

Economic Analysis of Agrivoltaic Adoption

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UMass DOE Project Advisory Committee Meeting
May 24, 2022

Acknowledgment

Acknowledgment: This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Energy Technologies Office Award Number DE- EE0009374. The views expressed herein do not necessarily represent the views of the U.S. Department of Energy or the United States Government.

About the Solar Energy Technologies Office: The U.S. Department of Energy Solar Energy Technologies Office supports early-stage research and development to improve the affordability, reliability, and domestic benefit of solar technologies on the grid. Learn more at energy.gov/solar-office.

Three Economic Project Research Areas

- Site Trial Costs and Returns
- Public Acceptance of Agrivoltaics
- Effect of Scale Agrivoltaic Adoption on Agricultural Sector

Site Trial Costs and Returns

Develop a framework and measure whole-farm changes in costs and returns under different agrivoltaic designs, compared to no panels.

- Products: Cranberries, Hay, Cattle, Butternut Squash, Lettuce*
- Framework: Total Revenues from Ag and Energy production minus Total Costs from Ag and Energy production
- Goal 1: Evaluate effect of site trial installations on farm net costs and revenues
- Goal 2: Develop Enterprise Budget Modules that flow into NREL's InSPIRE "Dual-Use Financial Model"

PAC Support for Economic Research Areas

Anticipated requests for PAC support for the coming year:

- Site Trial Costs and Returns
 - ▶ For PAC members familiar with farm financial and production records, critical review of data collection protocols
- Public Acceptance of Agrivoltaics
 - ▶ For all PAC members, assisting Economics team to collect "grey literature" on agrivoltaics, including public comment, local news articles, social media, and petitions