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Solar-Powered Totem Sign Burger King

Case Study

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Renewable power solutions

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Marlec Engineering is the UK's longest-established renewable energy company, manufacturing wind and solar solutions for off-grid power.

Since 1978, our systems have provided reliable, sustainable energy for Railways, Highways, Utilities, Telecoms, and Marine & Leisure industries. Our solar signage solutions are designed for durability, efficiency, and ease of installation.

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Since 1978

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Case Study

Greenlite partnered with Marlec to deliver a more sustainable and cost-effective solution for illuminating Burger King's drive-thru totem signage. Traditionally, these signs are powered by mains electricity, with supply cables laid underground from the restaurant's distribution board.

The civil engineering work required, such as obtaining permissions, trenching, ducting, and resurfacing, can be both costly and time-consuming.

Client need

- A fully illuminated signage solution without reliance on mains power
- A significant reduction in civil engineering costs
- Minimal disruption to site operations during installation
- Reliable year-round performance

The Challenge

The primary challenge lay in achieving the same level of illumination as a conventional mains-powered sign, without the associated civil works and costs. The system had to be discreet, self-contained, and capable of withstanding the seasonal variations in daylight across the UK.

Solution

Working with Marlec Greenlite developed an off-grid solar solution tailored to Burger King's requirements. Key features included:

- **High-performance solar panels integrated with intelligent charge controllers**
- **Energy-efficient LED illumination matched to the light output of traditional mains-powered signs**
- **Compact control gear housed within the drive-thru sign, ensuring a clean and secure installation**

This design not only delivered operational performance but halved the typical cost associated with installing mains-powered signage.

The Results

The solar-powered totem sign delivers dependable illumination throughout the year. The lighting system is programmed to:

- **Illuminate from dusk until 11 p.m.**
- **Switch on again at dawn to capture early morning traffic**

Despite seasonal daylight changes, the system operates reliably 365 days a year, providing consistent brand visibility without the need for mains power.

Environmental Impact

By choosing a solar-powered solution, Burger King has eliminated the need for traditional civil works, substantially reducing the project's carbon footprint.

The system's off-grid design contributes to long-term sustainability by avoiding emissions linked to construction, materials, and ongoing grid consumption.

Marlec Services

Marlec's team specialises in off-grid renewable energy solutions across multiple industries, including transport, utilities, and signage.

With thousands of systems in operation worldwide, we provide expert design, installation, and ongoing support.

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Discover how Marlec's renewable solutions can enhance your sustainability efforts.

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