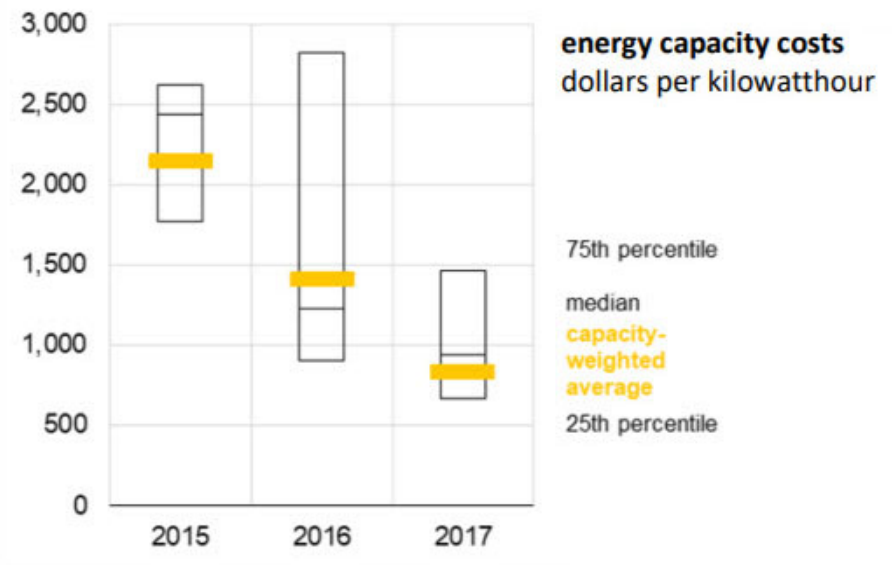
Battery Energy Storage

The United States is projected to have 4.6 GW of large-scale battery energy storage capacity by 2023. With various grid benefits and decreasing costs, the battery energy storage market will likely see continued growth in coming decades.

What's Driving Market Growth?

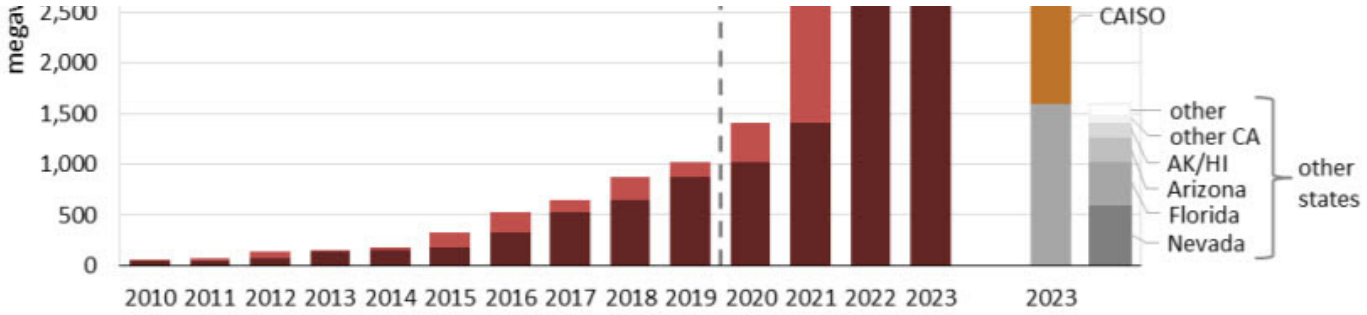
- Battery energy storage costs are decreasing, especially within the last decade.
- The operating capacity of battery energy systems continues to increase annually across the U.S.
- Lithium-ion chemistry batteries make up the majority of large-scale battery energy storage systems.

Total installed cost of large-scale battery storage systems by year



Source: U.S. Energy Information Administration, Form EIA-860, *Annual Electric Generator Report*
Note: Cost observations for installation years 2013 and 2014 were dropped from this figure as a result of small sample sizes for those respective years.

Large-scale battery storage cumulative power capacity (2010-2023)



Source: U.S. Energy Information Administration, Form EIA-860M, *Preliminary Monthly Electric Generator Inventory*

More Detail

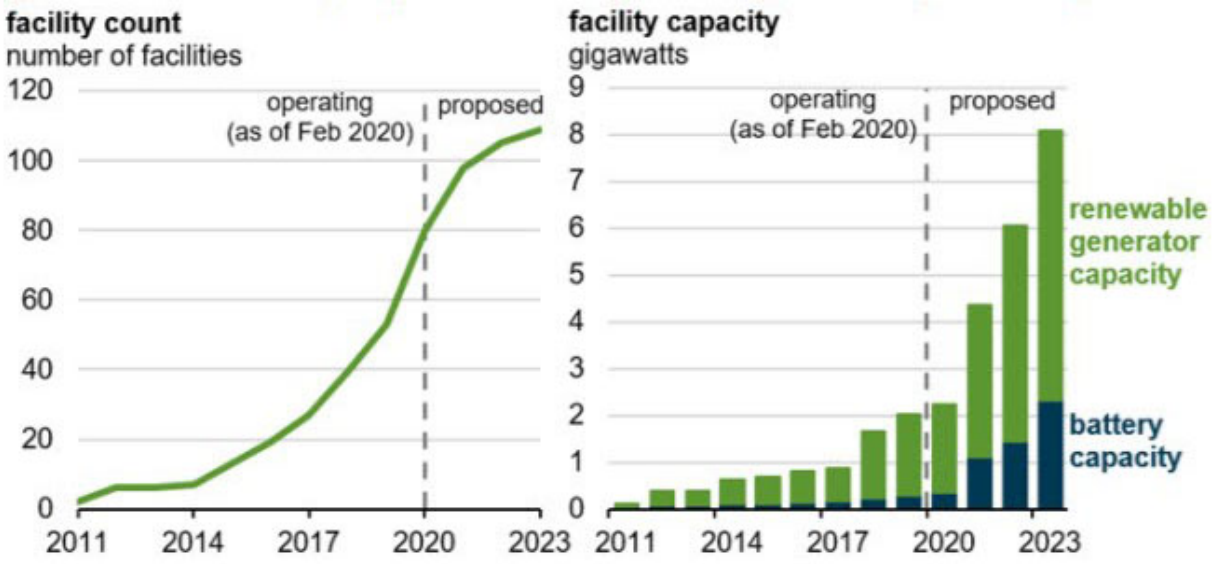
What's the Opportunity for Consumers and Co-ops?

- Batteries are often paired with renewable energy projects to store excess energy and deploy energy during periods of higher demand.

- Batteries have a range of benefits, including frequency regulation, peak shaving, and back-up power.

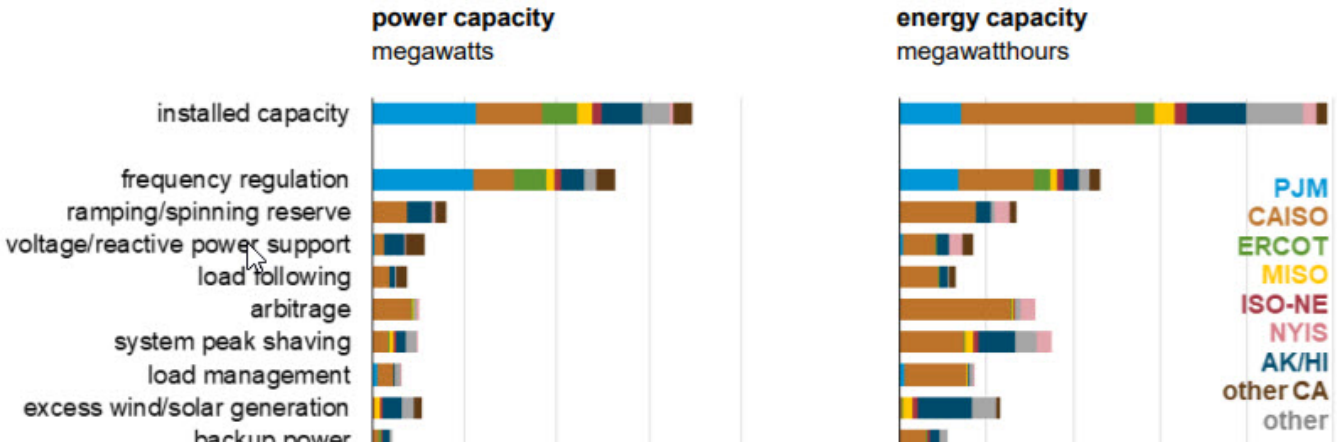
- Using batteries on the grid can help to reduce electricity costs for consumer-members.

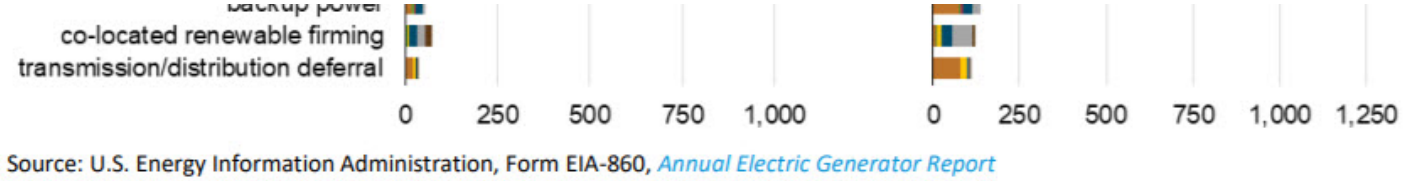
Count and capacity of renewable plus storage facilities (2011-2023)



Source: U.S. Energy Information Administration, Form EIA-860M, *Preliminary Monthly Electric Generator Inventory*; U.S. Energy Information Administration, Form EIA-860, *Annual Electric Generator Report*.

Applications served by large-scale battery storage (2018)





Source: U.S. Energy Information Administration, Form EIA-860, *Annual Electric Generator Report*

More Detail

What is NRECA Doing?

NRECA closely follows innovations in the battery energy storage industry, tracks cooperative battery storage projects, develops relevant battery storage resources for cooperatives, and leads research projects to deploy of battery energy storage at cooperatives.

VIEW BATTERY STORAGE RESOURCES (/TOPICS/DISTRIBUTED-ENERGY-RESOURCES/PAGES/DEFAULT.ASPX?ROLLUPPAGE=ENERGY%20STORAGE#CONTENT-AREA)

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