

Global Industrial REIT

EV Charging/Fleet Electrification

Power Profile

Customer

Global Industrial REIT

Location

Torrance, CA

Commissioned

December 2022

Fuel

Pipeline Natural Gas

Technologies

- C200S Microturbine

Lease Term

6 Month Rental

**Capstone Green Energy
Partner**

Capstone Engineered Solutions

The Challenge

As fleet electrification gained momentum, driven by both customer sustainability commitments and increasingly strict regulations in California, charging infrastructure emerged as a critical operational need. Logistics and real estate providers began expanding their offerings to include energy and mobility solutions that could support tenants in meeting these new requirements.

At a major distribution facility in Torrance, the challenge was urgent. The site needed to prepare for incoming Class 8 electric trucks, but delays in utility upgrades left it without the grid capacity required to support large-scale charging. Building out permanent infrastructure would take years, yet immediate charging capability was essential to keep electrification plans on track. To avoid slowing the transition to zero-emission operations, the facility required a fast, reliable, and low-emission rental solution capable of operating fully independent of the grid.

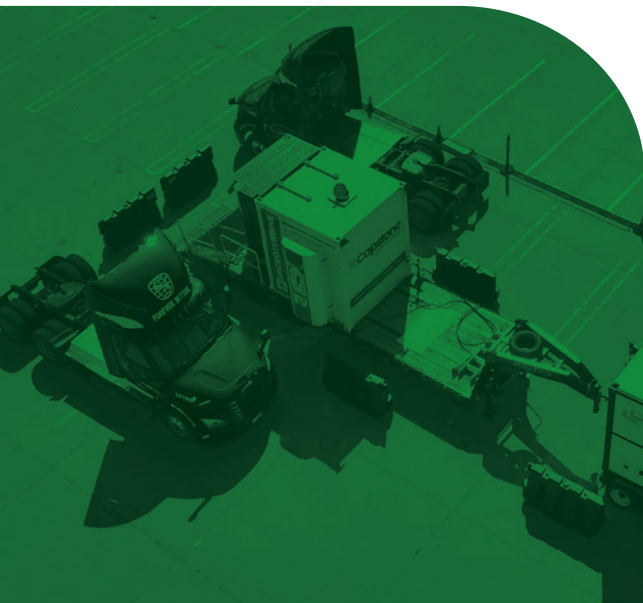
The Solution

To accelerate fleet electrification, Capstone deployed its first trailer-mounted mobile microturbine EV charging unit. The

“This project demonstrates how rental microturbines can accelerate the transition to electric fleets by providing clean, reliable power exactly when and where it is needed. By delivering a mobile charging solution in Torrance, we enabled our customer to begin operating battery-electric trucks months ahead of permanent grid upgrades, while avoiding the emissions and maintenance challenges of diesel generators.”

— Jim Crouse,
President, Capstone Engineered Solutions

**Smarter Energy
for a Cleaner Future**





Capstone deployed its first trailer-mounted mobile EV charging unit, combining a C200S microturbine with an on-board DC fast charger to deliver 180 kW of continuous, off-grid power. The platform charged two Class 8 electric trucks simultaneously without relying on utility service, giving the customer a clean, flexible solution to accelerate fleet electrification.

system combined a Capstone C200S microturbine with an on-board DC fast charger, providing up to 180 kW of continuous power. Designed as a fully off-grid solution, the mobile platform could charge two heavy-duty Class 8 trucks simultaneously without relying on utility service.

Fueled primarily by compressed natural gas (CNG), the unit offered full fuel flexibility to operate on renewable natural gas (RNG) or liquid natural gas (LNG) ensuring long-term compatibility with evolving low-carbon fuels. Unlike traditional diesel generators, the air-bearing microturbine requires no lubricants or coolants, significantly reducing maintenance and environmental impact.

The project was engineered by Capstone Engineered Solutions, which oversaw system design, factory acceptance testing, and on-site commissioning. Within weeks, the Torrance site had reliable EV charging capacity that eliminated downtime and kept electrification plans on schedule.

The Results

Over the course of the six-month rental period, the microturbine-based charging system delivered continuous, reliable power with greater than 99% uptime. The off-grid solution enabled the distribution center to launch EV fleet operations ahead of utility upgrades, proving that mobile microturbines can serve as an effective bridge technology.

The project demonstrated how resilient rental systems can accelerate adoption of zero-emission transport by removing dependence on utility schedules. By fueling with CNG, and with the option to integrate renewable or alternative fuels, the solution reduced NOx, SOx, and CO₂ emissions compared to diesel generators, while avoiding the high costs and delays of grid expansion.

This deployment established a model for future EV fleet rollouts, showing that microturbine rental power can provide scalable, clean, and flexible charging where and when businesses need it most.

Capstone C200S Microturbine



A C200S provides up to 200kW of electric power and contains the world's largest single-unit air bearing microturbine.