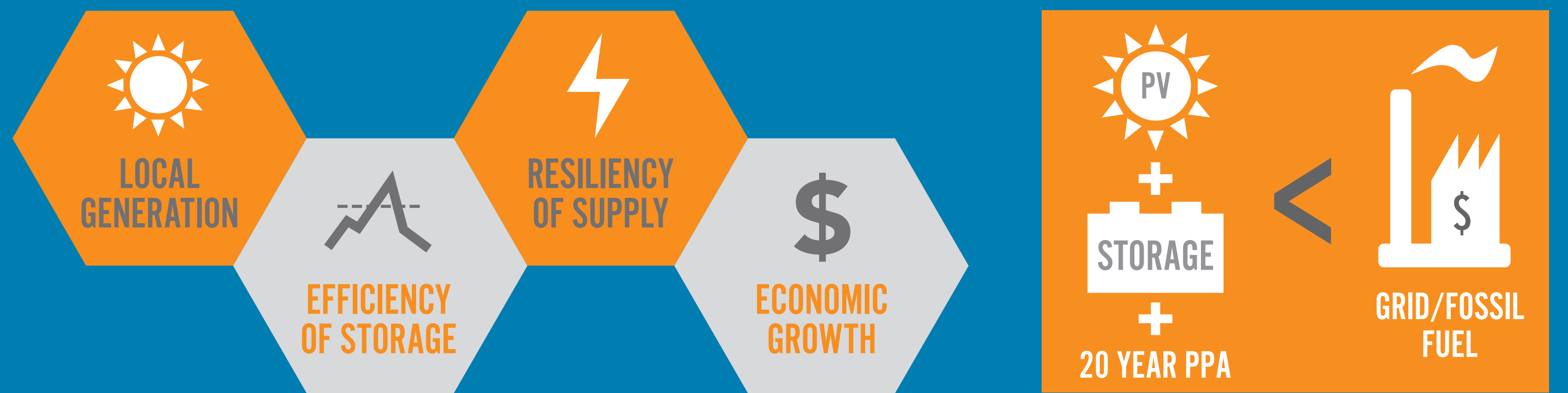




**CODA**  
ENERGY

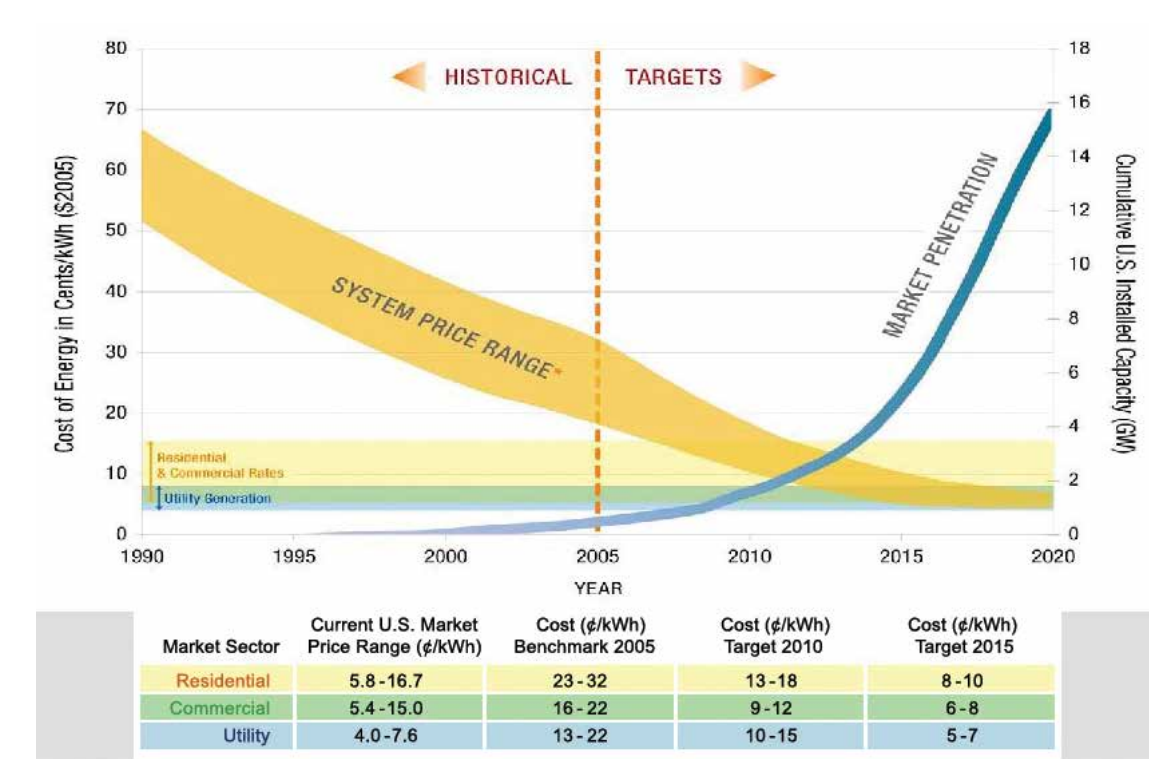
# RENEWABLE MICROGRIDS: A PATH TO GRID RESILIENCY

The growing volume of distributed energy generation is increasing the demand for corresponding local storage. Commercial PV Storage is projected to grow to 2.3 GW by 2017 fueled by a need to decrease energy costs in the short term and increase the reliability of supply over the long term.



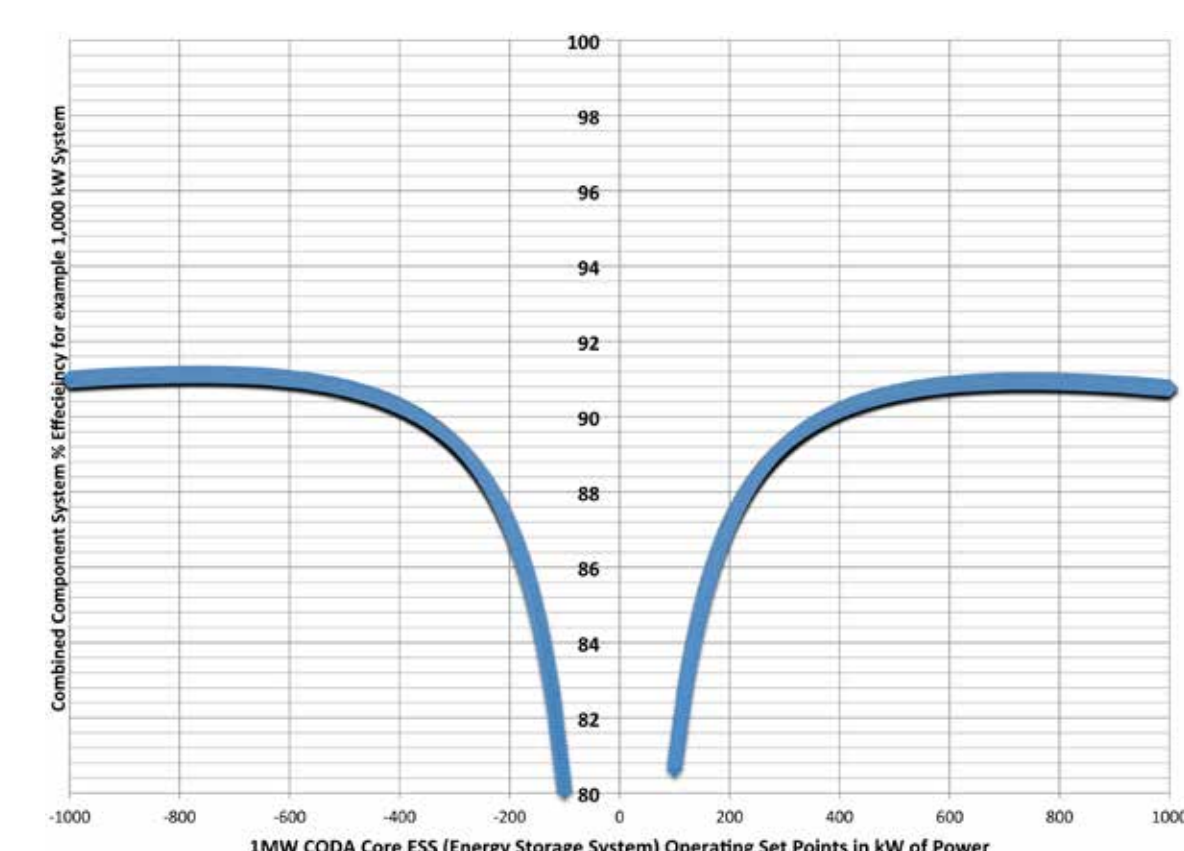
## INCREASING DISTRIBUTED GENERATION

Localized energy generation (especially PV) is increasing due to declining costs and ongoing grid instability, reaching grid parity in most of the world.



## DISTRIBUTED STORAGE SYSTEMS ARE 92% EFFICIENT

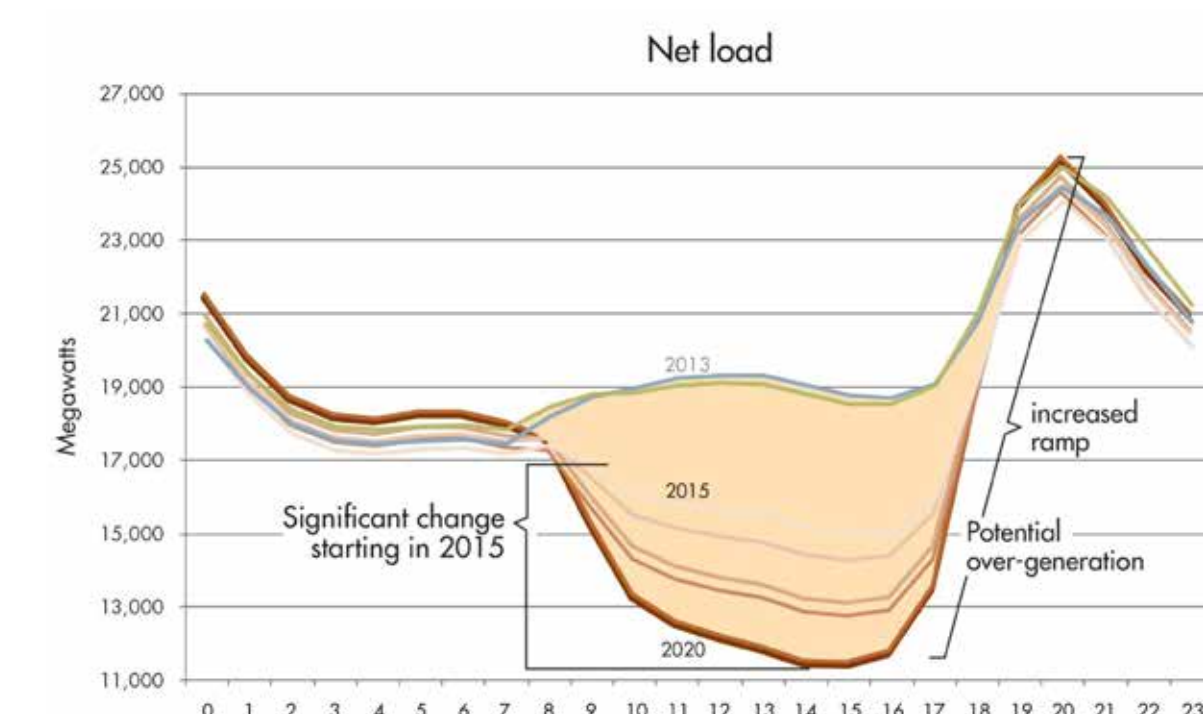
Running multiple inverters per site is more energy efficient (92%) than using a single large inverter (70%) for 24/7 usage.



## FLEXIBILITY & RELIABILITY OF ENERGY STORAGE

Storage allows for:

- > Load shifting
- > Demand management
- > Fast response rates
- > Security of locally sourced energy
- > Rapid deployment of transmission & distribution assets



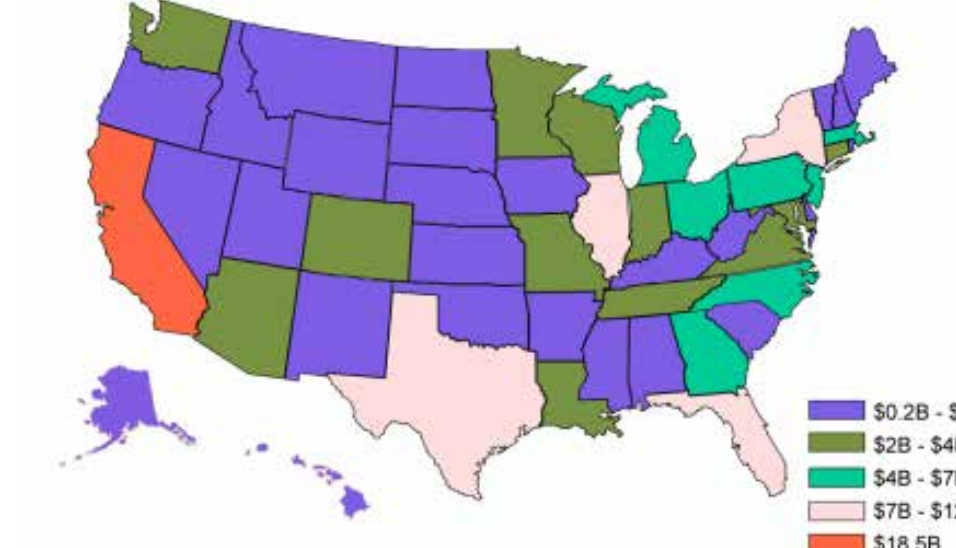
## INCREASED ECONOMIC DEVELOPMENT

Storage generates economic growth by mitigating the costs of energy instability:

- > Secure supply, no outages
- > Increased use of clean sources
- > Locally generated sources

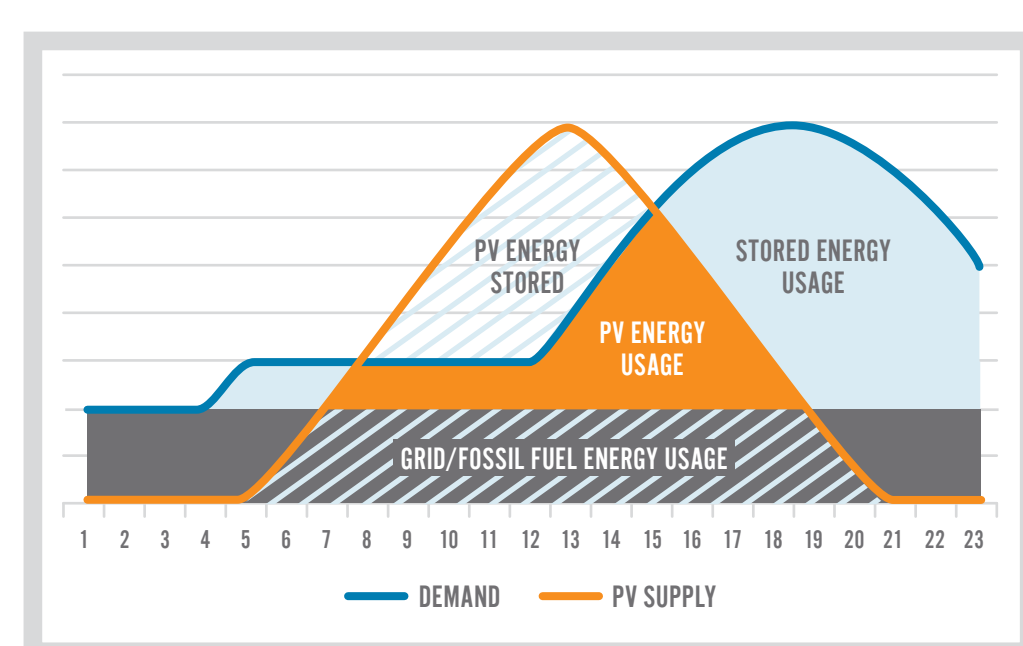
### Annual Business Losses from Grid Problems

Primer Study: \$150B annually for power outages and quality issues



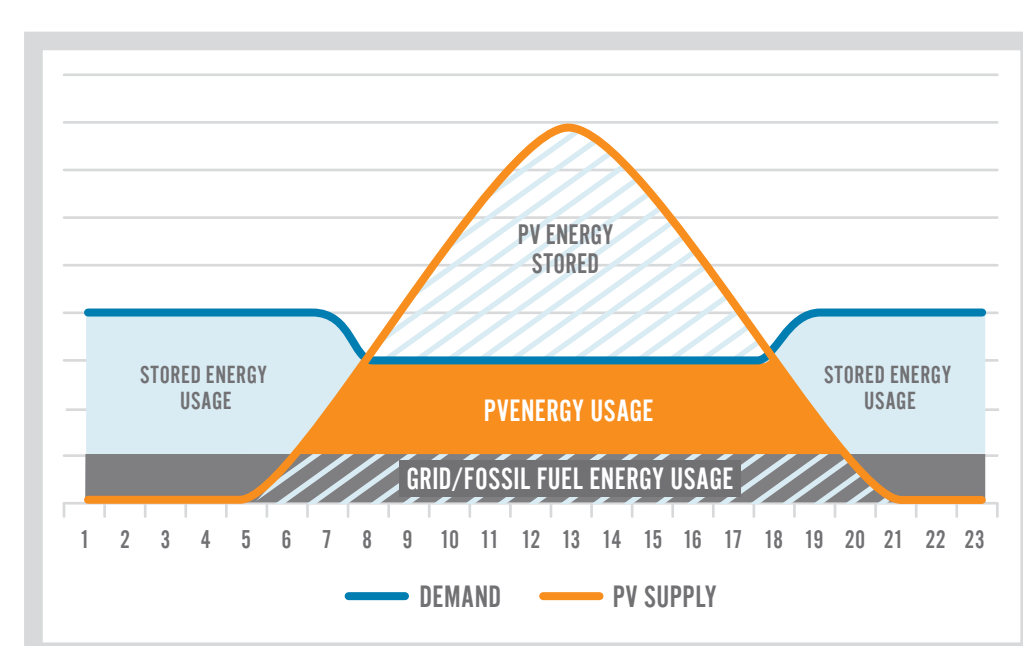
## HOW IT WORKS – CASE STUDY ON A HAWAIIAN CAMPUS

An analysis of 19 government facilities on the island of Maui with proposed on-site solar PV installations offers a case study on how Energy Storage Systems (ESS) are used to improve the effectiveness of daytime solar energy generation for six distinct demand and energy usage profiles.



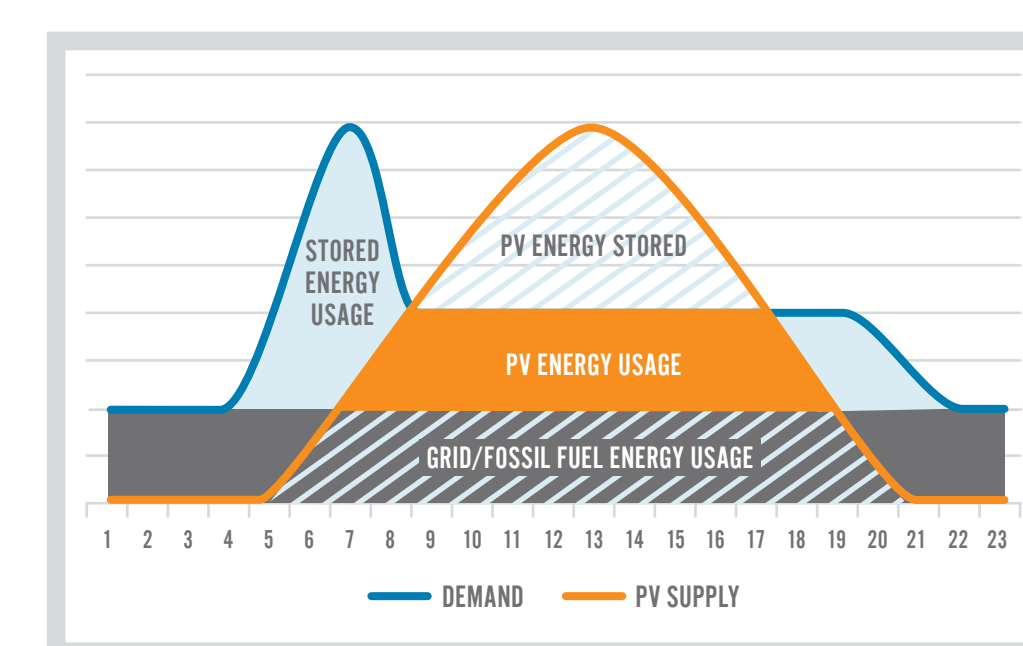
### Commercial Office Building

- Late afternoon/evening peak demand
- **Storage Benefit:** Load shift with flat demand & grid discharge prevention



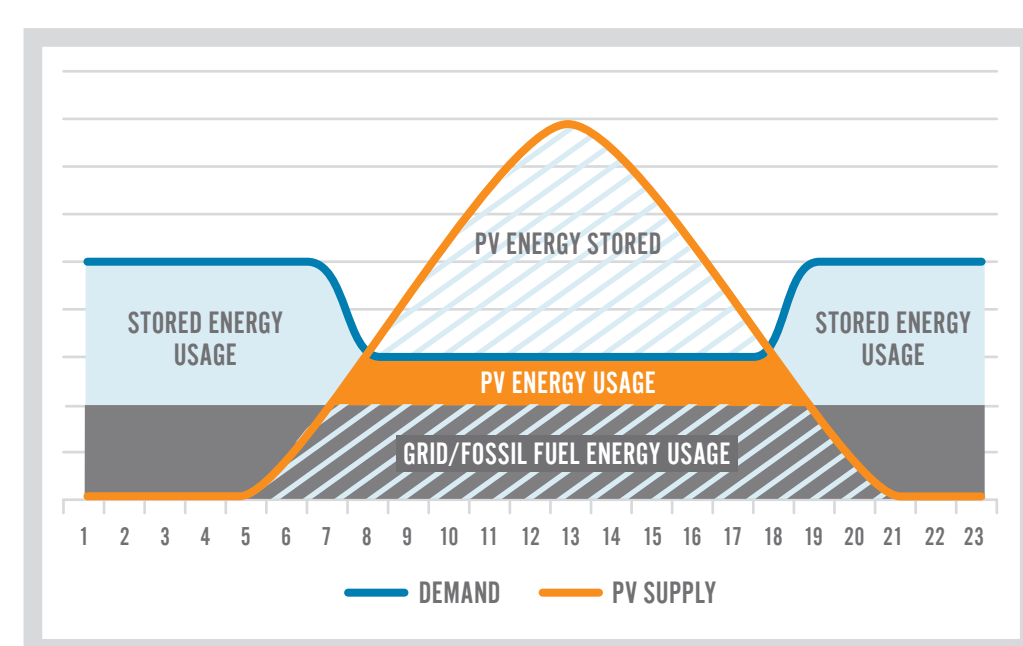
### Open-Air Facility

- Flat 24 hour utilization
- **Storage Benefit:** Flat demand & grid discharge prevention



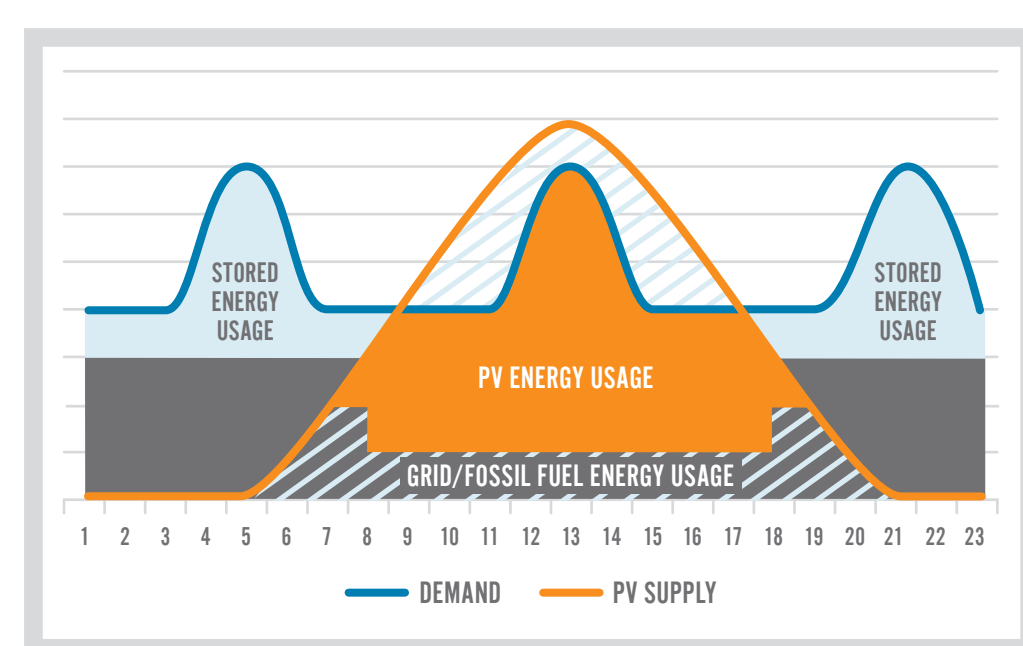
### Commercial Hotel Buildings

- Early morning & late evening peak demand
- **Storage Benefit:** Flat demand & grid discharge prevention



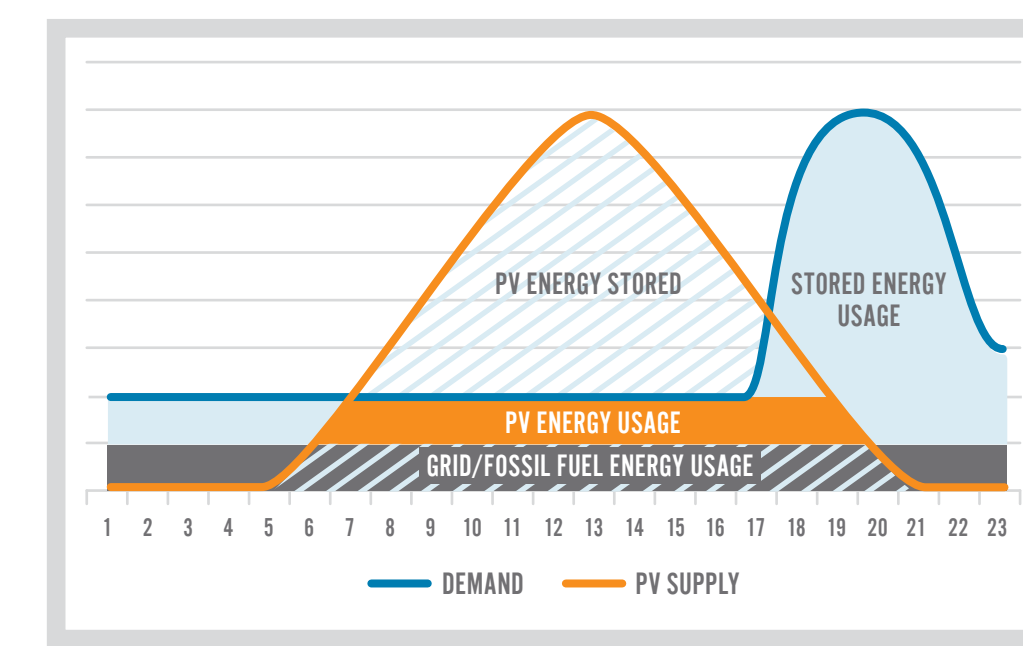
### Night Time Power Usage

- Night-time load demand
- **Storage Benefit:** Load shift with flat demand & grid discharge prevention



### Industrial Facility

- Fast-response power demand & peaks
- **Storage Benefit:** Time of use reduction with flat demand & grid discharge prevention with fast ramp rates

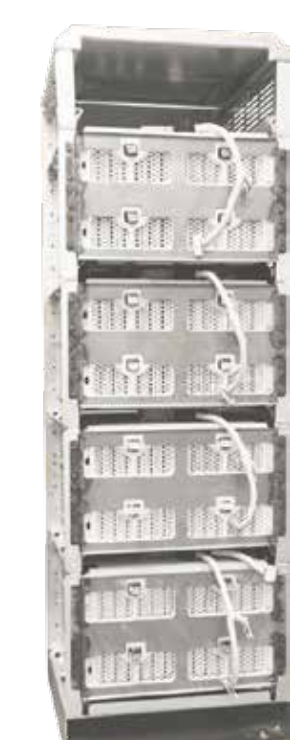


### Evening Peak Power

- Night-time peak demand
- **Storage Benefit:** Flat demand & grid discharge prevention

## CODA ENERGY: FLEXIBLE, SCALABLE, RELIABLE, AND SAFE STORAGE SOLUTIONS

40kWh  
CODA CORE™  
UDP TOWER



LARGE-SCALE  
ESS CONTAINER

### Proven product flexibility

Energy storage systems (ESS) incrementally scalable in power/energy capacity up to 10MW.

### Unparalleled energy management experience

Core engineering team has worked together for a decade on energy systems and tested over 100 battery technologies in our test lab.

### Quality across the value chain

CODA controls design, development, manufacturing, testing and implementation of ESS from the Monrovia, California facility.

### Validated reliable & safe performance

Rigorous system testing with installed stationary storage systems and 2 million miles of electric vehicle road tests, meets industry safety certifications including UL.