

Economic Analysis of Agrivoltaic Adoption

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Economic Research Updates

PAC Literature Review Resource Collection Assistance

- Site Trial Costs and Returns
- Public Acceptance of Agrivoltaics
- Farm Adoption of Agrivoltaics

PAC Cost Tracking Protocols Review

Economic Research Updates

Broad Research Questions for Literature Review

- 1 What are the costs associated with producing crops under agrivoltaic installations?
- 2 What are the factors that contribute to farm adoption of solar installations?
- 3 What is the public's willingness to accept agrivoltaic installations?

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.

- Returns evaluated from yields
- Costs evaluated using on-site cost tracking tools developed from
 - ▶ Enterprise Budgets
 - ▶ USDA Instruments
 - ▶ Project Team Input

Farm Adoption of Agrivoltaic

Identify factors that contribute to farm adoption of agrivoltaic.

- Farm Adoption of New Technology, Innovation, Ecosystem Services
- Farm Adoption of Renewable Energy
- Farm Adoption of Agrivoltaics

Public Acceptance of Agrivoltaics

Identify the public's willingness to accept agrivoltaic installations.

- Any resource that gives us a window into the public perception of agrivoltaic installations, including any mention of agrivoltaics in the public realm.
- Published research on public acceptance of changes to public good resources.

Type of Resources Requested

- peer-reviewed from non-economic disciplines
- published papers from non-profits, government agencies, industry groups, etc.
- primary data from newspapers, online petitions, stakeholder meeting transcripts, etc.
- email correspondence, redacted if needed, with permission from correspondents
- legislative text, legal filings, contractual documents (including agrivoltaic contracts, payments, etc., with permissions and redacted if needed)
- any other content you feel may be of assistance, or would benefit the project

Lit Review Timeframe

- Help to source relevant literature for Literature Review (by October 31, 2022)
 - ▶ Site Trial Costs
 - ▶ Farm Adoption
 - ▶ Public Acceptance
- Econ Team Compiles and drafts Lit Review (early 2023)
- PAC provides feedback on relevant Literature Review sections (early 2023)
- Provide Lit Review to DOE

Cost Tracking Protocols Assistance

Using Lit Review of cost tracking tools, develop tools for site trial cost data collection

- Draft crop-specific tools (November 2022)
- Review with project team, farm operators, PAC (December 2022 - January 2023)
- Submit for IRB approval (January 2023)
- Implement (February 2023)