SHINE A LIGHT! - prolectric

Diesel-Free News From Prolectric

Autumn 2018



Above: Our ProLight trailer lights are being used on the UK's largest highways project. (See inside for full story).

Hello from all the team!

Welcome to our inaugural Prolectric newsletter. We're delighted to bring you news of our rapidly-expanding solar fleet and how we are lighting up construction sites, car parks and streets and all over the UK - all with no diesel, no noise and no polluting emissions!

Things move so quickly here at Prolectric, that we've decided to launch a quarterly newsletter to keep our existing customers, suppliers and stakeholders up to date with all the exciting things that are happening. We hope you find it informative.

A Breath of Fresh Air!

CONCERNS about the health dangers of poor air quality in our towns and cities is putting increased regulatory and moral pressure on contractors to reduce their use of polluting diesel machinery.

But with a such huge array of plant and equipment - known collectively as Non-Road Mobile Machinery (NRMM) – it's not always so straightforward. NRMM engines account for roughly 15% of the nitrogen oxide (NOx) and 5% of the particulate matter (PM) emissions in the European Union – and they are expected to rise as a proportion of total emissions.

Switching to temporary solar lighting, instead of diesel generator lights, is one 'quick-win' that also offers operational and

cost benefits to contractors. We estimate the solar lighting fleet still represents less than 1% of total UK needs. Just imagine the contribution that could be made if more contractors switched over to solar – it's so easy to do!

The problem is, many politicians, policymakers and environmental managers are not yet aware that we have developed solar technology to be 100% reliable all year round. So, we're working hard to make them aware of the contribution it can make.

The solar revolution!

Our Solar Lighting Fleet Has Saved:

E	1 million litres of diesel
	3,000 tonnes of CO2
£	€800.000 of fuel costs



STOP PRESS

In just 12 months

VINCI Construction UK

We are pleased to announce that we have signed a two-year framework agreement to supply ProLight and ProTemp temporary solar lights to VINCI Construction UK across their UK sites. This further cements Prolectric as the leading provider of solar powered lighting in the UK. Congratulations must go to Prolectric's Richard Middlebrook who worked with the team at VINCI to make this a competitive proposition for VINCI, while providing a sustainable solution for their site lighting needs.

- In August we submitted our evidence to the Treasury's inquiry into whether tax-relief offered on red diesel used in many NRMM is disincentivising the use of renewable technologies. Should there be a level playing field for renewables? Watch out for a possible announcement in the Autumn Budget.
- We're actively lobbying the Greater London Authority, where Mayor Sadiq Khan is keen to reduce emissions from NRMM in the capital's Low Emissions Zones.

We'll continue to spread the word – maybe you could help too? Pass this newsletter to colleagues – or maybe even your local MP.

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Saying 'No' to Diesel

The Highways England A14 Cambridge to Huntingdon improvement scheme has become the first UK project to switch to temporary lighting powered by sunshine in preference to diesel. The A14 Integrated Delivery Team (IDT), working on behalf of Highways England, is currently the largest user in the country of solar trailer lights.

Using temporary solar lighting wherever possible will save the UK's biggest road construction project more than 1,000 tonnes of CO2 over the course of construction, contributing significantly to Highways England's environmental impact goals and supporting its commitment to source all project electricity from 100% renewable sources.





A total of 24 Prolectric ProLight solar lighting towers have now been deployed at the three compounds along the construction route between Cambridge and Huntington, illuminating site operations and helping to protect worker safety.

As a result, a saving of 264,000kg of CO2, 98,800 litres of diesel, and £80,454 of manpower costs, has been achieved in the past 12 months.

Highways England Project Director David Bray said:

"Highways England's environmental strategy seeks to help protect, manage and enhance the quality of the surrounding environment.

"The use of Prolectric solar powered lights on the project is an excellent innovative approach by the A14 Integrated delivery team. The use of renewable power sources on the A14 scheme helps us to work in greater harmony with the environment."

Above Top: The A14 Project: Currently the largest user of ProLights Above: Off-grid lights were the solution to providing lighting for construction workers at Williton Park & Ride, Somerset

Flood Response

The Environment Agency (EA) is undertaking trials of Prolectric's innovative solar lighting technology that promise to help emergency responsiveness and protect personnel safety. An almost-eerie quietness prevails at the EA's central Midlands depot at Lea Marston, near Sutton Coldfield.

But should a major flood event affect any part of the UK, this peace will be shattered as the depot springs into life. Operations teams gather and the site transforms into one of a number of strategic hubs. Articulated vehicles circle the access road to collect the pumping equipment and temporary flood defences stored there, before heading to the nearby M42 and on to the wider highways network.

Solar-powered lighting bollards line up along Lea Marston's main access road to provide bright, LED illumination, always ready to guide the safe progress of vehicles



along the river's edge. The bollards are supplied by the UK's leading solar lighting provider, Prolectric. But the bollards are not the only way in which the EA is trialling solar with Prolectric as a means of providing bright, reliable illumination. The EA's flood defences and vehicle compounds are often located in areas with no access to mains electricity. Using solar technology offers a solution to providing safe, bright illumination in remote, rural or difficult-to-access locations, just when it is needed.

"Solar lighting offers a solution to ensuring operational safety with minimal maintenance, no noise or emissions, and no need to refuel as there would be with a diesel tower light. There are 1,000s of such assets all over the Midlands region, and across the UK, and we are now keen to share our experiences of the technology with colleagues."

Environment Agency West Midlands delivery lead, Neil Lote



THE SOLAR REVOLUTION!

Our lights are being put to work on high-profile infrastructure projects around the UK.

"Using the lights has saved hugely on our diesel costs and just as important have been the savings in manpower. The ProLights operate automatically, so we have saved the costs of paying two workers to return to a diesel light and switch it on and off,"

Vinny McCabe, Senior Works Manager A14 project

Light up your street!

Thousands of Prolectric permanent solar-powered lights are lighting up car parks and streets across the UK on a diverse range of projects. Here's just a few of them:

- Our permanent solar street lights have been installed to provide lighting to a large park and ride facility for construction workers at the Hinkley Point C project in Somerset, where there's no access to mains power. Using our high-end AE6 solar lighting technology enables the lights to be monitored and controlled remotely via our web-based portal.
- We're working on a contract with Carillion Amey to replace ageing lights at the Royal Marines Base in Chivenor, providing welcome, safe and bright street lighting for family housing on the base. The contract has enabled street lighting to be replaced safely at a fraction of the cost of mains street lighting, which would have required extensive construction works to lay new cables.

Right: Prolectric Street Lights

 By installing Prolectric solar street lighting, developer Taylor Wimpey South West saved two weeks of construction time and cost on the 700home Somerdale development on the site of the former Cadbury factory at Keynsham, Somerset. Street lights were required for a private driveway serving nine affordable homes and helped ensure a timely handover to Sovereign Housing Association.



Silent Night

Upgrade works at London's Euston station are proving the potential for solar-powered off-grid temporary lighting to contribute sustainability benefits and cost-savings to major infrastructure projects.

Skanska has used Prolectric ProTemp LED solar tower lighting to illuminate night time working and to protect site security in a project to replace and upgrade an electricity substation at Barnby Street, NW1 for Network Rail.

As it does not use mains power, the ProTemp dispenses with the need for a contractor to dig trenches, install trunking or cables and saves significantly on groundworking and installation costs.

Skanska Environmental Manager Richard Cattan said:

"I was familiar with the off-grid benefits of Prolectric solar lighting from previous trials, so I knew that using the ProTemps at Euston would mean we would get reliable site illumination without having to connect to mains electricity, therefore



Above: Safe working with ProTemps at Euston Station Upgrade

achieving a welcome saving in utility charges.

"As the substation site is next to a residential estate, it was also important that we make all reasonable efforts to reduce our impacts, such as noise from generators. The lights were easy to install and avoided pinning cables to the hoarding fence which could be a hazard." Mounted on a concrete base, the standalone ProTemp tower light can be moved into position quickly and easily with a forklift or sack truck. Eight lights will be positioned around the perimeter of the Barnby Street site until the completion of the contract in mid-2018.

Light Bulb Moments!

When Managing Director Chris Williams and Commercial Director Tim Brooks began working on a temporary solar light in 2016 they had an inkling they were on to something – but even they could not have expected the solar revolution about to get underway.



Above: Members of the Prolectric Team

Chris and Tim are the driving forces behind our business. Together they pioneered an approach to solar lighting that is unique, calling on their combined engineering experience of sustainable new product introduction to meet the demanding requirements of the construction industry. They knew that off-grid lighting must first deliver cost and efficiency benefits before its positive environmental contribution could be exploited. It had to be well-engineered, robust and completely reliable. Crucially, the technology also needed to demonstrate hard evidence of all its benefits. Prolectric worked hard to make sure the price points and the costbenefits stacked up against conventional technologies.

As a rapidly-developing privately-owned company, we are sufficiently agile to make new products quickly available in the field. Where other lighting manufacturers and suppliers add a solar product to their range as a 'nod' to environmental interests, we have been completely dedicated to developing, refining and proving our smart, clean technology.

Primed for Growth

Following rapid demand for our ProLight and ProTemp solar lights over the past 18 months, we've doubled the size of our factory. We've taken over the next-door unit to double the production space available and to accommodate our temporary lighting fleet available for hire.

We've also growing our team. Dave Burns joined us to take responsibility for our assembly and installation team. He is a qualified electrician with extensive experience in the renewables field. We have also welcomed Steve Ridley, Assembly Technician, Juan Viamorte, Product Development Technician and John McGuigan, Logistics Manager to help us manage our expansion.

Richard Middlebrook joined us as Business Development Manager with a wealth of experience from the tools, plant and machinery rental sector. He has taken responsibility for our new rental fleet of solar lighting products including the award winning ProLight and ProTemp solar lights.

Welcome aboard guys!





Above: The team enjoy our annual summer fun day

Left: Another consignment of Prolectric ProLights ready to leave our newly-expanded Somerset production facility.

For more news, case studies and blogs, visit the 'stories' section of our website.

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