

A Microgrid Solution

For Your Industrial Pharmaceutical Facility

Microgrids with solar, cogeneration, battery storage, and EV charging capabilities support energy resiliency and thermal processes at pharmaceutical plants and their supply chains.

As pharmaceutical manufacturers evaluate their energy needs, facility leaders typically face one or more of four challenges as they work to optimize their operations:



1. Resiliency

Remain operational 24/7/365 and allow for production even during long-duration utility outages



2. Sustainability

Meet evolving Environmental Social Governance (ESG) and sustainability commitments



3. Capex

Commit capital to upgrade critical infrastructure in order to increase plant capacity or maintain current production



4. Savings

Meet production cost targets by reducing the energy spend for the facility

Unison Energy

A Unison Energy microgrid allows pharmaceutical facilities to take control of their energy future:

- **Combined heat and power (CHP)** provides reliable, cost-effective electricity and can operate in island mode
- Using the **waste heat** to offset boiler usage improves efficiency and reduces carbon footprint
- Adding in **solar** and **battery storage** increases renewable energy
- Include **EV charging** stations for fleet electrification
- Meet new **renewable portfolio standards (RPS)** with your current ESG goals on our balance sheet
- **Transitioning existing microgrids** enables the asset to operate on our balance sheet at an above-average uptime (97%+) and avoids maintenance costs



A Turn-Key Energy Solution

Unison Energy uses the Energy as a Service (EaaS) model to invest in facilities. We sign a long-term contract to provide electricity and thermal energy. We invest all the capital required and handle permitting, engineering design, equipment, construction, and ongoing maintenance. We only bill for energy used by the facility.

Typically our clients see:

- 5-15% saved on total utility bills
- 20-60% reduced CO2 emissions depending on location and thermal load
- 60-85% system efficiency vs. 38% grid efficiency

Our scope includes on-site microgrids using CHP, solar, and battery storage, but can be expanded to include energy infrastructure improvements such as boiler upgrades, HVAC replacement, and EV charging stations.

An on-site microgrid is an investment in the future. As additional technologies and fuel sources become available, such as biofuels, renewable natural gas (RNG), hydrogen, and carbon capture, Unison can incorporate them into the existing infrastructure. Electrification of everything from vehicles to heat pumps can also be incorporated into the system.

Unison Energy as a partner:



Build

Our team has experience permitting and building hundreds of sites, including everything from utility power plants to fuel cells to small CHP installations



Operate

Our operations team leads the industry in uptime, with a 24/7 staffed monitoring center, dedicated field service technicians, large inventory, and proprietary technology



Energy as a Service

Our projects stay on our balance sheet. Under the terms of our 15- to 25-year energy services agreements (ESA), our customers make no initial investment and instead make payments based on their energy usage