

Case Study

Milestone Infrastructure

Background

Milestone Infrastructure are responsible for providing maintenance services for highway infrastructure around Hinkley Point C nuclear power station, the biggest building site for a power station in Europe, based in Somerset.

Hinkley Point C (HPC) will make a major contribution to the UK's move to reduce carbon emissions and will deliver low-carbon electricity to around 6 million homes.

The station will offset 9 million tonnes of carbon dioxide emissions a year, or 600 million tonnes over its 60-year lifespan.

Challenge

Milestone Infrastructure Limited and HPC faced several challenges in the implementation of solar lighting solutions:

- **Demanding environment:** at HPC work never stops and a temporary lighting solution was needed to illuminate nighttime working at key points in the site from dusk to dawn.
- **Alternative to diesel lighting towers:** traditional diesel-powered lighting towers were seen as an unattractive option, with high noise levels, the substantial cost of diesel fuel, the requirement for refuelling, and periodic maintenance.
- **Required a sustainable solution:** In a project looking to provide clean energy, they needed a sustainable lighting solution for nighttime work that delivered low-carbon lighting.

We're committed to using innovative solutions, provide safer and greener services to our clients and their customers.

Milestone Infrastructure



The Solution

Prolectric provided tailored solutions to address HPC's challenges:

- Award-winning solar lighting tower:** The ProLight delivers powerful light without noise or emissions and zero-fuel, no-emissions smart solar alternatives to diesel-powered products, accelerating customers away from fossil fuels.
- Autonomous lighting:** Our intelligent products are designed to interpret advanced telematics, historic weather data and GPS location data. They then autonomously adapt based on their remaining battery power, to ensure optimum performance, meaning the lights work all night.
- Comprehensive support:** Prolectric offered unparalleled support from point of sale to

ongoing product assistance, creating a collaborative and trusting relationship.

- Environmental impact:** Prolectric's solar power solutions were acknowledged for their positive impact on reducing carbon footprints across various site locations. This alignment with sustainable practices enhanced the environmental credentials of Askam Plant's operations.

Throughout the winter EDF and Milestone deployed Prolectric products throughout the site, featuring 58 solar-powered lighting towers.

The integration of these solar lighting towers has notably contributed to the reduction of carbon emissions and diesel consumption, leading to substantial cost savings.

Our smart, clean, cost-effective,

and user-friendly technology has presented compelling evidence of carbon savings. Collaborations with Tier 1 contractors showcase the considerable potential to make significant contributions towards meeting carbon reduction targets in the construction industry.



The below results were taken from December 2019 - May 2024

Carbon Savings
1,540,196
kg of CO₂e

Fuel Savings
613,622
litres of fuel

Cost Savings
£1,117,798

Why choose Prolectric?



No Emissions
No fumes or greenhouse gas emissions.



No Refuelling
No fuel costs, spills or refuelling labour costs.



Advanced Technology
Remote control, monitoring and reporting capabilities.



No Noise
Ideal for urban, residential or night time projects.



Minimal Maintenance
Setup and forget technology.



SOLAR TOWER LIGHTING

Milestone Infrastructure are responsible for providing maintenance services for highway infrastructure around Hinkley Point C nuclear power station in Somerset.

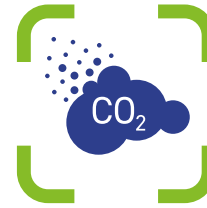
The following results are reported from December 2019 - May 2024.

Assumptions:

- Compared against a popular diesel lighting tower with a fuel capacity of 116 ltr and runtime of 60h, the fuel rate will be 1.93 ltr/h.
- Refuelling a light happens every 116 litres, at a cost of £40 per refuel.
- The average cost of diesel from Dec 2019 to May 2024 is 147.6969 p/ltr taken from (<https://www.gov.uk/government/statistics/weekly-road-fuel-prices>)
- The carbon emission factor of diesel is 2.51 kg of CO₂/ltr (Defra 2023 Emission Factors)

1,540,196

kg CO₂e saved from going into the Earth's atmosphere!



MILESTONE
INFRASTRUCTURE

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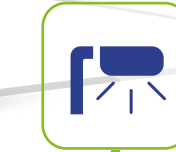
87
UNITS USED
OVER THE
LAST 4 YEARS



60,674
TOTAL DAYS KIT
WAS UTILISED



42,487
KWH
SOLAR ENERGY
GENERATED



317,763
HOURS LIGHTS
WERE ON



£906,204
DIESEL COST SAVINGS



£211,594
SAVED IN LABOUR
COSTS FROM 5,290
REFUELLING TRIPS



613,622
LITRES OF
DIESEL SAVED

£1,117,798
TOTAL SAVINGS

