



# CASE STUDY / South Central Ambulance Service Solar Installations On Rapid Reponse Vehicles

## Overview

The ambulance service that covers Oxfordshire, Buckinghamshire, Berkshire and Hampshire is the first in the country to introduce solar panels onto its Rapid Response Vehicles.



South Central Ambulance Service started trialing solar panels in January 2012, and from September 2012 started fitting them on all new RRVs. The panels have been installed on 36 rapid response vehicles to help power defibrillators, satellite navigation and communication devices. These are used to charge the emergency vehicle's secondary battery, which supplies

power to this equipment. The panels will also reduce fuel consumption therefore keeping the vehicles on the road for longer.

Previously, ambulances were forced to let their engines run idle while on standby between emergency calls in order to keep the equipment charged. Engineers at the South Ambulance Service wanted to come up with an idea that reduced the carbon footprint and fuel costs.

It is thought fuel costs will reduce by more than £50,000 over the next five years, while its carbon dioxide emissions will drop by 30.28 tonnes.

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South Central Ambulance Service NHS Foundation Trust is taking the initiative to introduce solar panels to its Rapid Response Vehicles. It will reduce fuel consumption, fuel and battery replacement costs, the trust's carbon footprint and the need for RRV's to return to base to recharge vehicle batteries.

**Brian Miller**

SCAS green team co-ordinator

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## Summary

### Objectives –

- Reduce carbon footprint and fuel consumption/costs on 36 x Rapid Response Vehicles

### Solution Used –

- 2 x Solara S120M36 34W Semi-Flexible Solar Panels (per vehicle)
- 1 x CTEK Smartpass 12V DC Controller (per vehicle)
- 1 x CTEK D250S-Dual 12V 20A DC to DC (per vehicle)

### Benefits –

- Reduction in carbon dioxide emissions by over 30 tonnes
- Reduction in fuel costs by over £50,000 over the next five years
- Reduction in battery replacement costs

