

BISHOP'S ORCHARDS

FARM MARKET & WINERY

Bishop's Orchards Solar Project

The Bishop family's stewardship in Guilford, CT started in 1639 when John Bishop was one of the co-signers of the Guilford Covenant. In 1871, the first parcel of land, which is a portion of the existing farm, was purchased, and on 1.1 acres of this is 1 of 2 solar arrays, consisting of 1108 panels in 17 rows. The second array is on the roof of the Farm Market, consisting of 381 panels. The combined systems are 477 kW DC and are expected to produce 596,700 kWh per year, which will offset 80+% of the farm's annual electric usage. Total annual farm usage is 668,000 kWh with an annual cost of approximately \$106,000, which was the basis for the solar project.

The site selected for the ground mounted system is a hillside with shallow soils and rock ledge that is not agriculturally viable land. The solar array adheres to Bishop's Orchards Vision: Preserve and enhance the value of the land for current and future generations and provide exceptional products and services to our customers that emphasize "family, food, and recreation."

Previous to the solar installation, Bishop's Orchards worked to reduce their electric usage thru conservation measures by participating in the Energize CT Small Business Energy Advantage Program (SBEA) in 2009 and 2015 by investing a total of \$225,000 in retrofits of lighting fixtures, motors, and refrigeration. These efforts are an important part of the farm's green initiatives.

This project was made possible with technical assistance from the CT RC&D - CT Farm Energy Program (CFEP). CFEP assisted the farm in applying for a USDA Rural Development REAP grant that provided for 25% of the eligible ground mount project costs. In addition, this system is made possible because the farm is able to utilize Virtual Net Metering (VNM) as established by CT Public Act No. 13-298 and secured ZRECS both administered by Eversource.

The Bishop family's ability to make this major investment in solar started with knowing that another generation of the family has committed to carrying on the family farm. The anticipated future savings of electricity in 7 years will create a more flexible financial opportunity for the family farm operation to flourish. For more information about the system and live data feed, visit: BishopsOrchards.com/solar

For additional information, please contact the CT Farm Energy Program Office at 860-345-3977 or visit CTFarmEnergy.org



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