

Clean Energy Extension

Status: NIFA REVIEW

Project Director

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Organization Project Number

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Accession Number

7002098

Start & End Date

10/01/2020

Organization

University of Massachusetts

To Project / Program

"Clean Energy Extension"

Primary Critical Issue

Sustainable Energy

Fiscal Year

2022

In 2-3 sentences, briefly describe the issue or problem that your project addresses.

The Clean Energy Extension serves an important and impactful niche within the range of Massachusetts public entities that serve the clean energy and climate commitments of the Commonwealth. CEE provides applied research, student training, and objective technical assistance and outreach to the clean energy markets and beyond. Over our 6 years of existence, CEE has become a trusted and appreciated resource for MA municipalities, regional and community based organizations, government officials, and University research collaborators.

Briefly describe in non-technical terms how your major activities helped you achieve, or make significant progress toward, the goals and objectives described in your non-technical summary.

Observing the growing trend of accelerating solar PV development in Massachusetts, and the strain and pressure that small rural towns were facing with interfacing with these pressures from solar firms and constituents, CEE prepared a *Community Planning for Solar Toolkit* which is now being deployed by CEE to towns in western MA. The Toolkit enables a town to understand its solar resources, assess the goals and preferences of constituents, evaluate solar ownership and economic benefits opportunities, and prepare an actionable solar plan for the community.

CEE also provided broad technical assistance and outreach to 60 municipal governments across Massachusetts providing advice and actionable recommendations on solar projects and energy efficiency and strategic electrification to town buildings. We have also had interactions with 65 additional organizations to offer technical support or share and compare extension outreach and applied research work.

Briefly describe how your target audience benefited from your project's activities.

The municipalities that we serve are provided technical and economic analysis of clean energy opportunities with actionable plans and follow up to move forward. Some have also been provided greenhouse gas inventories and methods to maintain these inventories, along with planning documents for their net-zero carbon goals. CEE has provided similar technical assistance to a range of community organizations and under-resourced non-profit organizations looking to move towards clean energy solutions.

Briefly describe how the broader public benefited from your project's activities.

CEE directly serves the Commonwealth's clean energy and climate goals, and its work benefits the state population as a whole in meeting these objectives, transitioning to a more affordable clean energy future, and building economic and environmental resiliency by reducing the threats of climate change. Our work has particularly targeted opportunities to advance a more equitable and just energy future by initiating and supporting clean energy economic opportunities for low-income, rural, and minority populations within Massachusetts.

Comments (optional)

The Covid-19 virus maintained most of our work this year virtual. Nonetheless, we feel that the effectiveness of our work and service to the communities were not diminished. The completion of our Community Solar Planning toolkit work was delayed, so our work to deploy the toolkit started in fall 2022 and will continue substantially through 2023. Our work in 2023 will also build on our community partnerships in western MA to demonstrate solar business plans for local ownership to substantially enhance economic value to rural, low-income, and

minority populations. This work is enhanced by provisions in the federal Inflation Reduction Act.

- Individual consultations, site visits, and mentored student public service projects - Development of community solar Action Plans by Massachusetts towns that receive our technical assistance through our community planning for solar toolkit (3) 12 Participants 6 male, 6 female, 12 white non-hispanic adults
- Individual consultations and site visits - Meetings with businesses, organizations and municipalities to advance clean energy opportunities (125) 875 Participants, 840 Adults, 35 Youth.

Participant race/ethnicity:	# Race/Ethnicity	
	795	White; (Not of Hispanic Origin)
	30	White; (Hispanic Origin)
	50	Black or African American; (Not of Hispanic Origin)
Participant locations:	# Location	
	450	(MA) Pioneer Valley/Berkshire Region
	300	(MA) Statewide
	50	New England States
	75	National