



Case Study

Kings Hill Solar Farm



Summary

- **Location:** Kings Hill, near Maidstone, Kent
- **Capacity:** 3 megawatts
- **Type:** Solar farm
- **Developer:** SAS Energy
- **Owner:** Kent County Council
- **Panel type:** JA Solar
- **Completion date:** October 2023



As Britain's biggest generator of zero carbon electricity we're busy building Britain's own wind, nuclear and solar energy supply to reduce our reliance on energy imports and help prevent future price rises.



Overview

SAS Energy, EDF Renewables' commercial and industrial solar division designed, installed and commissioned a utility scale solar PV project at Kings Hill, near Maidstone, in Kent. The primary objective of the project is to ensure a reliable energy supply to Kent County Council, an organisation that caters to a population of approximately 1.5 million people across 12 districts through its public services, schools, offices, and transportation networks.

In this installation, 6,480 JA Solar PV modules and 24 Huawei inverters were utilised to provide a reliable and secure source of energy. The solar farm is located on 11.9-acre parcel of land and is capable of producing three million kilowatt-hours of renewable electricity annually. This output is sufficient to supply power to approximately 750 homes, effectively mitigating 621 tonnes of CO2 emissions. The project included various measures to protect the area and enhance the surrounding environment. This involved having livestock on-site, creating wild meadows, installing bat and bird boxes and establishing a sanctuary section for reptiles. The ultimate aim is for the area to become a nature reserve after the solar PV installation reaches the end of its lifespan.



Project Summary

SAS Energy has a long-lasting relationship with Kent County Council, having installed various of their high-profile projects, through which they demonstrate their eagerness and persistent initiative in promoting and implementation of renewables throughout the region.

The installation was developed internally to maximise the potential of the site and support Kent County Council's sustainability efforts. LHW Partnership LLP were engaged to undertake project feasibility with included technical, planning and grid connection, and provided technical advisory services

Another challenge was the biodiversity research that took much longer than expected – 10% uplift in biodiversity as per the development regulations.

We initially complete the unexploded ordnance survey as part of the development works prior to build commencing at Kings Hill, the unexploded ordnance survey resulted in a further investigation on site due to 189 anomalies being highlighted in the survey.

A winter installation meant making the ground works difficult/reduced daylight hours.



Outcomes

We are pleased to inform you that the installation and commissioning of this project has been successfully completed by SAS Energy. The site is under a comprehensive operation and maintenance contract, which entails thorough monitoring of the system and reports. Since commissioning the solar PV ground-mount at Kings Hill has been consistently meeting its generation targets, even during overcast days, and has been performing exceptionally well.

Local Benefit

- Offsetting used power, net zero goal to reach emission balance by 2030
- Secure source of energy
- Significant savings

Community Benefit

- Enhanced biodiversity
- Grid balance



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Published in the United Kingdom by Solar Trade Association
6 Langley St, London WC2H 9JA, The Conduit
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