



VERDITEK SOLAR - PROVIDING COST SAVINGS, NET ZERO CARBON SOLUTIONS AND EFFICIENCIES FOR TRANSPORT

Verditek Solar has developed and manufactures a strong, lightweight and flexible solar solution for truck and trailer rooftops, as well as EV charging stations. Our solar modules are ideal for surfaces unable to take conventional solar panels due to loading capacity, profile, or shape constraints.

The **North American Council for Freight Efficiency** states fuel costs account for 25%-40% of the total cost of operating a commercial vehicle. The average cost of operation can be as high as \$0.65 per mile under regular operations and can increase to \$3 per mile when the truck is idling. Truck batteries, normally charged by diesel power, are no longer able to meet increasing power needs of the trucks related to driver comfort requirements, idling reduction regulations and telematics.

The **Committee on Climate Change** has published they recommend that the UK should achieve net-zero GHG emissions by 2050 (i.e. a 100% reduction from 1990). This would be an appropriate UK contribution to the Paris Agreement and means the transport sector needs to look at alternative solutions to diesel. *(Source: Net Zero, the UK's contribution to stopping global warming Committee on Climate change May 2019.)*

Diesel fuel remains the fungible energy of choice for transport and should be reserved for moving goods rather than maintaining conditions. The challenges of idling engines include:

- operational burden of wasted fuel
- environmental and health impact of particulate pollution in urban locations
- increasing threat of fines
- maintenance of diesel engines representing a significant spare parts and manpower burden
- large CO2 footprint.

INSTALLING VERDITEK SOLAR PANELS WILL HELP:

- reduce or remove diesel fuel consumption
- reduce maintenance costs
- help meet clean air regulations and lower emissions
- eliminate idling
- reduce maintenance costs
- reduce need for battery charging with diesel
- help meet cities low emission zones limits: Birmingham, Leeds, Newcastle, Edinburgh, Manchester, Oxford, London.

ROAD TRANSPORT GREENHOUSE GAS EMISSIONS

94%
of the transport
greenhouse gas
emissions are
caused by
road transport

27%
TRUCKS, BUSES, LORRIES



73%
CARS & VANS



Source: European Environment Agency

HOW CAN VERDITEK SOLAR HELP ADD VALUE/MEET ZERO EMISSION TARGETS:

Verditek offer bespoke solutions for your trucks and existing diesel and electrical vans based on your needs and requirements.

Lightweight Verditek panels weigh less than 3Kg/sqm and can be installed on vehicle roofs and trailers with ease.

Low Profile Verditek panels are less than 3mm thick and have passed IEC 61215 and IEC 61730 certification. We work where others can't.

Flexible High efficiency mono crystalline cells are integrated into a lightweight polymer laminate to make a flexible panel that can be easily installed on curved and non-rigid structures.

Easy Installation No holes, no heavy supporting structures required. Verditek panels can be simply attached or integrated on the truck or transport container with clamps, glue or Velcro. These are out of sight and silent.

Higher generation Verditek panels can be manufactured to order in different sizes that provide maximum coverage for limited surfaces. The panels have been developed in multiple colours which are easy to install and require no mechanical maintenance.

Hard wearing and weather resistant Verditek panels have been rigorously tested to withstand hailstorm, snow, branches, vibrations and truck washes.

THE VERDITEK SOLAR 'ONE STOP SHOP' SOLUTION

Verditek Solar offers a complete end to end solution to the client and a secure and trusted progression to savings.

These include the 5 steps:

1. Design
2. Permissions and Procurement
3. Installation (mechanical and electrical)
4. Commissioning and Connection
5. Operations and Maintenance and Monitor

Verditek Solar products are certified with TÜV InterCert to the IEC 61730 and IEC 61215 standards.



Verditek Solar Panels come with up to 10-year product guarantee and up to 20-year performance guarantee.

CASE STUDY - REFRIGERATED TRUCKS:

Truck savings & payback	
Average truck mileage per year	100,000
Fleet size (# trucks)	1000
Savings battery life	£193
Fuel savings via reduced idle time	£3,447
Fuel savings due to solar production while moving	£499
Total cost savings per truck per year	£4,138
Payback period (in years)	1.74
Savings for Fleet of 1000 Trucks	£4M
CO ² Reduction (Tonnes)	4.65
Fleet CO ² Reduction (Tonnes)	4,650



MOBILE



LIGHTWEIGHT



FLEXIBLE



LOW PROFILE

TALK TO US TODAY TO INCREASE SAVINGS AND MEET REGULATORY STANDARDS ON YOUR PREMISES.

VERDITEK SOLAR

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