

Case Study

SPL Powerlines

Background

SPL Powerlines is a leading independent Overhead Line Electrification (OHLE) provider in the UK that carries out all aspects of overhead line construction and maintenance on mainline heavy rail and tram networks. The company has a Principal Contractors License with Network Rail and a track record of successfully delivering large and complex projects throughout the UK, providing turnkey OHLE capabilities across design, installation, commissioning and final testing.

Challenge

SPL Powerlines is committed to achieving net-zero emissions in Scotland by 2045 and by 2050 in England and Wales. To meet this target, the company is moving quickly to remove carbon emissions from across its business and has a detailed action plan for the next two decades as it moves towards net-zero.

Recognising the emissions produced by diesel-powered mobile lighting towers used for night-time trackside work, the company sought a sustainable solution. They invested in a substantial fleet of ProLight solar lighting towers, expanding their total fleet of the ProLights.

These solar-powered tower lights operate year round, emitting no CO₂e and generate no noise. The investment has resulted in significant annual carbon emission savings and cost reductions in diesel expenses and maintenance while gaining remote control and monitoring capabilities through the Smart Remote Portal.

Carbon Savings
279,314 kg of CO₂e

Fuel Savings
104,222 litres of fuel

Diesel Cost Savings
£151,121

Solar Capacity
1,320W



The Solution

The use of diesel-powered mobile lighting towers for night-time trackside work was proving to be a significant source of carbon emissions for SPL Powerlines. They have recently invested in full solar lighting with the purchase of additional ProLight solar lighting towers.

ProLight mobile towers operate entirely from solar power, with no CO₂ emissions and no noise. They work all year-round, even on winter days with 16 hours of darkness, thanks to their 1,320W solar capacity – over three times as large as the nearest competitor.

The Result

SPL Powerlines' investment in ProLight technology will help them to save up to 279,314*⁽¹⁾ kg of CO₂ emissions and £151,121*⁽²⁾ in diesel costs each year. Unlike diesel-powered lighting towers, the ProLight is maintenance and fuel free, as well as being trailer mounted for ultimate mobility.

Every individual ProLight is fitted with a microcontroller, the Prolectric Hub, and GPS tracking, so SPL Powerlines can control the unit remotely and see key data such as power generated, lighting status, carbon and diesel savings using the Smart Remote Portal.



*⁽¹⁾ Based on 8 hours of use each day, 365 days per year when compared to a diesel tower light.

*⁽²⁾ Based on diesel costs at £1.45 per litre (prices correct as of 17/07/2023) using:

<https://www.fleetnews.co.uk/costs/fuel-prices/>

Key Statistics

- Saving 279,314 kg of CO₂e every year
- Saving £151,121 in diesel costs every year
- Saving 104,222 litres of diesel every year
- 1,320W solar capacity
- Adaptable lux levels to suit any application

Why choose Prolectric?



No Emissions
No fumes or greenhouse gas emissions.



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



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



Minimal Maintenance
Setup and forget technology.



Advanced technology
Remote control, monitoring and reporting capabilities.