



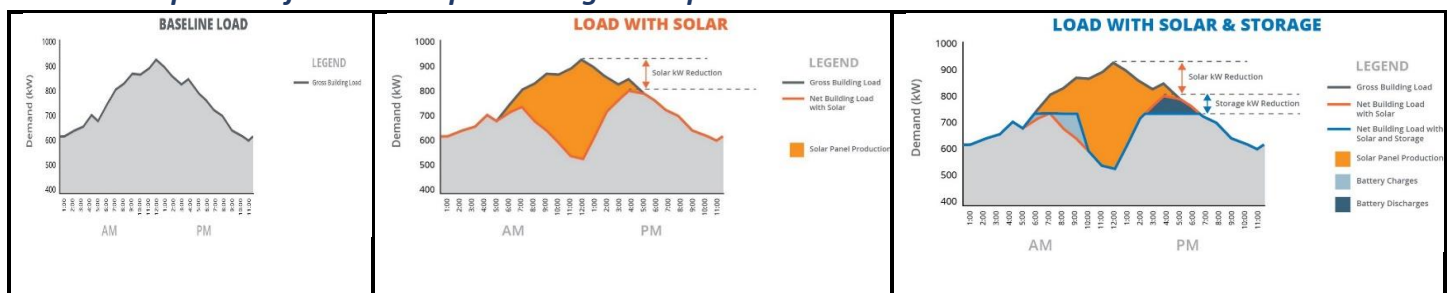
## Solar PV (Photo Voltaic) System and BESS (Battery Energy Storage System) Development for the C&I Space

**Why and What's the Rush:** The cost of future-proofing your organization using Solar and BESS solutions is less expensive than it has ever been. Our turn-key comprehensive solutions will allow your organization to decrease: its operating costs and its carbon footprint while providing the option of being self-consumptive with resilient backup power. Solutions are designed to work for as little as a few minutes to over ten days when the grid is down. Our solar systems will have a 25-year manufacturer's product and performance guarantee for critical components and are available with a 20-year warranty on the BESS systems with our Tier 1 suppliers.

**Why the Rush:** Suppose your organization is committed to operating sustainably, and its business plan or vision includes the desire to improve the environment for your family, employees, customers, and neighbors. In that case, the time is now to minimize your use of fossil fuels. The great news is that 90% of the projects have penciled out to provide an IRR over 14%, with a high of 24% when applying the Federal ITC (Investment Tax Credit-IRS form 3468). Also, use the MACRS (modified accelerated cost recovery system) bonus depreciation (100% the first year), your reduced Demand Charge reduction fees, and your local Utility rate cost savings. The true benefit of the MACRS depreciation varies depending on your businesses' tax rate. It typically adds up to an additional 25% discount off a commercial solar energy project's installed cost, which is offset by reduced tax payments. These tax incentives will be applied to all aspects of the installed solar solution, including new roofing, further improving the project's ROI and IRR.

The bad news is that the Federal ITC for RE projects is down-phasing and has lowered from 30% (2019) to 26% (2020) and will decrease to 22% in 2021, and the MACRS bonus depreciation phases out for installations after January 1st, 2023.

### **Value Proposition for Solar PV plus Storage - Graphics:**



The typical methods to finance a Solar PV / BESS solution are to purchase it with cash on hand, finance it with a loan, PPA (power purchase agreement), or a lease agreement. The most advantageous financing methods for your organization depend on multiple factors, and we will help you identify the best strategy for your circumstances through detailed project modeling. We will create an estimated Pro-forma financial spreadsheet to demonstrate the expected details for your project showing ROI, IRR, and NPV, allowing you to feel confident you are adding a long-term asset. The typical system is paid off in 3-8 years depending on the project, with the system's life producing more than 80% of the nameplate power on year 25. A few old solar systems now produce at least 80% power on year 40 (ARCO Solar)!



# 3E ENTERPRISES GROUP

Equity - Environment - Economy

A typical C&I (Commercial & Industrial) Solar PV system size is between 500kW to 1MW DC, which requires approximately 34,000ft<sup>2</sup> to 70,000ft<sup>2</sup> of roof, ground, or parking lot space. The system size will depend on your exact loads/circumstances, and smaller or larger systems can also be beneficial and considered. The BESS solution can include a 250kWh to 1MWh battery size or larger, typically one or more self-contained systems pre-installed in a "mobile" container, factory tested, and code certified. We can place it strategically to allow accessibility and minimize installation/interconnection costs.

We work with your roofing manufacturer or installer to ensure our roof-mounted Solar PV installation does not violate the roof warranty. We typically use a non-penetrating solar panel racking system designed for the building structure that meets the local specified wind/snow loads. Suppose we are installing a new roof under the solar array. In that case, we coordinate the project with the roofing contractor. All warranties are passed on to the building owner to apply the federal investment tax credits to the installed cost of the Solar PV system, the BESS, and the new roof.

Typically, the ground-mounted solar car canopies are pole-mounted. We confirm the parking space solution, ground support details, and/or parking garage structural integrity to support the Solar PV solution.



◇ **The 3E Enterprises Group** financial model connects the expected created value to the project cost arriving at a solution that maximizes the cost-benefits, expressed as return on investment, simple payback, and/or internal rate of return.

◇ Each design configuration assesses how different levels of photovoltaics and storage interplay with costs and incentives and determines whether the resulting values are relative to the increased investment.

◇ Select us to help you design, install, and operate the next phase of your sustainable electric supply objective while meeting your Corporate Social Responsibility (CSR) goals.

## Energy Storage Project Outline:

