

BATTERY ENERGY STORAGE PRIMER

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BACKGROUND ON THE RENEWABLE ENERGY BUYERS ALLIANCE

VISION

The Clean Energy Buyers Association (CEBA), representing over 120 large U.S. energy buyers, envisions a resilient zerocarbon energy system where every organization has a viable, expedient, and cost-effective pathway to renewable energy.

CEBA's goal is to catalyze 60 gigawatts (GW) of new renewable energy projects by 2025 and to unlock energy markets for all large-scale energy buyers by creating viable pathways to procurement.

BATTERY ENERGY STORAGE PRIMER

Energy storage can enhance corporate sustainability goals and mitigate power reliability risks for large energy buyers. However, battery storage is a relatively new technology, and there are many factors to assess when incorporating this resource into an energy buyer's portfolio.

CEBA's BATTERY ENERGY STORAGE PRIMER provides clear and comprehensive information on battery storage to aid buyers interested in using the technology to incorporate greater reliability, reduced costs, and enhance carbon-reducing strategies. The Battery Storage Primer discusses in-depth topics, including:

- Why buyers are motivated to pursue battery storage
- Which scenarios best align with buyer's financial and sustainability goals
- How to mitigate corporate risks in battery storage projects

DEPLOYING BATTERY STORAGE

Battery Storage Applications for Large Energy Buyers

On-Site Standalone Storage

- Availability: vertically integrated markets and wholesale markets

Energy Source: electric grid

On-Site Storage with Solar

- Availability: vertically integrated markets and wholesale markets
- Energy Source: primarily from solar, but the grid is possible

Off-Site Storage with Solar

- Availability: wholesale markets
- Energy Source: primarily from solar, but the grid is possible

This Primer discusses three types of Battery Storage Applications for large energy buyers. Specifically, it addresses the value-add of the two most common battery applications: standalone on-site storage and on-site storage paired with solar. The Primer also discusses a less common application for energy buyers: off-site storage with solar.

These use cases describe how battery energy storage can be used to optimize generation, transmission, and distribution level assets. For large energy buyers, this is most likely to occur when storage is used as a standaolone asset or paried with renewable generation. The latter practice is frequently used because it can reduce costs associated with land acquisition, permitting, site preparation, interconnection, and project overhead (Source: <u>DOE</u>).