



## Background

Astley Signs, one of the leading UK suppliers of commercial signs approached Narec Distributed Energy to help them to identify how renewable energy could be used to provide power to illuminate their signs.

Astley Signs have already reduced power consumption of sign illumination by replacing traditional fluorescent tubes with LED technology. Moving to renewable energy generation will further lower carbon output and reduce energy costs and there will be no cabling requirement to connect the signs to a power supply.

## Project Outline

Narec Distributed Energy carried out a technical and financial feasibility study exploring the integration of renewable energy systems to supply power into signs. Two applications were assessed for using renewable technologies to generate electricity to offset the power used by the signage.

The first application was for a petrol station price display totem and the second application in the form of a 6m x 2.5m LED illuminated retail unit display.

The energy output and financial aspects of these systems was calculated in line with the feed in tariff revenue and compared with energy demands of the signs.

## Project Outcomes

The study found that though the electrical load requirements of signage can be vastly reduced by the introduction of LED's, the potential for illuminating large signs using renewable energy is limited.

Grid connected systems may be suitable in offsetting the energy used by the signs. The grid can be regarded as an energy store.

## *Advancing Renewable Energy*

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