



## **Solar Generation and Battery Storage for Fleets and Facilities**



Organizations like yours seek resilient, reliable energy supply and more control over energy production, storage, and use. Black & Veatch helps you deploy clean options to make progress toward your sustainability goals and to obtain energy at the lowest cost possible. By deploying solar photovoltaic (PV) panels and battery energy storage systems (BESS), you will optimize energy consumption and reduce carbon emissions.

As a technology integrator, Black & Veatch has a comprehensive view of energy generation, distribution, and application. We strategically plan and deploy cleaner versions of essential systems, slash resource consumption, and evolve transportation and facilities into the decarbonized era. We help you balance volatile energy environments and integrate a range of technologies to cost-effectively achieve resilience, sustainability, and growth.

## **Energy When and Where You Need It**

Organizations are installing solar and BESS at record rates, reinforced by incentives and policies to accelerate deployments. As an established leader in power and renewables, Black & Veatch helps you navigate one of the most critical and costly elements of your operation: electric power. When located behind the meter, these distributed energy resources provide reliable energy when and where it's needed, often at lower rates than you can purchase from the electric utility. To better manage energy, onsite solar generation and BESS can:

- Form an onsite energy system (with a microgrid) that can connect to & disconnect from the grid
- Cost-effectively lessen peak grid demand, reducing electricity costs
- Provide uninterrupted power supply & redundancy to protect operations
- Ensure steady distribution of stored energy day and night
- Provide options to export excess solar power to the grid for additional revenue
- Form a modular foundation that can expand over time to integrate more energy generation, management controls, & applications

## **Charge Electric Fleets Anywhere, Anytime**

To reduce carbon-heavy operations, fleet electrification is a universal choice. As electrification adoption increases exponentially, so does the power requirement. Utility upgrades may be necessary, which could take from 12 up to 48 months based on Black & Veatch's experience.





A microgrid-solar-storage system with a backup generator can help bridge the gap to get operations up and running and keep them online while waiting for increased distribution capacity from the utility. With a modular, scalable design, you can add clean technologies over time to balance utilization and generation, achieve the largest cost reductions, increase resilience, and decarbonize more of your fleet facility and supply chains.



## **Grid-Resilient Businesses & Developments**

Driven by climate change and sustainability goals, many organizations deliver their goods and services from green buildings and campuses. Green buildings focus on all systems to design an ideal clean structure, but the energy system affects nearly every facility function, including transportation with electric fleets and vehicles. For this reason, many development and retrofit projects include solar generation and BESS to power buildings with clean energy, reduce emissions, and lower operational costs. Depending on the end use and location, an organization can add a microgrid to ensure redundant, reliable energy supply and management. Used in combination, these clean energy technologies:

- Counter the rising cost of delivered energy
- Monetize energy sources to control operational expenditures
- Provide a localized solution to powering buildings that are isolated or have greater climate risk
- Create a self-contained energy system for critical businesses
- Balance energy fluctuations and mitigate intermittency from renewables

