Community Solar for the Southeast

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https://nccleantech.ncsu.edu/community-solar/





Community Solar for the Southeast

NC CLEAN ENERGY TECHNOLOGY CENTER

Project Summary

The goal of this project is to greatly expand the deployment of solar projects across the southeastern U.S. by spurring the development of community solar programs in the territory of cooperative and municipal utilities. The project will use a stakeholder engagement process during Phase I to set goals for community solar programs and to develop a *Guide to Designing and Implementing Community Solar Projects at Public Power Utilities in the Southeast.* Phase II will involve targeted outreach to all cooperative and municipal utilities in the southeast, and personalized technical assistance using the *Guide* developed in Phase I to help develop and implement community solar programs.



Key Personnel/Organizations

North Carolina Clean Energy Technology Center, North Carolina Cooperative Extension, Savannah River National Laboratory, Fayetteville Public Works Commission, Roanoke Electric Cooperative, National Rural Electric Cooperative Association, Electricities

Key Milestones & Deliverables

Year 1:	Development of the Guide to Designing and Implementing Community Solar Projects at Public Power Utilities in the Southeast
Years 2 & 3:	Direct outreach to every cooperative and municipal utility in AL, FL, GA, KY, MS, NC, TN, SC, VA



Agenda

- Survey Results
- Working Groups
- Technical Assistance
- Rocky Mountain Institute





33 Survey Responses



Appealing Aspects







Gap and Challenge Ranking

- 1. Program Model and Pricing
- 2. Limitations in Wholesale Power Contracts
- 3. Different State Policies
- 4. Unfamiliarity with Program Design
- 5. Integration with Billing
- 6. High Upfront Costs
- 7. Unfamiliarity with Storage Options
- 8. Cost-Shifting to Non-subscribers
- 9. Customer Interest





Non-Gap Challenges

- Integration with Billing Systems NRECA's Community Solar Playbook
- Community Solar Program Design NRECA's Community Solar Playbook SEPA's Community Solar Program Design Models
 CCSA's Community Solar Policy Decision Matrix
- Upfront costs DSIRE

NRECA's *Community Solar Playbook* RMI's bulk procurement experience

- Stimulating Customer Interest NRECA's Community Solar Playbook SEPA's Community Solar Playbook
- Education

Many resources





Working Group Topic Areas

- Program Design for Community Solar + Storage
- Innovative Credit Rate Structures
- Getting Buy-in From Local Leadership
- * State Policy and Utility Market Variations





Program Design for Community Solar + Storage

- How should each subscriber get credit for the output/savings from storage?
- Is the value of storage different in the southeast compared to other regions? Is the value of storage different in different states within the southeast?
- What incentives and policies specifically pertain to storage?
- How significant is the demand component for the utilities? How much can storage help reduce demand rates?
- How do you deal with the battery replacement costs, do you build that into the program design?





Innovative Credit Rate Structures

- Should Community Solar be valued at avoided cost, or retail rate, or something else?
- Should the new approaches being developed in other states be considered for southeastern states?





Getting Buy-in From Local Leadership

- Are there existing networks that we can tap?
- What criteria do city council and co-op board use to evaluate community solar projects?
- What is the best way to approach city council or board?
- Should we try to work through the G&Ts or work directly with the utilities?





State Policy and Utility Market Variations

• State policy and market matrix





Working Group Operating Principles

- Three Bi-weekly conference calls/web-conferences
 Week of 9/25/17, 10/9/17, 10/23/17
- ~ 1 hour of homework between calls





Working Groups Sign Up

Look for Google Form





Technical Assistance

- System selection and cost/benefit analysis
- Solar + Storage technical considerations
- Community solar program design guidance
- Project development
- Outreach and education
- Joint procurement





Thank You!

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