

CASE STUDY

CLIENT
Lightsource

EPC
Canadian Solar

DNO
SSE

YEAR
March 2016

Modus Utilities Ltd were commissioned by Lightsource Renewable Energy to design, project manage and deliver the 33kV infrastructure connection to the park.

As part of the contract Modus represented and managed on behalf of the client, the point of connection (POC) interface with SSE and undertake the contestable element of the works as the ICP. The PV farm was connected to the existing SSE 33kV overhead line network.

The development comprised a Solar Farm with a total installed capacity of approximately 4.9MW, on a site that covers an area of approximately 11.4 hectares.

The solar farm not only produces clean energy – the rows of solar panels are widely spaced and raised so that grass can establish throughout the site, including the area underneath the panels.

The project was developed in collaboration with the landowners at Wilsom Farm, who intend to continue to utilise the solar farm area by grazing sheep. The fields were previously used to grow maize (used to generate energy using ‘anaerobic digestion’). Now completed, the land takes on a dual use and supplies our food chain whilst still generating clean, renewable energy through solar design.

Proposed solar farm at: ‘Wilsom Farm’, Caker’s Lane, Alton, Hampshire, GU34 3AB

Lightsource has taken on board feedback from the local community and significantly reduced the scale of the proposed solar farm in order to substantially limit visual impact. The remaining area is well screened from public and private viewpoints. Lightsource has also worked closely with consultant ecologists on a Biodiversity Management Plan and Planting Plan which have been submitted as an integral part of the planning application. The plans will ensure that the land is managed responsibly throughout the life of the solar farm to minimise views into the site, enhance botanical biodiversity, improve habitats for wildlife, and allow a continuation of agricultural practices on-site.



Proposal reduced in size significantly
In response to ongoing conversations with the local community, Parish Council and Council staff, a large section of panels has been removed from the design. This has reduced the overall capacity of the solar farm from 11 Megawatts to 4.92 Megawatts and will significantly reduce any views into the site from the surrounding area.

National Trail Undisturbed
The footpath running along the north will be undisturbed. The majority of the path sits behind a thick band of vegetation and will not have views into the site.

Improved Screening
The submitted planning plan proposes a new hedgerow along the length of the most northern field boundaries, between the footpath and the unused field. This will fill the section to the west, which is currently open, and fill any sparse areas along the length of the path. The hedgerow will be managed to a height of 1.8 metres.

Barn Owl Box
A single barn owl box is proposed in the north eastern corner to encourage nesting.

New Hedgerows and Trees
In addition to the new hedgerow along the footpath, new hedgerows comprising dogrose, hawthorn, blackthorn and hazel are also proposed along the application site’s northern and eastern boundaries, as marked in pink.

The proposed hedgerows will be enhanced with crab apple, field maple, oak and silver birch trees to improve the existing natural screening around the site and provide new habitats, food resources and better connectivity for wildlife.

Area removed from the proposal

Bat Boxes
Bat boxes are proposed in mature trees within the hedgerows to encourage roosting.

Sheep Grazing
Species-rich grass will be sown throughout the site, including the areas overseeded by panels. Sheep will graze on the grassland within the solar farm area, giving the land dual usage.

Wild Flowers
Areas of wild flowers are proposed in the side field margins between the perimeter hedgerows, to enhance habitats for birds, bees and other invertebrates.

Improved Hedgerows
The existing hedgerows along the northern and southern boundaries of the solar farm will be strengthened with in fill planting, as marked in yellow.

Rural Fencing
A timber and wire agricultural fence of about 2 metres in height will be used, appropriate to the rural setting. The fence will sit inside the surrounding vegetation, within the current field patterns.

Mammal Gates
‘Mammal gates’ are proposed in the fencing to allow small mammals to move freely across the site undisturbed.

Hawthorn

Kingweed

Crested Dogtail

LIGHTSOURCE