

AGRIVOLTAICS POLICY LANDSCAPE

Rooted in Resilience, Powered by the Sun: A
Tool for the Clean Energy Transition

August 2026



- Housekeeping
- **Dr. Stephen A. Smith, SACE:** *The Role of Agrivoltaics in the Clean Energy Transition & SACE's Mission*
- **Carynton Howard, SACE:** *Agrivoltaics Policy Overview*
- **Jim Johnson, SC SBDC:** *USDA Rural Energy for America Program*
- **Turner Jackson, MA DOER:** *Agrivoltaics Policy in MA and Massachusetts SMART*
- Q&A

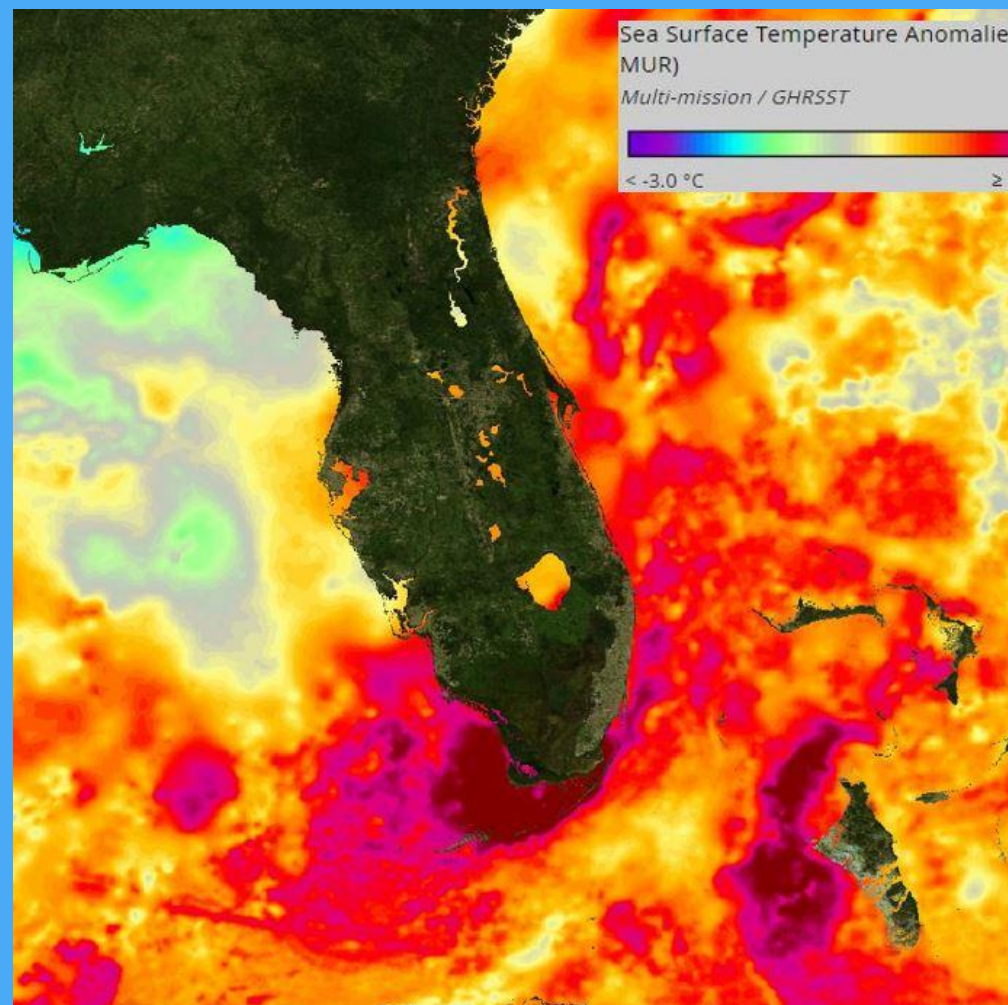


SOUTHERN ALLIANCE FOR CLEAN ENERGY

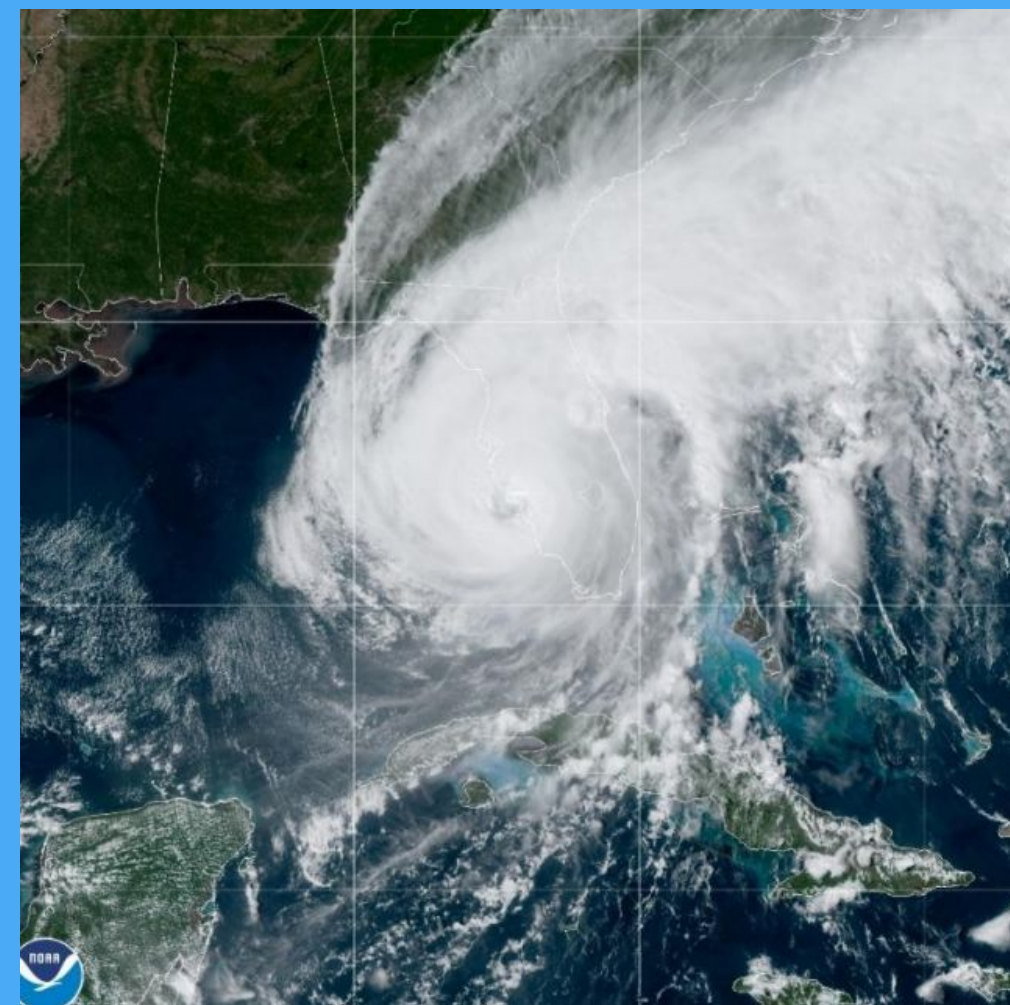
The Southern Alliance for Clean Energy (SACE) is a nonprofit organization that promotes responsible and equitable energy choices to ensure clean, safe, and healthy communities throughout the Southeast. For 40 years, SACE has been a leading voice for energy policy in our region, focused on transforming the way we produce and consume energy in the Southeast.

The Southeast is already living the reality of the climate crisis.

Heat waves



Hurricanes



Winter storms



Floods



Why SACE Supports Agrivoltaics

New report outlines economic benefits of agrivoltaics for farmers, developers and communities

By Kelsey Misbrener | November 13, 2025

TECH

With tech, farms can double up to produce both food and power

Such ‘agrivoltaic’ ventures find ways to share the sun between crops and solar panels

AGRICULTURE

In the battle between solar and agriculture, what if farms could have both?

BY [EMILY KENNY](#) | CENTRAL NY
PUBLISHED 3:37 PM ET FEB. 28, 2024

Solar farms can be ‘oasis’ for honeybees

VPM | By [Patrick Larsen](#)
Published October 9, 2024 at 5:11 PM EDT



Agrivoltaics: How combining solar panels and farming delivers big benefits

3/2/2026 0

Arizona farmers turn to solar panels to shade crops, save water and generate power

by Amaia J. Gavica July 8, 2024

Facebook

Small Footprint, Big Opportunity: Land Use Realities of Utility-Scale Solar in the Southeast

January 7, 2026 | Jamie Moody, Communications Director

BlueWave Advances Agrivoltaics In Massachusetts, Blending Solar Energy With Farming To Support Rural Communities

By [S.S. Dev](#) - 10th June 2025

1825 0

Despite the Southeast's high solar energy potential, transformative solar policies do not exist in every state.



Technical Guidance

South Carolina - SC Pollinator Habitat Act

North Carolina - NC Solar Technical
Guidance

Georgia - Recommended Practices for
the Responsible Siting and Design of Solar
Development

Florida - Florida Solar Site Pollinator
Habitat Planning Form and Scorecard



DIRECT COMPENSATIO N

Landowners and solar system owners are paid for electricity produced

**Massachusetts
New Jersey**

TAX EXEMPTIONS

Property tax exemptions for agrivoltaics project owners

**Maryland
Nevada
Colorado**

RESEARCH FUNDING

State governments are funding research and demonstration projects

**Colorado
New Jersey
New York**

STUDY COMMISSIONS

State lawmakers are creating legislative task forces to study agrivoltaics

**Oregon
Colorado
Connecticut**



Solar Investment Tax Credit Set to Expire

Phase out of the 30% commercial investment tax credit for solar projects

Federal Agencies Slowing Solar Development

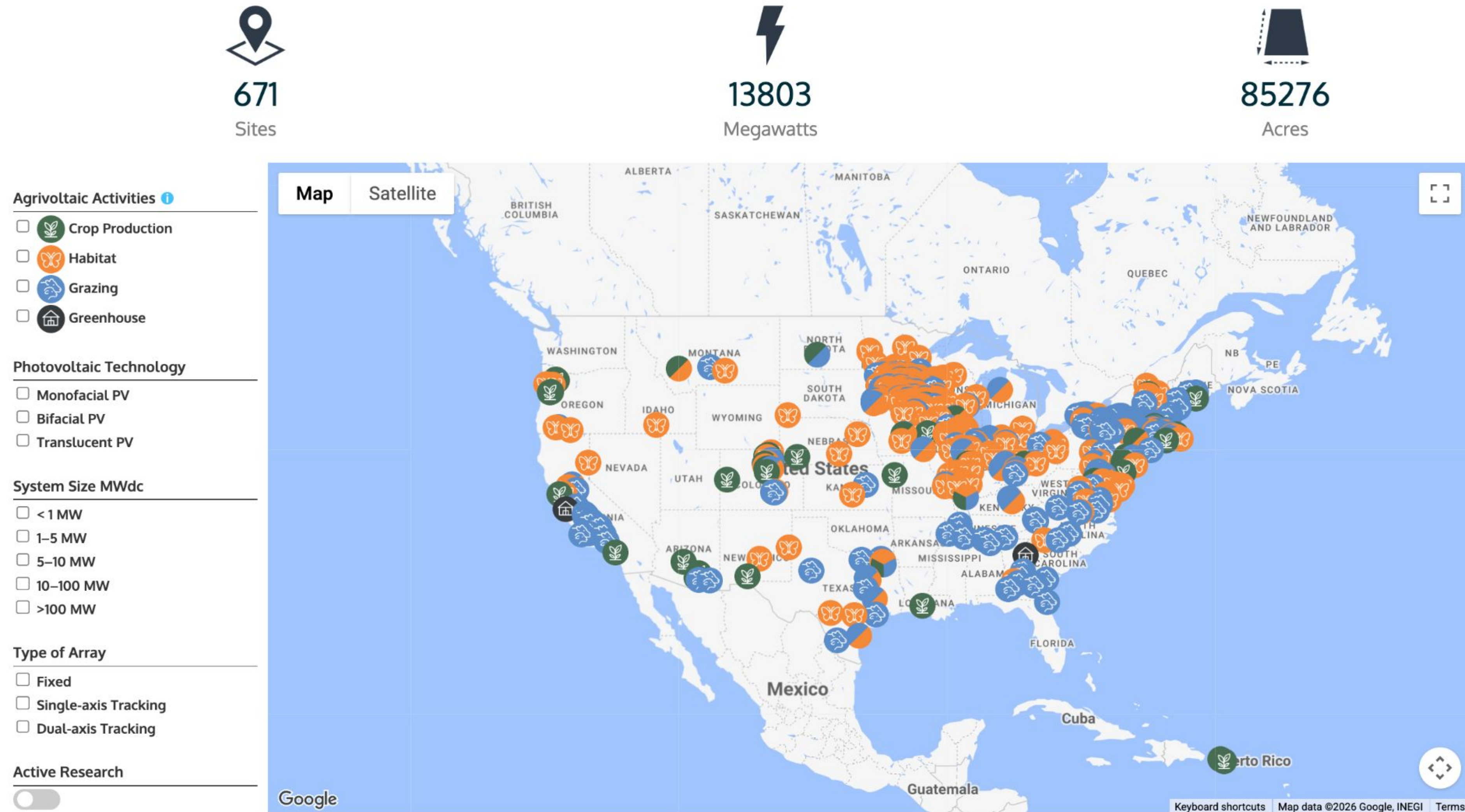
Multiple federal agencies have used permitting and regulatory frameworks to slow or halt solar development.

Restricted Rural Energy for America Program (REAP)

REAP has faced escalating restrictions

Agrivoltaics in the U.S.

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JIM JOHNSON

Senior Business Consultant
South Carolina Small Business
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FARM GROWTH

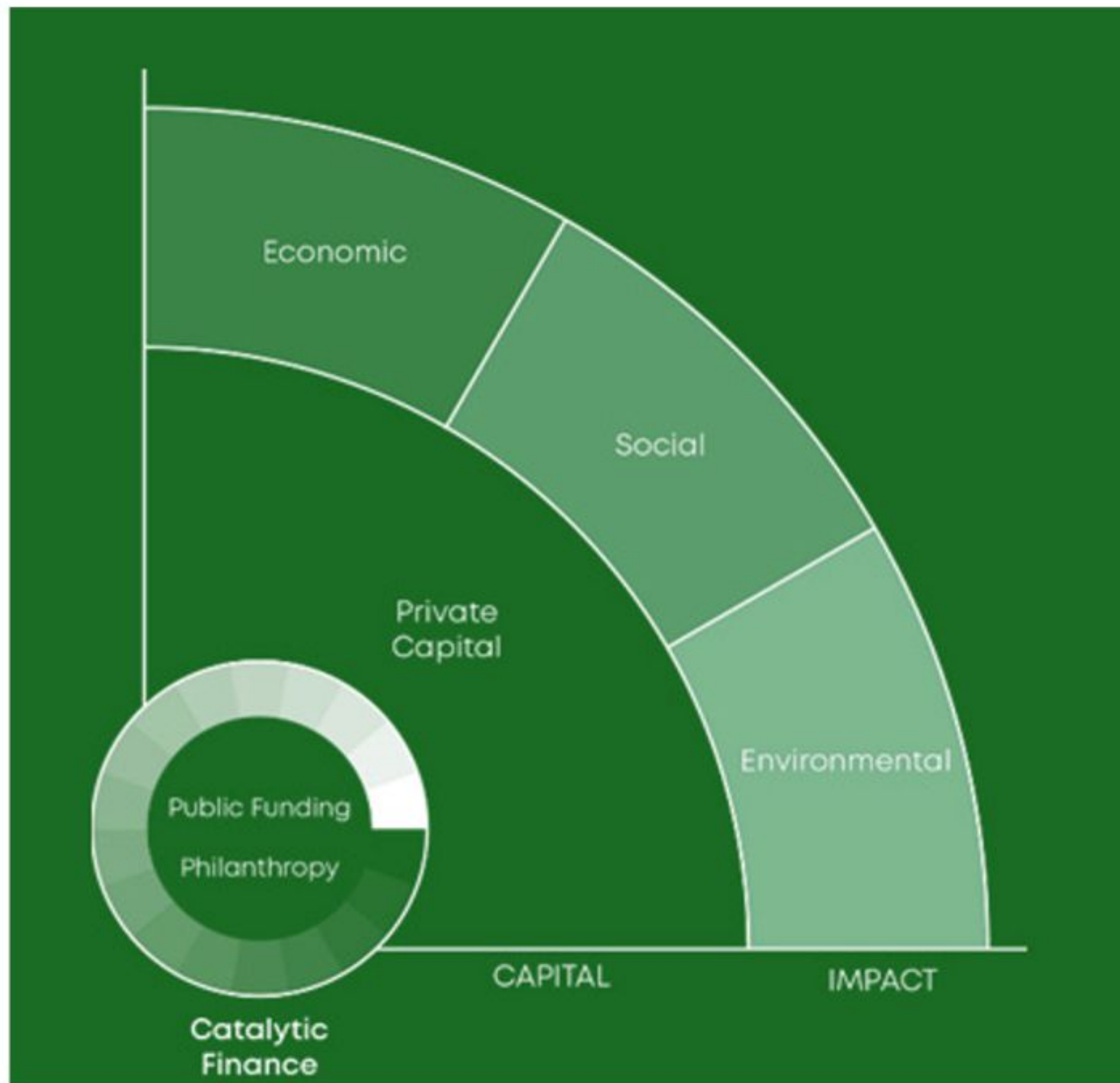
Agrivoltaics for Small Farms

Harnessing solar energy while preserving agricultural value

Jim Johnson, MBA, CGBP
Senior Business Consultant | Agri-Food Specialist
South Carolina SBDC



The Capital Stack: How Projects get Funded



1

Private Capital and Debt Funding

- Your own cash or private investors (debt or equity)
- Conventional, Guaranteed and Agricultural Loans
- Energy Revolving Loan Funds

2

Federal & State Tax Credits

- 30% Federal Tax Credit
- 25% SC State Tax Credit (\$35k cap spread over 10 years)
- tax credit transfer markets

3

USDA REAP Grants

- Pays up to 50% of eligible project expenses for renewable energy systems
- Capped at \$1,000,000
- Program currently on hold - undergoing review and revision

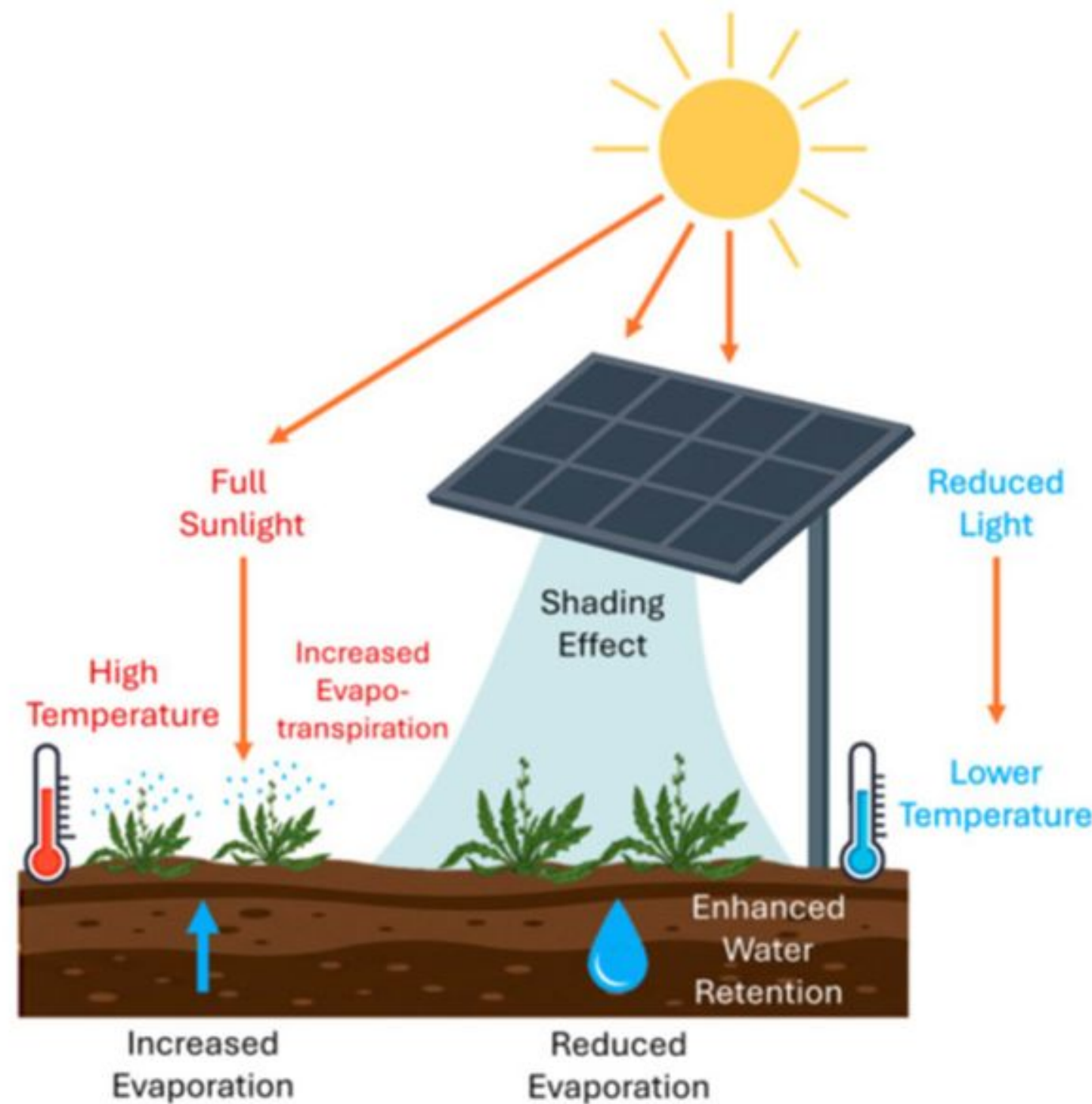
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State & Utility Incentives

Check with your state and local utility for programs.

**Use a blended finance approach, combining grants, tax credits, debt, and private capital to improve project economics and reduce risk.
Lenders invest on cash flow.**

Revenue Streams and ROI



1

Lower Energy Costs & possible Revenue

- Offsets Energy Cost
- Protects against future inflation
- Creates value in sale of energy

2

Farm Income

- Basic farm income from compatible enterprises such as grazing, pollinator habitat, forages, or specialty crops that perform well with the panels.
- Markets and capacity dependent

3

Conservation Income

- NRCS programs like EQIP and CSP
- Advancing Markets for Producers (AMP)

4

Resilience

- stabilize the farm against market and weather shocks.
- Diversification of income

Agrivoltaics revenue models are similar to conservation practice investments in that the value is realized over time, so not a quick-return investment.

Agrivoltaics models offer consistent income. The financial ROI can vary greatly based on the unique farming situation.

Strong Return on Investment for Social and Environmental impacts.

A practical action plan for small farms getting into agrivoltaics

1 Feasibility

- Do Your Research
- Build a Team
- Start with low-complexity models
- Understand all markets
- Understand size fit

2 Build a Financial Stack Early

Ask a solar developer, lender, or advisor to map out federal credits, USDA REAP guaranteed loans or grants, and any state or utility incentives so you know what the project can support before you design it.

3 Phase in the Project

- Not a full build out on day 1
- Start small and build skills and Infrastructure
- Government programs take time

“Start with the land’s best fit, the finance stack, and a small pilot—then let the numbers prove the model.”

**THANK
YOU!**



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Coordinator*

Massachusetts Department of
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MASSACHUSETTS
**DEPARTMENT OF
ENERGY RESOURCES**

Agrivoltaics in the SMART Program

August 12, 2026

Turner Jackson

Program Coordinator

Renewable and Alternative Energy Division



SMART Program Overview

Massachusetts' primary solar incentive program

- Utility companies compensate solar system owners per kWh generated over a 20-year tariff term
- Certain system types and land uses receive additional incentives through "adders"
 - Building mounted
 - Brownfields
 - Landfills
 - Canopies
 - Community solar
 - **Agrivoltaics**

Example Incentive Rate for an Agrivoltaics Project

Base Rate for STGUs between 250-500 kW:
\$0.2430

Dual Use Agricultural Adder: \$0.09

Combined Rate: **\$0.333**

**Over 50,000 systems and 1,300 MW
have qualified under the Program to date**



Key Requirements for Agrivoltaics in SMART

- **Regulatory provisions**
 - **Will not interfere with the continued use of the land** beneath the canopy for agricultural purposes
 - Designed to **optimize a balance** between the generation of electricity and the agricultural productive capacity of the soils beneath
 - Raised structure allowing for **continuous growth of crops** underneath the solar photovoltaic modules, with height enough for labor and/or machinery as it relates to tilling, cultivating, soil amendments, harvesting, and grazing animals
- **Application requirements**
 - Site details (acreage, agricultural tax status, property map)
 - Letter from UMass Clean Energy Extension
 - Solar array design details
 - Shading analysis
 - Agricultural plan (crops or grazing, soil tests, equipment)
- **Annual Reporting and Waivers**



Collaboration with Department of Agricultural Resources

- Development of Guideline and Pre-Determination Application
- Individual project reviews
- Site visits
- Community engagement
- Knowledge and expertise sharing
- Coordination of policy objectives and long-term climate goals



Czajkowski Farm: Hadley, MA



- 375 kW AC
- Low Income Community Shared Solar
- Broccoli production → supplier for local schools



Knowlton Farms: Grafton, MA



- 2 MW AC paired with Energy Storage
- Community Shared Solar
- Direct ownership
- Fruit, vegetable, and hay production



Ring Road Bog: Plympton, MA



- 2 MW AC
- Energy Storage
- Cranberry production



Community Concerns

- **Loss or degradation of productive farmland**
 - Farms more susceptible to abandonment or conversion due to economic pressures
 - Dual-use solar as a farm viability and diversification strategy
- **Aesthetic concerns**
 - Screenings, setbacks
 - Farmer control
- **Novel, untested technology**
 - Gradual, closely monitored deployment with input from experts
 - Policy evolution in response to challenges and results

Community Buy-in

- **Local zoning and permitting**
 - MA is a local control state, but some towns have integrated DOER's review process into their permit approval process
 - Additional Siting and Permitting Reform
- **Research and data collection**
 - Strong partnership with UMass research staff who are collecting data on operational projects
- **Annual reporting**
 - Projects must report annual agricultural yields, challenges, successes to continue receiving incentive
 - Reports publicly available on DOER's website



Challenges and Lessons Learned

- Tension between comprehensive policy that works for all and accounting for unique needs of each operation
- Defining expectations about agricultural productivity while avoiding value judgments about “traditional farming”
- Responsibility to stay attuned to necessary policy changes and be responsive to evolving landscape
- Need for learning by doing, but community education and buy-in are key to success





MASSACHUSETTS
**DEPARTMENT OF
ENERGY RESOURCES**

Thank You!

Q&A



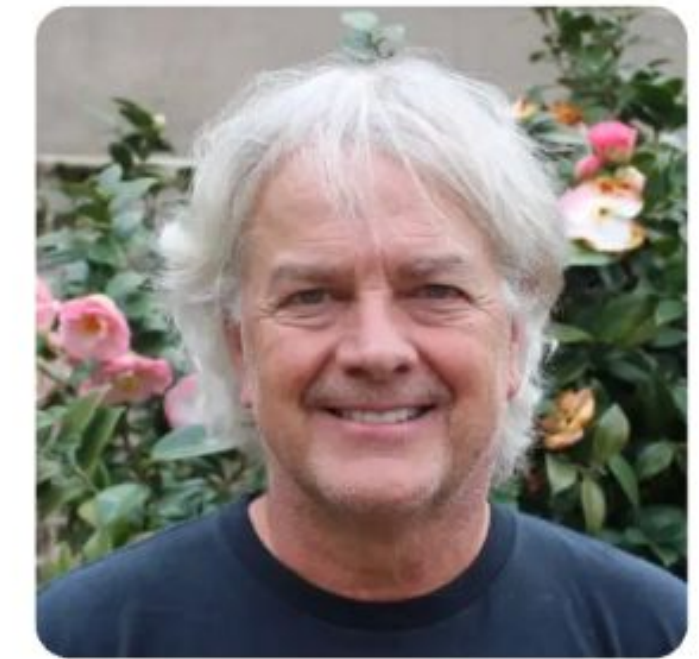
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THANK YOU!

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