

Solar Management

Maximize the **self-consumption** of on-site **solar energy** through intelligent coordination. This includes optimizing **EV charging**, battery storage, and grid usage.

Why Solar Management Matters

On-site **solar generation** is most valuable when it is used intelligently. Without proper coordination, facilities miss critical opportunities to optimise their energy assets and **reduce operational costs**.

Without Coordination

- Excess energy is exported at low value
- Grid imports remain high
- Peak demand costs increase
- Charging capacity is underutilised

With Solar Management

Solar management transforms generation into **real savings** and **revenue**. By intelligently coordinating energy flows, facilities can capture the **full value** of their **solar investment** whilst **reducing dependence** on **grid power**.



Maximising On-Site Solar Value

Self-consumption optimisation ensures that every kilowatt-hour of **solar energy** generated on-site is put to its highest and best use. Rather than exporting excess power to the grid at reduced rates, intelligent systems direct **solar energy** where it delivers **maximum value**—powering **EV charging** sessions, supporting facility loads, and **reducing costly grid imports**.

Prioritise Solar for EV Charging

Direct **clean energy** to charging infrastructure first, ensuring vehicles are powered by **renewable sources** whilst maximising the **return on solar investment**.

Power Local Site Loads

Use solar generation for facility operations, lighting, and equipment, reducing overall **grid dependency** and lowering energy bills.

Minimise Grid Export

Reduce the amount of solar energy exported to the grid at lower compensation rates, keeping value on-site where it matters most.

Increase Investment Returns

Accelerate payback periods and **improve overall ROI** by ensuring solar assets deliver maximum financial benefit through intelligent usage coordination.

Intelligent Energy Coordination

Effective solar management requires seamless coordination across all energy assets. Modern **energy management** systems automatically balance **solar generation**, battery storage, **grid power**, and **EV charging** demand in real time, ensuring optimal performance under all conditions.

This intelligent orchestration eliminates the inefficiencies of isolated systems, creating a unified energy ecosystem that responds dynamically to generation patterns, load requirements, and economic signals. The result is stable, efficient operation even during periods of **variable solar output** or unexpected demand spikes.



Solar Generation

Continuous monitoring of output and availability



Battery Storage

Dynamic charge and discharge management



Grid Connection

Optimised import and export timing



EV Charging

Intelligent load distribution and scheduling

The system automatically shifts loads based on **solar availability**, ensures stable operation during variable generation periods, and optimises energy usage in real time—all without manual intervention.

Driving Down Operating Costs

Solar management delivers **tangible cost reductions** across multiple dimensions of facility operations. By intelligently coordinating **solar generation** with **EV charging** and other loads, facilities can dramatically reduce their **energy expenses** whilst improving overall operational efficiency.



Reduced Grid Energy Imports

By powering facilities directly with solar, dependency on the grid is significantly lowered, leading to direct savings on electricity bills.



Minimised Peak Demand Charges

Smart energy management systems intelligently shift loads to avoid costly peak demand periods, optimizing energy usage and reducing charges.



Lower Infrastructure Costs

Integrating solar with EV charging creates a cost-effective setup, reducing the need for expensive grid connection upgrades and maximizing investment.



Improved Asset Utilisation

An integrated energy system ensures optimal use of solar, battery, and EV chargers, leading to greater efficiency and value from existing assets.

The financial benefits extend beyond simple energy savings. **Reduced peak demand charges, lower grid connection requirements**, and improved asset utilisation all contribute to a **stronger bottom line**. Over time, these savings compound, significantly improving the **total cost of ownership** for EV charging infrastructure and solar installations.

Reducing Grid Dependency

Many EV charging sites face challenges with weak or limited grid connections. **Solar management** systems enable efficient operation even under these constrained conditions, reducing reliance on **grid power** and increasing **site resilience**. This capability is particularly valuable in locations where grid upgrades are expensive, time-consuming, or simply not feasible.

Minimise Grid Reliance

Operate charging infrastructure with significantly reduced grid power requirements, leveraging **solar generation** and **battery storage** to meet demand.

Support Constrained Connections

Enable robust EV charging even on limited grid connections by intelligently managing available power and coordinating with on-site generation.

Increase Site Resilience

Build operational flexibility and reliability through diversified energy sources, ensuring charging services remain available during grid disruptions.

Avoid Upgrade Costs

Eliminate or defer expensive grid infrastructure upgrades by maximising the value of existing connections through intelligent energy management.

This independence from grid constraints unlocks charging opportunities in previously challenging locations, expanding the reach of EV infrastructure whilst controlling capital expenditure.

Enabling Sustainable Charging



Solar management systems prioritise **renewable energy** sources, ensuring that **EV charging** operations align with **sustainability objectives** and **low-carbon goals**. By maximising the use of clean, on-site generation, facilities can dramatically increase the proportion of **renewable energy** used for charging whilst meeting increasingly stringent environmental standards.

This capability supports comprehensive **sustainability strategies**, providing the data and control necessary for accurate reporting, ESG compliance, and regulatory alignment. Facilities can demonstrate genuine environmental progress, moving beyond aspirational statements to measurable reductions in carbon intensity.



Increase Renewable Share

Maximise the proportion of charging energy sourced from on-site **solar generation**



Support Low-Carbon Strategies

Enable targeted carbon reduction initiatives with intelligent **renewable prioritisation**



Improve Reporting

Generate accurate **sustainability metrics** and comprehensive environmental performance data



Align with ESG Goals

Meet corporate **sustainability commitments** and regulatory requirements with confidence

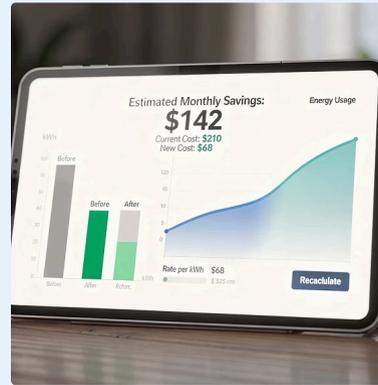
Transforming EV Charging Sites

Solar management fundamentally transforms the economics and performance of **EV charging** operations. By intelligently coordinating **generation**, storage, and demand, facilities achieve outcomes that would be impossible with conventional approaches.



Higher Charger Utilisation

Support more **charging sessions** without **grid constraints** or demand charge penalties



Lower Energy Costs

Reduce the **cost per charging session** through **optimised solar usage** and smart grid management



Improved Solar ROI

Accelerate payback periods by maximising **self-consumption** of generated power

The benefits extend beyond pure economics. Sites with **solar management** deliver more predictable performance, reducing operational uncertainty and maintenance requirements. Customers and partners recognise the commitment to sustainability and operational excellence, enhancing brand perception and competitive positioning.

This comprehensive value creation—spanning financial performance, operational reliability, and market perception—makes **solar management** an essential component of **modern EV charging infrastructure**.

An Integrated Energy Ecosystem

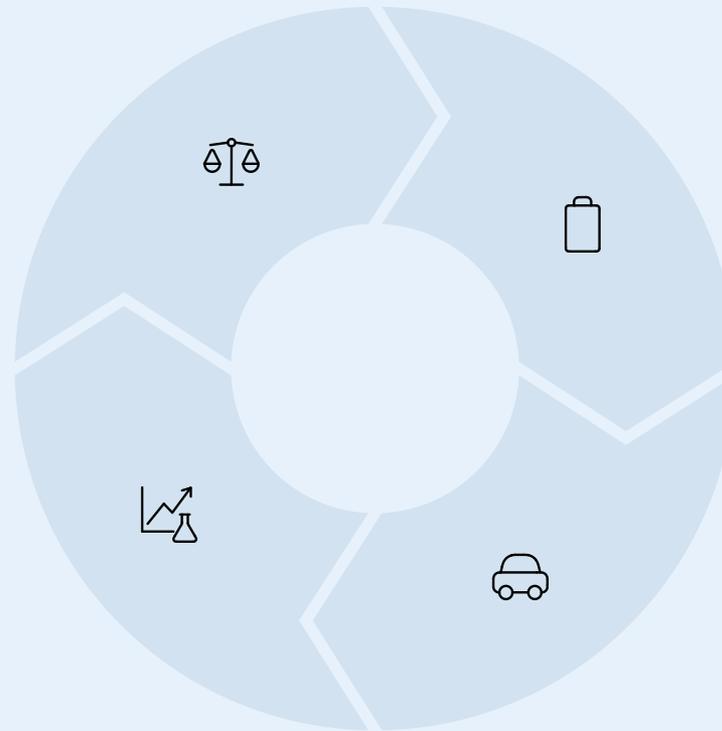
Solar management delivers maximum value when fully **integrated** with all aspects of **site energy operations**. Rather than treating components as isolated systems, leading facilities deploy **unified platforms** that **coordinate** every element of their energy infrastructure.

Load Balancing

Dynamic distribution of power across multiple chargers and site loads

Energy Monitoring

Comprehensive analytics and reporting across all energy assets



Battery Management

Intelligent charge and discharge cycling to maximise storage value

EV Charging Operations

Seamless coordination of charging sessions with available generation

This **integrated** approach eliminates the inefficiencies and complexity of managing separate systems. One **coordinated platform** provides complete visibility and control, enabling **sophisticated optimisation strategies** that would be impossible with fragmented solutions. The result is superior performance, reduced operational burden, and dramatically improved outcomes across all metrics that matter.

The Future of On-Site Generation

Solar energy is most powerful when managed intelligently. The difference between basic solar installation and sophisticated solar management is the difference between generating electricity and creating value. With smart coordination, solar becomes far more than a sustainability statement—it becomes a fundamental competitive advantage.

1

Cost Reduction Tool

Deliver **measurable savings** across energy procurement, demand charges, and operational expenses

2

Charging Enabler

Unlock **charging capacity** in grid-constrained locations and support **higher utilisation rates**

3

Sustainability Driver

Maximise **renewable energy** usage and demonstrate **genuine environmental progress**

4

Infrastructure Pillar

Establish the foundation for **resilient, efficient, and future-ready EV operations**

Forward-thinking facilities recognise that solar management is not optional—it is **essential infrastructure** for **competitive EV charging operations**. As the industry evolves and expectations rise, the gap between managed and unmanaged sites will only widen. The time to implement intelligent solar coordination is now.