CASE STUDY

Case Study: Unlocking Velo Solar
ROI Through eGauge Systems
and LCOE.ai

LCOE.ai   **Velo Solar**

Partnership Background

LCOE.ai integrates eGauge Systems' smart meters into its AI Data Foundation, aggregating and contextualizing energy data to provide actionable insights for asset owners. Their platform prioritizes alerts, optimizes workflows, and quantifies savings, making energy management more efficient and profitable.

Velo Solar, a top solar EPC based in the Southeast with projects nationwide for clients like Cox Enterprises, Inc., uses eGauge meters through LCOE.ai to monitor solar production, building energy use, and individual systems like lighting and HVAC.

By leveraging this integration, Velo Solar delivers measurable results and enhanced value to its customers, including ROI validation, energy efficiency verification, and regulatory compliance reporting, such as GHG emissions reporting.

Overview

eGauge Systems partners with **LCOE.ai** to provide advanced smart energy monitoring systems that power LCOE.ai's AI-powered analytics platform. This collaboration enables customers like **Velo Solar** to optimize energy performance, validate efficiency upgrades, and demonstrate measurable ROI. The partnership between LCOE.ai and eGauge Systems serves companies like Velo Solar by highlighting how combining reliable hardware, intelligent analytics, and expert energy management delivers tangible results for commercial and industrial asset owners. Customers benefit from clearer insights, improved decision-making, and measurable ROI and sustainability outcomes.

Why eGauge Systems?

eGauge Systems was chosen for its combination of reliability, flexibility, and scalability. Their smart meters are IP-based, capable of monitoring diverse energy sources, multiple loads, and inverter platforms across large portfolios. The devices are cost-effective alternatives to traditional SCADA systems, requiring minimal installation and training while providing long-term data storage of over 30 years.

Key reasons for selecting eGauge:
- Robust and reliable IP-based meters for diverse energy applications.
- Cost-effective solution with easy installation.
- Long-term historical data enables detailed analysis of asset performance and efficiency improvements.

Objectives

The partnership focuses on demonstrating the value of integrating eGauge smart meters with LCOE.ai's AI-driven analytics. The goals include:
- Providing quantifiable energy and cost savings for asset owners.
- Standardizing reporting across multiple sites for scalable portfolio management.
- Supporting regulatory compliance and sustainability initiatives, including tracking renewable energy credits (RECs) and carbon offsets.

> "We've been using eGauge for over a decade—it's a rock-solid, IP-based meter with great functionality. It's been essential for validating solar investing, energy efficiency upgrades, and demonstrating ROI to our customers."

Mark Bell, President, Velo Solar

Solution Implementation

Velo Solar deployed eGauge meters through LCOE.ai across more than 100 sites, monitoring hundreds of energy loads. The installation was straightforward, and systems became operational within months with minimal training. LCOE.ai's AI Data Foundation then aggregated and contextualized the data, providing actionable insights for energy offsets, predictive maintenance, and workflow optimization.

Results and Benefits

Customers using eGauge devices through LCOE.ai and Velo Solar have achieved measurable financial and operational benefits. For example, **some clients saw energy savings of $7,000–$9,000 in just 10 days, and $58,000 during a peak month**. LCOE.ai's analytics streamline alerts and work order management, improving workflow efficiency and reducing unnecessary interventions.

Additional benefits include:

- **Enhanced Customer Value:** Delivers clear ROI and compliance reporting, with automated tracking of solar and building loads across hundreds of sites—a major benefit for large portfolios with strict GHG requirements.
- **Scalability:** Standardized monitoring allows analytics to be deployed quickly and consistently across multiple locations.
- **Regulatory and Sustainability Compliance:** Provides accurate REC, carbon offset, and generation data to support major sustainability reporting frameworks.
- **Data Reliability and Cost-Effectiveness:** AI-driven analytics paired with robust meters offer a flexible, lower-cost alternative to SCADA, while also enabling utility billing validation—including one case where a customer secured a $25K credit after identifying an overcharge due to a problem with a transformer.

🕐 ## 13-15% Time Savings

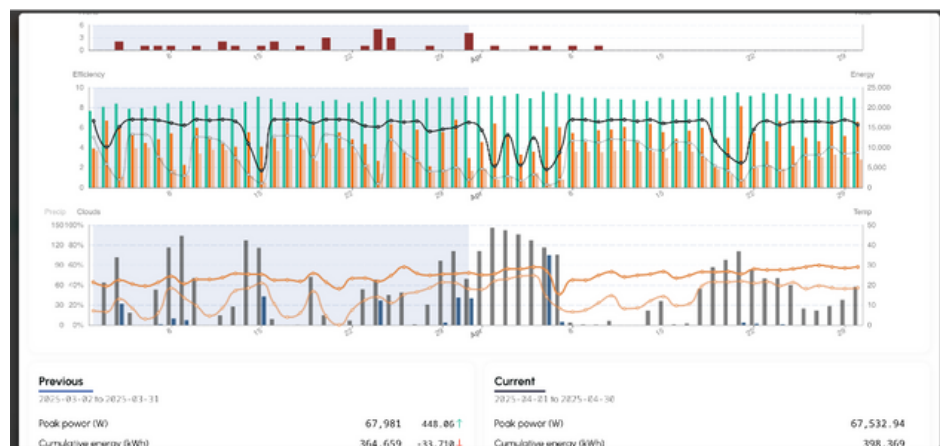**Thanks to smarter analytics and faster visibility.**

$60k Cost Avoidance

Achieved in the first full month using solar production data against real-time pricing utility rates.
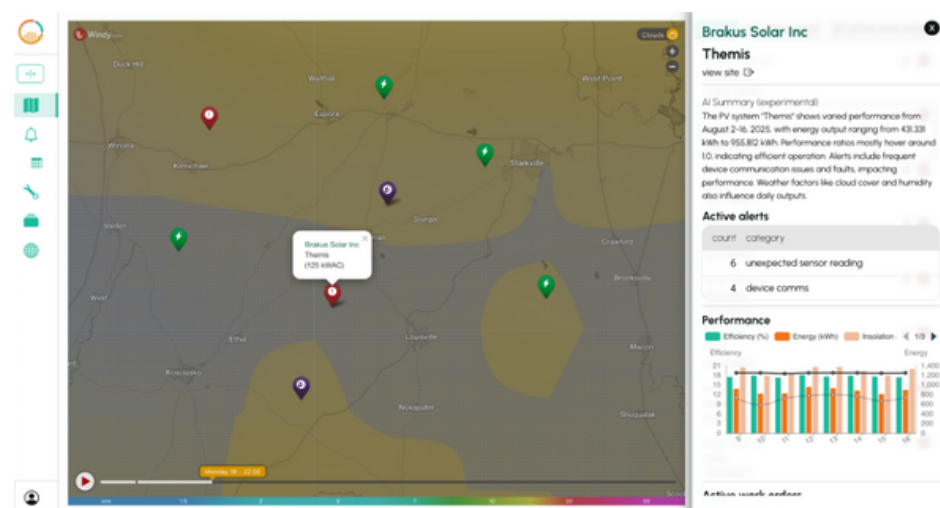
Data Insights

The collaboration between LCOE.ai and eGauge Systems delivers intuitive, actionable visualizations that simplify energy data management for companies like Velo Solar. These dynamic tools—shown in the examples below—turn complex energy metrics into clear, actionable insights, empowering teams to optimize operations, enhance engagement, and make informed decisions across their entire portfolio.

Quick, Easy-to-View Dashboards: Monitor energy, power, weather metrics, and alerts at a glance.

Portfolio Overview: Track multiple sites with out-of-the-box performance alerts for efficient management.

Automated Reporting: Generate ad-hoc or scheduled reports to keep teams and stakeholders informed.

Kiosk Mode: Showcase energy production in public or internal displays to drive engagement and awareness.

Conclusion

The partnership between **eGauge Systems**, **LCOE.ai**, and **Velo Solar** demonstrates how advanced energy monitoring combined with AI-driven analytics can transform energy management. Customers benefit directly from measurable financial savings, operational efficiencies, and enhanced transparency, enabling them to optimize performance, achieve ROI, and meet sustainability goals efficiently.

Key Takeaways

- eGauge smart meters + LCOE.ai analytics deliver actionable insights and measurable ROI.
- Scalable, flexible solutions simplify portfolio-wide energy management.
- Customers gain clear financial, operational, and sustainability benefits thanks to the partnership.
- Long-term data storage supports proactive decision-making and regulatory compliance.

> *"The beauty of this partnership is that each company gets to focus on what they do best—eGauge on hardware, LCOE.ai on analytics—which creates a truly symbiotic relationship, where the end-goal is a smoother, value-driven experience for customers who are looking to understand their energy to address the ever-rising costs."*

Daryl Lu, CEO, Co-Founder, LCOE.ai