

Advantages of solar self consumption energy management system and microgrid for Commercial and Industrial (C&I) customers

- More solar permitted through local energy balancing
- Lower interconnection costs and delays
- Lower battery costs through EV subsidy and integration
- Fewer AC inverters needed
- High energy usage at restaurants (retail lunch hour) coincide with solar peak
- Load sharing and instantaneous failover across multiple feeders for critical uptime sites (data centers, hospitals)
- Adaptive EV charging following excess solar generation
- Synthetic inertia for generation through bi-directional EV charger to limit variation to 10% per minute
- Higher efficiency through DC coupled loads and generation
- Opportunistic storage: HVAC, refrigeration, batteries, fuel cells, EVs, water/process heating