribution to your local area via our community support fund, should the project go ahead.

#### How would a solar park at Witherington Farm impact on local wildlife?

Research by ecologists has shown that solar parks actually increase biodiversity compared to farmed or neglected land. Within a short time of building a solar park, there is a statistically significant rise in the number of bees, butterflies and wild flowers.

Expert advice on optimising biodiversity on solar parks was produced in April 2014 in partnership with wildlife and conservation bodies including The National Trust, the RSPB, Plantlife, Bumblebee Conservation Trust, Eden Project, Buglife, Wychwood Biodiversity and Wiltshire Wildlife Trust.

The RSPB is keen to work with solar park developers to support farmland birds, and says that well-sited solar parks "create a big opportunity for wildlife".

We have carried out detailed environmental studies at Witherington Farm including bird and bat surveys which show that they would not be affected by our proposals. We're continuing to work closely with Natural England to make sure that local wildlife is protected and would look to introduce measures such as feeding strips for Turtle Doves that would help support native populations.

We are a main supporter of the British Beekeepers Association (BBKA) and house bee apiaries on each of our sites, encouraging vital bee populations in the area. A number of our sites have bat boxes and perching stands for birds of prey. We also create wildlife corridors for small animals such as field mice and voles.

# How long would a solar park take to construct?

Construction of a park this size would typically take around five months. Panels arrive at the site preassembled, to be fixed to light metal frames. All cables are hidden underground before the park is then connected to the existing local electricity grid.

Another benefit of solar energy is that installing solar panels can happen quickly and usually doesn't need any heavy construction equipment.

#### Would a solar park at Witherington Farm create traffic issues?

Once operational, a solar park at Witherington Farm would only require routine maintenance a couple of times a month. This could be done by a single technician in a car or small van.

Construction traffic would enter the site itself from the A36. We would agree routes and times with the council to minimise any potential for disruption to local people and businesses. We would also regularly check the road for any mud or debris left by us, and should any cleaning be required we would arrange this as soon as possible.

# Does a solar park pose a health risk?

Solar panels are completely harmless. They are made mostly from silicon (sand) and do not emit any harmful electromagnetic frequencies which could cause health problems to people or wildlife, or emit any frequencies that could affect radio equipment, mobile phones or Wi-Fi. In fact, solar panels are one of the cleanest and safest ways of making energy there is.

# If the proposal went ahead, would the area become a target for other solar park developers?

Every application for a solar park (or any other type of development) is considered individually on its own merits and would need to be approved separately. Wiltshire Council would consider any new proposals in the context of what already exists in the area or has permission.

Before any of our solar parks are proposed, we carry out detailed studies to make sure that the site is suitable. A number of assessments are carried out looking at everything from environment and land usage, to local communities and heritage.

#### What are the next steps?

Feedback from local people and important organisations is really important to us and we want to listen to your views on our proposals. Once we have reviewed all of the feedback we receive and completed all of the detailed technical and environmental studies we need to do, the next stage will be to finalise our proposals and submit a planning application for consideration by Wiltshire Council. You will then be able to submit your comments to them as part of the planning process.

#### How can I contact you if I have any further questions?

You can contact us in a number of ways:

- By post at FREEPOST HIVE ENERGY
- Email at info@hiveenergy.co.uk
- Telephone 08000 191719, 9am-5pm Monday to Friday (with a call-back facility at other times)