Supporting Clean Energy in Massachusetts Clean Energy Extension UMass Amherst

Massachusetts Clean Energy Conference: Helping Communities with Renewables and Efficiency September 22, 2016





What is the *Clean Energy Extension (CEE)*?

- Mission: To reduce market barriers and accelerate the adoption of renewable energy and energy efficiency in Massachusetts by providing technical assistance, research opportunities, financial support, and policy solutions to a range of clean energy stakeholders across the state.
- Established in 2015, with support from MA Department of Energy Resources, to help meet the state's energy and climate goals.
- Created at UMass to align with broader extension mission and capabilities of the University, dating back to its founding.





UMass Extension Mission



- The UMass Amherst Center for Agriculture, Food and the Environment creates, disseminates and utilizes knowledge for the benefit of the Commonwealth and its citizens, and to advance academic scholarship and the mission of the University of Massachusetts Amherst.
-we create programs of integrated research and educational outreach that address public priorities and concerns...





Who are we?

- CEE small staff includes expertise in:
 - MA clean energy markets, programs, and policy
 - Market outreach and development
 - Clean energy technologies, analysis, and engineering





UMass Clean Energy Student Corp



CEE coordinates the **UMass Clean Energy Student Corp** to expand its outreach and energy-related data collection and analysis, actionable energy strategies, and workforce development.



Mobilizing UMass Resources

- We collaborate with University resources in:
 - Engineering
 - Regional planning
 - Economics
 - Environmental studies

- Public policy
- Water resources
- Business
- Public health





What do we do?

- CEE provides objective technical assistance to MA cities and towns, businesses, institutions, and clean energy markets.
- We help entities
 - Scope clean energy opportunities
 - Navigate through state programs and policies and funding sources
 - Prepare and review proposal documents
 - As an owner's agent through project development
- CEE also engages in applied research and targeted outreach to support market and policy development



Specific CEE Projects



• Technical assistance:

- Winchester Public Library geothermal evaluation
- Local preparatory school campus-wide pellet boiler and CHP analysis

• Research opportunities:

 Developing Massachusetts large-scale boiler and power plant survey using ArcGIS to identify opportunities for CHP, Renewable Thermal, and district heating

• Market outreach:

- Convening 3rd Annual Massachusetts Clean Energy Conference: Helping Communities with Renewables and Efficiency on Thursday, September 22, 8:00am - 5:00pm at the Beechwood Hotel in Worcester, MA
- Policy analysis
 - Developing MA Community Shared Solar policy study in collaboration with UMass School of Public Policy

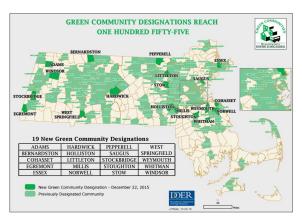


UMassAmherst

Green Communities Assistance

Support for DOER Green Communities Program

- Engage with towns or RPAs to prepare applications for Green Communities Designation (Criterion 3).
 - MassEnergyInsight account and platform development
 - Review of third-party energy audits
 - Recommendations and drafting of Energy Reduction Plans
- Engage with existing Green Communities to:
 - Review progress on 20% energy reduction requirements, and offer recommendations to successfully meet these goals
 - Scope renewable energy and energy efficiency projects for GC Competitive grants, and assist in grant applications and project activities
- Currently working with Ware, Southampton, Amherst, Erving, Monson





Emerging Technologies

Supporting emerging clean energy technologies and business models that show promise for benefiting municipal and businesses, low-income accessibility, and energy resilience in general.

For example:

- Community Shared Solar
- Renewable thermal and district energy
- Energy resiliency and storage
- Combined heat and power





How do we work?

- We're eager to help stakeholders meet clean energy goals and have limited staff resources.
- We work across the Commonwealth, and western MA is of specific interest and proximity.
- We aim to avoid competing with what the private sector can offer. For example, we don't offer:
 - Energy audits that are available from MassSave.
 - In-depth feasibility and engineering/design studies that are available from engineering consultants.
 - Solar PV siting studies, which are available from solar companies.
- We aim to minimize the transactional costs associated with providing our services to towns. Thereby, for Green Communities services, we currently have no charge for our services or contractual agreements.
- Contact us and let's explore the possibilities!





CEE is Organizing a Clean Energy Conference

MASSACHUSETTS CLEAN ENERGY CONFERENCE

Helping Communities with Renewables and Efficiency

September 22 – Worcester, MA

Free Registration for Municipalities

Agenda and registration at <u>www.masscleanenergyconference.com</u>

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Current Sponsors



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Clean Energy Extension

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