

# ENPHASE SOLAR, BATTERY & EV CHARGING INTEGRATION



**Location:** Wenham, MA

## Project Overview

BD Electrical & Solar expanded an existing Enphase solar and battery system in Wenham, Massachusetts by adding two Enphase EV chargers.

Rather than operating as independent electrical loads, the EV chargers were integrated into the home's existing Enphase energy ecosystem, allowing the homeowner's solar production, battery storage, and vehicle charging to work together through a unified energy management platform.



## The Challenge

The home already had a substantial Enphase solar and battery system. With two EVs to charge, the goal was to expand the system without losing the benefits of the existing energy management infrastructure. This required integrating the new charging equipment with the existing Enphase system and electrical distribution rather than treating the chargers as isolated branch circuits.

## The Solution

BD installed two Enphase EV chargers and integrated them with the home's existing Enphase solar and battery equipment.

The completed system combines:

- Existing rooftop solar
- Four Enphase batteries
- Two Enphase EV chargers
- Enphase monitoring and energy management
- Integrated electrical distribution

The result is one connected home-energy ecosystem rather than separate solar, storage, and EV systems.



## Results

The homeowner can now produce solar energy, store it for later use, and charge two electric vehicles through an integrated Enphase platform.

It is a strong example of how an existing solar and battery installation can evolve as a home's electrical needs change.