



# Solar Solutions for Commercial Performance

Efficient, resilient power  
for long-term value

[www.tsg-solutions.com/uk](http://www.tsg-solutions.com/uk)



# Clean Energy That Works for Business

Control energy costs. Improve performance



Delivered by TSG Solar, our integrated photovoltaic and battery storage systems (BESS) support commercial and industrial operations across the UK, helping reduce energy costs, strengthen resilience and demonstrate responsible environmental leadership.

We design, install and maintain solar PV systems, battery energy storage and associated electrical infrastructure, enabling organisations to take control of their energy strategy with reliable, future-ready solutions.

Businesses are facing increasing pressure to adopt sustainable technologies that offer practical, long-term benefits. Solar PV has become one of the most effective ways to achieve this, delivering predictable electricity at a far lower cost than grid-supplied power. When combined with battery

storage, enterprises can operate with greater confidence, reducing exposure to fluctuating tariffs and strengthening business continuity.

## Why Solar Matters Today Reducing Costs, Building Resilience

Electricity prices remain unpredictable as demand grows across sectors, including logistics, data centres, food production and transport. Many businesses are already operating close to their maximum grid capacity, while others face extended lead times for upgrades. Solar shifts energy generation on site, allowing companies to produce electricity at source and reduce reliance on external markets.

Battery storage amplifies this impact. By capturing surplus energy during daylight hours and using it when tariffs peak, companies achieve greater control and secure long-term financial stability. Solar also supports Environmental, Social and Governance (ESG) commitments, improving credibility with partners, investors and local communities.

Decentralised, low-carbon energy is no longer a distant ambition. It is a strategic necessity.





# About TSG Solar

## Specialist delivery for a low-carbon future

TSG Solar is a specialist division of TSG UK, delivering engineered solar PV and battery energy storage solutions that support industrial performance and commercial value. We serve logistics hubs, cold storage facilities, manufacturing plants, business parks, retail estates and public infrastructure.

### Why choose TSG Solar

- Full EPC and ICP capability from assessment to energisation
- NERS accreditation with Lloyd's Register oversight
- National delivery supported by in-house civils, cabling and electrical installation
- Data-led designs aligned to operational and financial goals
- Comprehensive service and maintenance for predictable long-term performance

### Integrated Delivery

We coordinate every stage of a project, combining solar PV, BESS, high-voltage (HV) systems and electric vehicle (EV) charging within a single managed programme. This reduces risk, accelerates delivery and ensures accountability across all works.

### Skerritts, a TSG company

Skerritt Electrical Ltd strengthens delivery with specialised electrical design and contracting. Its accreditation portfolio and long-standing reputation support TSG's commitment to quality and safety.

### Independent Connection Provider (ICP) Capability

#### Simplifying Connections, Strengthening Reliability

Securing or upgrading a grid connection is often the most complex aspect of any energy project. As a fully accredited ICP, TSG delivers contestable works under the National Electricity Registration Scheme (NERS), ensuring compliant and efficient grid connections for solar PV, BESS and EV charging.

#### Why ICP matters

- Faster routes to energisation
- Greater flexibility over programme planning
- Clearer cost management
- A single accountable provider from application to commissioning

### How TSG supports grid readiness

We manage feasibility studies, load calculations, civil works, trenching, cable laying, switchgear installation and documentation. Our dedicated teams work with Distribution Network Operators (DNOs) and Independent Distribution Network Operators (iDNOs) to secure approvals and streamline delivery.

Access to reliable, well-planned infrastructure ensures long-term security for solar generation, battery operation and future expansion.



# Solar PV for Commercial and Industrial Sites

## Practical, Scalable Solutions for Large-Scale Operations

Solar offers a practical route to lower energy costs and improved resilience. With large rooftops, open yards, and canopy structures, commercial sites are well-suited to solar installations that deliver substantial annual savings.

### How TSG delivers solar projects

Every project starts with survey work, structural analysis and detailed energy profiling. Designs are customised to meet demand and engineered to maximise output. Whether rooftop-mounted, ground-based or integrated into solar carports, systems are designed for durability and long-term operation.

### Solar carports

Carports transform unused parking areas into productive energy assets. These structures generate clean power while providing shelter for vehicles. For fleet operators, solar carports support electrification by pairing generation with on-site charging.

#### Key benefits

- Lower electricity costs
- Reduced dependence on grid supply
- Improved sustainability credentials
- Scalable, future-proof energy infrastructure

## Battery Energy Storage Systems (BESS) Flexible Power That Works Around Your Business

BESS allows businesses to store electricity for later use, enabling peak shaving, load shifting and backup power. This is particularly valuable for sites with high daytime load or operations that must remain stable during outages.

#### Why storage matters

- Captures surplus solar generation
- Protects against tariff increases
- Provides continuity during supply interruptions
- Supports participation in revenue-generating grid services

#### Technology for long-term value

We select deep-cycle lithium iron phosphate batteries for their long lifespan, low maintenance requirements and proven safety. These systems deliver consistent, steady output even under frequent cycling conditions.

#### Supporting the grid

By reducing peak loads and smoothing demand, BESS plays an important role in reinforcing grid stability and accelerating renewable integration across the UK.



# Cold Storage: A High-Impact Solar Opportunity

## Continuous Power for Temperature-Critical Environments

Cold storage facilities are among the most energy-intensive sites in the UK. Large flat roofs, continuous refrigeration demand and rising energy costs make them ideal candidates for solar PV and BESS.

### TSG's approach

We conduct detailed structural surveys, assess load patterns and design high-capacity systems tailored to the operational profile of cold storage environments. Pairing solar with BESS allows operators to use stored energy overnight and during peak windows, protecting the integrity of temperature-controlled goods.

### Commercial impact

- Lower operating costs in a high-consumption environment
- Reduced exposure to market volatility
- Increased resilience during grid disturbances
- Strong environmental credentials for supply chain partners

## Solar for Small and Medium-Sized Enterprises

### Scalable Energy Solutions for Growing Businesses

Solar is no longer limited to large industrial estates. Businesses across retail, leisure, office parks and light industrial sites now have access to systems that are affordable, scalable and simple to maintain.

### Why SMEs are embracing solar

- Business rates and energy costs continue to rise
- Rooftops are often underused assets
- Grants and tax incentives reduce upfront costs
- Solar projects provide immediate, visible return

### TSG's SME service model provides:

- Streamlined surveys and feasibility assessments
- Clear financial modelling tailored to smaller budgets
- Compact systems designed for minimal disruption
- Optional storage for improved independence

For SMEs, solar is both a cost-saving measure and a practical route to stronger sustainability credentials.



# Return on Investment (ROI)

## Long-Term Value from On-Site Generation

The commercial case for solar has never been stronger. Panel prices have fallen significantly, while electricity costs continue to rise.

### What shapes ROI

- Annual energy consumption
- Available roof or ground area
- Time-of-use tariffs
- Storage capacity
- Operational hours and future expansion plans

Many TSG clients achieve payback within five to seven years. Beyond that point, energy produced is essentially cost-free, supporting long-term financial planning.

### Storage increases ROI through:

- Peak shaving
- Enhanced self-consumption
- Guaranteed continuity during outages
- Access to grid service revenues
- Reduced exposure to market shocks

Solar and storage offer predictable, future-proof value in a volatile energy environment.

### Service and Maintenance

#### Protecting Performance Throughout the Asset Life

Long-term performance relies on effective maintenance. TSG provides preventive and corrective support across solar PV, BESS, HV systems and EV infrastructure.

#### Planned maintenance includes:

- Panel inspections
- Inverter analysis
- Thermal imaging
- Voltage and current checks
- Roof condition review
- Energy production reporting
- Cleaning as required

Our teams monitor performance remotely, respond quickly to faults and ensure compliance with safety standards and warranty obligations.

# Case Study for National Forecourt Operator

## Solar Photovoltaic (PV) and Electric Vehicle (EV) Charging Upgrade for a Modernised Forecourt



### Client Full Name:

National Forecourt Operator

**Location:** Midlands area

**Services:** Solar PV installation, inverter system integration, EV charging installation, project management, commissioning

**Supplier:** TSG UK Solutions Ltd – Solar

### The Project

A national forecourt operator appointed TSG Solar to support the modernisation of one of its key highway sites. Originally operating as a fuel only station, the site was selected as a pilot for the operator's move towards cleaner energy and mixed-fuel forecourts.

The operator aimed to create a future ready site that combined traditional fuelling with low carbon technologies. This included installing rooftop solar photovoltaic (PV) panels, high efficiency inverters and fast electric vehicle (EV) chargers, all delivered without interrupting daily operations.

TSG Solar was tasked with providing the complete renewable energy package to reduce reliance on grid power, support rising EV demand and improve the site's environmental performance as part of a wider sustainability programme.

### The Solution

TSG managed the full programme from design to commissioning, working around live fuel operations and strict safety protocols. Key elements included:

- **Rooftop solar PV system** Solar panels and optimised inverter technology were installed to maximise energy generation throughout the year.
- **SolarEdge inverter integration** Modular inverters were selected for their high efficiency and real time performance monitoring.
- **Fast EV charging infrastructure** Two 300 kW DC chargers were installed, creating four dedicated charging bays positioned for safe traffic flow.
- **ATEX-compliant coordination** All works were integrated with existing fuelling systems while maintaining full site operations.
- **Comprehensive project management** TSG oversaw all subcontractors and phased the works to avoid disruption during busy periods.

The solar system now powers the EV chargers and contributes to the forecourt's general electrical load, reducing energy costs and grid dependency.

### The Result

TSG delivered a fully integrated renewable upgrade that has transformed the forecourt into a modern, low carbon site. The solar installation now supplies a significant share of daytime energy, while the high capacity chargers provide reliable EV charging on a major UK route.

The operator praised the quality of installation and the seamless coordination between trades. Following the success of this pilot, further sites are now being considered for solar PV, battery storage and EV charging upgrades.

## TSG UK Solutions

TSG delivers integrated solutions that support the design, delivery and operation of modern energy and transport infrastructure. From electric vehicle charging and sustainable fleet depots to multi energy refuelling, solar PV, battery storage and high voltage connections, TSG provides scalable systems built to meet today's demands and evolve for the future. Our expertise spans forecourts, convenience retail and commercial sites, combining smart payment and control technologies with engineering, installation and ongoing service and maintenance support. Covering everything from energy generation and distribution to fuel, car wash and site optimisation, TSG enables businesses to operate efficiently, securely and with confidence across an increasingly complex energy landscape.

### Get in touch



Move with TSG  
Energize your future

T : 0333 015 3001 E : [enquiries.uk@tsg-solutions.com](mailto:enquiries.uk@tsg-solutions.com)  
[www.tsg-solutions.com/uk](http://www.tsg-solutions.com/uk)

