

# Konect

## End-to-End Energy Management Solution

Drive Profitability and Secure Energy Resiliency



# Energy optimization at your fingertips.

Gain actionable insights into your site's energy usage and consumption and optimize your energy needs with Konec's robust Energy Management System.

At Konec, we help EV site operators secure energy resiliency and drive profitability.

With an increased demand for EV charging comes a new challenge: coordinating onsite energy use and consumption to ensure an optimized balance between grid stability, cost, and sustainability.

The Konec Energy Management System (EMS) enables real-time power monitoring to control your EV charging network for optimal economics and an ideal customer experience. Our AI-driven smart energy management software directs its proprietary controller to facilitate seamless and continuous communication between all onsite assets and the grid for multiple use cases —performed automatically and simultaneously — resulting in maximum value and peace of mind for site owners.

As we continue along the path of EV adoption, Konec's differentiated solution enables fleets, fueling stations, charge point operators (CPOs), and other businesses to be successful in the electric transition.

## Addressing CPOs' energy management pain points

A mismatch between energy demand, infrastructure constraints, and fluctuating energy prices creates multiple pains for CPOs:



**Volatility** in energy prices results in an inability to maintain consistent target margins.



Grid-import **regulations** can cause a degradation in the level of service to customers.



Limitation in **grid capacity** affects the flexibility of new site deployments.



Limited alignment between solar energy and EV charging sessions results in a missed opportunity to **reduce energy costs**.



# A use case for all your sites' energy management needs.

With Konect, you'll have the business intelligence you need to make informed energy management decisions that will move your business forward.

Konect's EMS controller takes solar forecasting and production data into account and captures real-time site and grid energy use in sub-second intervals.

Our intelligence analyzes the data and dynamically assigns power according to a customized business plan. Konect's EMS connects with all site assets and communicates with all onsite assets via meters.



Our AI-driven prediction tools trigger automatic controls in a **variety of use cases** that help sites become more cost-effective and profitable:



## EV Load Management

Maximize charging power while maintaining energy shifting and peak shaving. Enable Dynamic Power Allocation via continuous operation of the electrical infrastructure.



## Ancillary Services

Capitalize on your installed assets such as solar inverter, grid connection, EVSE, and energy storage to create new revenue streams from the local energy market.



## ESS Controller

Storage controller for power functions supports renewable integration, load shedding, load shifting, and peak shaving. Driven by energy rate optimization.



## Site and Network Power Distribution

Visualization of single or multiple sites, for data intelligence based on energy sources and destinations.



## Site Power Management

Direct available on-site power towards charging equipment while supporting the site's general loads.



## Renewable Integration

Integrate renewables to optimize energy usage and leverage solar PV for self-consumption and energy markets.



## Dynamic Import and Peak Shaving

Monitor and optimize the grid connection, balance varying tariffs and mitigate demand charges.



Connect to a turnkey

# Energy Management Solution

## EMS Software

Konect's AI-driven smart energy management software directs its proprietary controller to facilitate seamless and continuous communication between all onsite assets and the grid for multiple use cases—performed automatically and simultaneously—resulting in maximum value and peace of mind for site owners.

## Site Controller

The local Konect control center helps maximize the value of your energy assets on site and facilitates seamless and continuous communication between individual sites and the grid while simultaneously optimizing communications between single-distributed energy resources on a specific site.

## 2<sup>nd</sup> Life Battery System

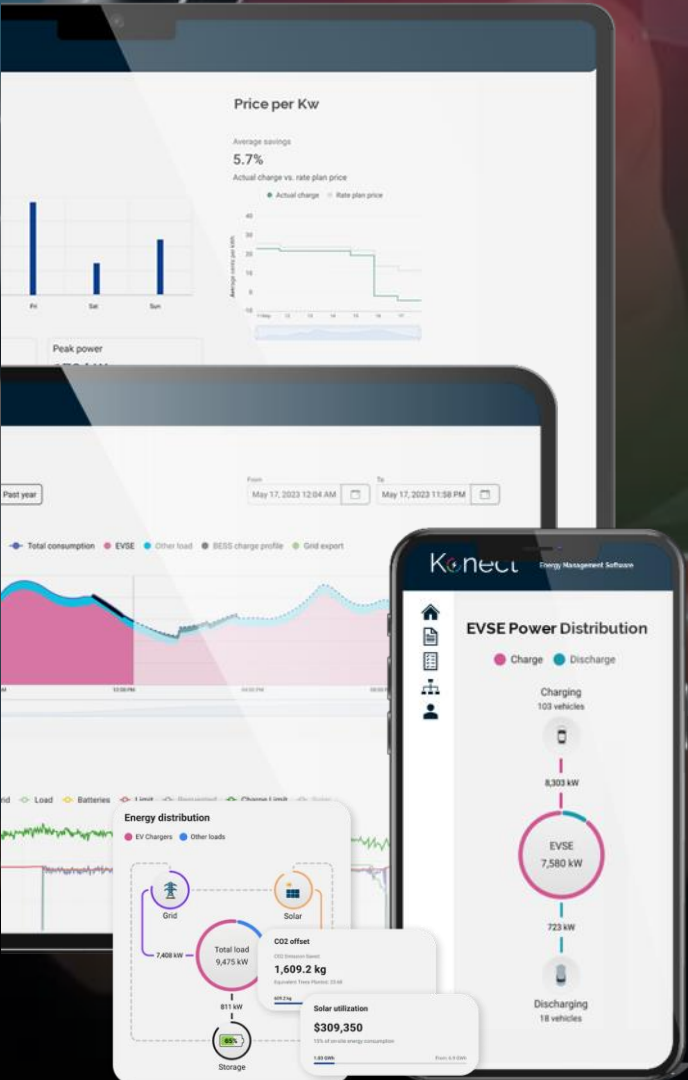
Konect's revolutionary BESS technology helps CPOs, automakers and fleet operators get the most out of second-life EV batteries by generating more energy per cycle to reduce BESS cost-per-kWh by as much as 60% while cutting Capital Expenditure costs to half of competitive solutions.

## Why choose Konect?

- Optimized, customized energy use and consumption
- Monetized energy assets for additional revenue streams
- Mitigated demand charges and energy savings
- Operational cost savings
- Increased charging network profitability
- Informed planning and scaling
- Increased site capacity
- Real-time monitoring and communication
- Flexible API for third-party interconnections
- 100% system uptime
- Valuable business intelligence

# Features

Offering you an advanced suite of functionality.



## Power Assist

Offer fast-charging services even if your operation is located where the grid can't provide enough power. Konect's EV charger EMS integrates with your energy storage to supplement grid power where capacity is limited. This delivers more energy and allows more customers to charge up quicker without making expensive infrastructure upgrades. Leverage personalized algorithms for your business model to prioritize power boosts to the first customer in line, or VIP guests.



## Load Shifting

By charging your battery using grid power at times when electricity costs less, you can lower your operational expense. Konect's EMS automatically optimizes your charging and discharging to ensure reliable, cost-effective operation of all your site assets based on varying prices, renewable production, changing loads and available grid capacity.



## Peak Shaving

Demand charges are typically based on your highest level of grid use during a billing period. Konect's EMS helps align your business operations with grid conditions, ensuring your battery charges before and deploys during your peak demand times to reduce your grid consumption and avoid extra utility costs for the highest profit margins.



## Ancillary Services

Increase the value of your onsite renewable energy, EV chargers and energy storage system by participating in grid programs. Konect's EMS integrates with all your site assets and uses real-time insight to automatically bid into these programs when opportunities arise, so you can generate additional revenue while seamlessly maintaining your everyday operations.

# Konect helps you achieve your site goals by coordinating your energy consumption and uses among different devices.



## Load Profiling

Often, business owners don't know how they are using power, from what source, and when they are experiencing peak demand. All of this can result in high utility charges and blindly investing in additional infrastructure they may not need. Konect provides a deep understanding of your site's current and historical power usage, helping you make informed decisions about adding additional assets like energy storage and renewables, as well as renegotiating utility contracts or moving to a different utility rate.



## Renewables Integration

Konect's EMS communicates with your onsite renewable energy and storage systems for maximum benefits. For example, charging your battery with solar power offers a cost-effective alternative when the price of grid electricity peaks. Konect helps find the best way to bring renewables into your customized operational model to add more value to your business and achieve sustainability goals that align with those of your customers.



## Peak Load Forecasting

Understanding when your site uses the most electricity is critical for avoiding demand charges and high utility bills. Predicting future demand patterns can inform your operational and capacity planning decisions. Konect helps you analyze your site's energy use (from EV chargers, renewable assets, batteries, and more) for a comprehensive understanding of traffic patterns. This intelligence directs the EMS to better prepare by automatically implementing—and continually refining—a personalized site plan. With efficient, optimized energy usage and consumption, you enjoy maximum available power with minimal operational energy costs.



## EVSE Max Available Power

With a capped amount of electricity to work with on your grid-connected site, every kilowatt must count. When Konect's EMS detects available power in real-time, it puts it toward good use at charging ports so that nothing is wasted, and extra power becomes profit.



## Breaker Protection

When your EV chargers need more power than the grid can provide, the breaker can trip, shutting down your site and your business. While battery backup power can avoid shutdowns, energy storage must be properly managed to kick in at the right times. Konect's EMS and controller solution uses real-time, meter-fed site and grid data to determine when additional power is required and directs the battery to discharge. Even in the event of a battery error, the EMS will ensure your chargers stay online to ensure power resilience so you can build a reputation for reliable service.



## EV Load Management

Managing your EV charging is critical for reliable, cost-effective operations. Konect's EMS enables real-time power monitoring to control your EV charging network for optimal economics and an ideal customer experience.

# Energy Management Solution

**Choose Konec.**

Find out how your forecourt or fleet depot  
could benefit from our end-to-end  
EV charging ecosystem solutions.

Europe:  
North America:

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[www.gilbarco.com/us](http://www.gilbarco.com/us)

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