



Renewable energy lighting

One of the UK's most diverse counties encompassing hills, harbours, farmland, and market towns, West Sussex is a county in South East England, on the English Channel Coast and close to the South Downs National Park.

KEY PROJECT REQUIREMENTS

- Lighting solution which uses renewable energy
- Solar-powered lighting suitable for the UK weather
- Dimming options to provide light only when required
- Limit light trespass into residents' properties

West Sussex County Council are committed to developing a secure, affordable, and sustainable energy supply and making use of energy from renewable sources. The County Council admirably generates renewable energy from its land and buildings to reduce energy costs and its impact on the environment in support of the authority's pledge to try to reach net zero carbon emissions by 2030.

From stately homes to breath-taking beaches, nestled in North Bersted is the new affluent Whittaker Grove development of predominantly semi-detached family homes.

Linden Homes tasked COLAS UK infrastructure consultants to find a sustainable and reliable solar-powered lighting solution, suitable for the UK climate and attractive enough for their new housing development: which was finished to a very high standard. Good aesthetics were therefore a must to complement the area.

OUR SOLUTION

35 Defender luminaires were installed at a 6-metre mounting height throughout the development. Designed specifically for the UK market, Defender's large capacity battery with advanced cell technology and large footprint solar panel makes it ideal for the residential location. Its 4000K colour temperature helps to aid feelings of safety and ensures easy facial recognition for those taking an evening stroll.

To optimise the use of stored energy, luminaires were set to a 30-second proximity activation via PIR, with through the night operation and set dimming control, providing light exactly when required.

The Defender luminaires feature adjustable LED arrays, which address the concerns of glare and light trespass; units positioned near properties were adjusted to direct light away from windows with an asymmetric distribution.

Defenders' modern, non-intrusive aesthetics blend into the surroundings unnoticeably and have been commented on by several residents and the local Parish Council.