

IMPACTS OF DUAL-USE SOLAR ON CROP PRODUCTIVITY AND THE AGRICULTURAL ECONOMY IN MASSACHUSETTS AND BEYOND

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Dissemination Plan

September 7, 2022



UMassAmherst

Center for Agriculture,
Food, and the Environment

College of Social & Behavioral Sciences
Resource Economics



UMassAmherst

Clean Energy Extension

Purpose



Research Project:

Provide research-based data currently being sought by policy makers and the solar and agricultural sectors to properly inform and advance dual-use solar development.

Dissemination Plan:

Provide a strategic and effective means of providing information and results from the research project to a broad range of audiences.

Strategy – Audiences

Research community:

- Agriculture
- Agricultural Economics
- Agrivoltaic

Stakeholders:

- Farmers / growers
- Non-farming landowners
- Solar developers
- Policy makers
- Land use professionals
- Community leaders

CEE with project research partners will establish email list of local/regional stakeholders.

We will utilize national agrivoltaics networks for broader dissemination.

Strategy – Dissemination Partners

Development of Dissemination Products

UMass Amherst

Primary source/affiliation for all project reporting, final approvals

American Farmland Trust

Research partner, content provider

Project Advisory Committee

Reviewer

Partners in Product Dissemination

NREL InSPIRE

American Farmland Trust

AgriSolar Clearinghouse

DOE SETO

Strategy – Product Consistency

- Assure consistency in language and branding across all product materials to identify them collectively with this research project.
- Assure information dissemination conforms to U.S. Department of Energy, Solar Energy Technology Office requirements.

Materials and Targets

Target: Research community

- Presentations at professional conferences
- Research reports and published papers

Target: Stakeholders

- Presentations: webinars and site visits
- Summaries and fact sheets
- Social media posts regarding website updates, webinars, and site visits

Dissemination Materials

Professional Conferences

Draft Outline, subject to change and travel budget availability

Product	Target Date	Audience	Lead Contributors	Notes
Presentations: Professional Conferences				
TBD	2022	clean energy & solar, professional & academic	Clean Energy Extension	Outreach project work to clean energy and solar professional and academic audiences and learn about and network with other efforts.
Northeastern Agricultural and Resource Economics Association (NAREA)	2023	Ag economics researchers?	Resource Economics	Present research to clean energy, agricultural, and renewable energy economists at academic conference.
Agricultural & Applied Economics Association (AAEA)	2023	Ag economics researchers?	Resource Economics	Present research to clean energy, agricultural, and renewable energy economists at academic conference.
TBD	2023	clean energy & solar, professional & academic	Clean Energy Extension	Outreach project work to clean energy and solar professional and academic audiences and learn about and network with other efforts.
AgriVoltaics Conference (Annual)	2023, 2024, 2025, 2026	Researchers & industry	Cranberry Station	Present research to researchers and industry.
North American Cranberry Research and Extension Workers Conference	2023	Researchers & industry	Cranberry Station	Present research to researchers and industry.
MA Land Conservation Conference	2023 or 2024		UMass Extension	Present research to researchers and industry.
Northeastern Agricultural and Resource Economics Association (NAREA)	2024	Ag economics researchers?	Resource Economics	Present research to clean energy, agricultural, and renewable energy economists at academic conference.
Agricultural & Applied Economics Association (AAEA)	2024	Ag economics researchers?	Resource Economics	Present research to clean energy, agricultural, and renewable energy economists at academic conference.
New England Vegetable and Fruit Conference	2024		UMass Extension	Present research to researchers and industry.
American Society for Horticultural Science	2024	Researchers & industry	Cranberry Station	Present research to researchers and industry.
International Society for Horticultural Science	2024	Researchers & industry	Cranberry Station	Present research to researchers and industry.
TBD	2024	clean energy & solar, professional & academic	Clean Energy Extension	Outreach project work to clean energy and solar professional and academic audiences and learn about and network with other efforts.

Dissemination Materials

Webinars and Site Visits

Draft Outline, subject to change

Product	Target Date	Audience	Lead Contributors	Notes
Presentations: Webinars & Site Visits				
Penn State University Extension Webinar	?		Clean Energy Extension	Stakeholder presentation/webinar #1 per GNG-1C (2 presentations/webinars to a total of 40 people)
Virginia Tech Extension Webinar	3/24/2022	Agricultural and solar professionals, educators	Clean Energy Extension	Stakeholder presentation/webinar #2 per GNG-1C (2 presentations/webinars to a total of 40 people)
Virginia Tech Dual-Use Solar Site Visit: UMass Amherst South Deerfield Research Farm	6/1/2022	Virginia Tech faculty, MDAR staff, and UMass researchers	Clean Energy Extension	Site visit with Virginia Tech faculty, MDAR staff, and UMass researchers to discuss the dual-use solar installation, review research status, and explore research collaborations.
AgriSolar Clearinghouse: Follow the Sun Tour	8/10/2022	Stakeholders	Clean Energy Extension, UMass Extension, Cranberry Station, American Farmland Trust	Stakeholder site visit #1 per GNG-2C
Webinar: Data / findings for first year, site trials in progress?	2023	Stakeholders		Stakeholder webinar #1 per GNG-2C
Webinar: Economics	2023	Stakeholders	Resource Economics	Stakeholder webinar #2 per GNG-2C
Stakeholder Site Visits	2022, 2023	Stakeholders		Stakeholder site visits #2 - #5 per GNG-2C
winter grower presentations to the New England Vegetable and Berry Growers Association	2023 and/or 2024	Stakeholders	UMass Extension	Stakeholder webinar #1 per EOP-C (planned or conducted)
winter webinars from our Production Ag group	2024 and various	Stakeholders	UMass Extension	Stakeholder webinar #2 per EOP-C (planned or conducted) Vegetable, Fruit, and/or Crops/Dairy/Hay/Grazing audiences

Dissemination Materials

Research Reports and Papers

Draft Outline, subject to change

Product	Target Date	Audience	Lead Contributors	Notes
Research Papers				
Technical report: Project site trial design(?)	2023			1 research summary technical report per GNG-2C
Research report: Agricultural research results	2024			Agricultural research results are documented in a report per EOP-A
Research report(?): Economic research results	2024			Economic research results combine modeled scenarios with public acceptance value from choice experiment: per EOP-A
Research paper: Site trial monitoring methods and findings	2024			Per EOP-C
Research paper: Economic analysis	2024			Per EOP-C

Dissemination Materials

Summaries and Fact Sheets

Draft Outline, subject to change

Product	Target Date	Audience	Lead Contributors	Notes
Summaries and Fact Sheets				
Information sheet:	2022	Stakeholders: farmers, solar developers	Clean Energy Extension	Info sheet #1 per Subtask 4.5 / GNG-1C: 2 project information sheets distributed to 100 individuals
Information sheet:	2022	Stakeholders: farmers, solar developers	Clean Energy Extension	Info sheet #2 per Subtask 4.5 / GNG-1C: 2 project information sheets distributed to 100 individuals
Information sheet: Newly established site trials	2023		UMass Extension, Cranberry Station	Downloadable project information sheet #1 per GNG-2C
Information sheet: Economics(?)	2023		Resource Economics	Downloadable project information sheet #2 per GNG-2C
Project activities and findings		National farm networks	American Farmland Trust	Disseminate project activities and findings to the broader national farm networks
Information on modifications to InSPIRE 1.0 Financial Model	2023/2024	NREL SAM users	Hyperion Systems	Modification to incorporate more detailed and relevant information to assist farmers in estimating the financial trade-offs between agricultural yield and energy production.
Information sheet:	2024		UMass Extension, Cranberry Station	Summary information sheet #1 per EOP-C2
Information sheet:	2024		Resource Economics	Summary information sheet #2 per EOP-C2

Tracking Dissemination Success

The research team will keep track of dissemination activities in the following ways:

- Maintain database of products disseminated with completion dates and audience size if appropriate
- Maintain all dissemination products or links on our website, and track web traffic
- Work with national partners to disseminate information to national stakeholder audience