



**COMMONWEALTH OF MASSACHUSETTS**

*Charles Baker, Governor  
Matthew Beaton, Secretary  
Judith Judson, Commissioner*

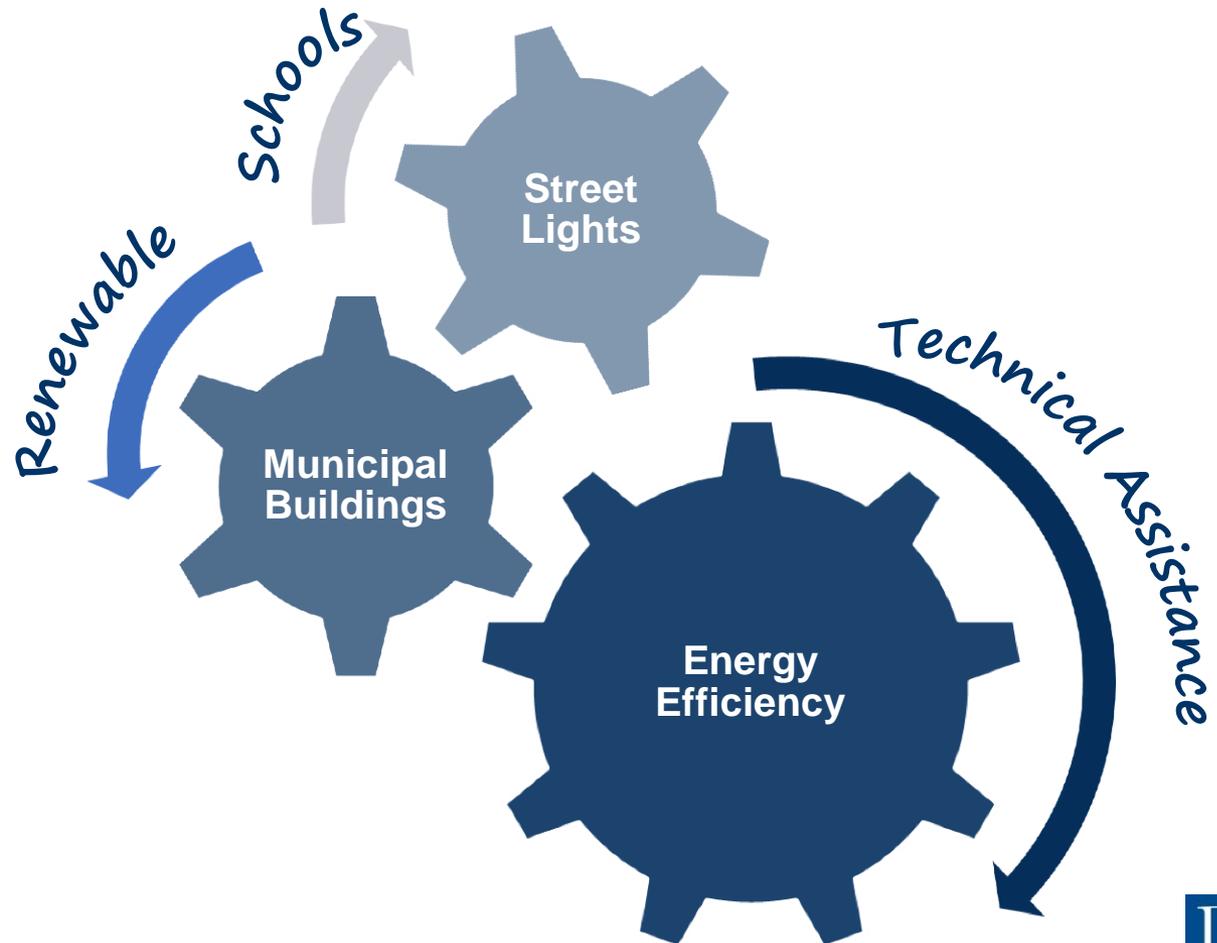
## **What's New at MassCEC**

*Green Communities Division  
Webinar*

*February 22, 2017*

# Green Communities Division

The energy hub for **all** Massachusetts cities and towns, not just designated “Green Communities.”



# Green Communities Division - Programs & Resources for Municipalities

- Green Communities Designation and Grant Program
- MassEnergyInsight energy tracking and analysis tool
- Municipal Energy Technical Assistance
- Energy Management Services Procurement Oversight
- Website filled with tools & resources:  
[www.mass.gov/energy/greencommunities](http://www.mass.gov/energy/greencommunities)

**Email updates via e-blasts – Sign up by sending an email to:**

[join-ene-greencommunities@listserv.state.ma.us](mailto:join-ene-greencommunities@listserv.state.ma.us)



*Helping Massachusetts Municipalities Create a Cleaner Energy Future*



# Outreach - Regional Coordinators

- Regional Coordinators act as direct liaisons with cities and towns on energy efficiency and renewable energy activities
- Located at each of the DEP Regional Offices:



WERO – SPRINGFIELD: Jim Barry  
[Jim.Barry@state.ma.us](mailto:Jim.Barry@state.ma.us)



NERO – WILMINGTON: Joanne Bissetta  
[Joanne.Bissetta@state.ma.us](mailto:Joanne.Bissetta@state.ma.us)



CERO – WORCESTER: Kelly Brown  
[Kelly.Brown@state.ma.us](mailto:Kelly.Brown@state.ma.us)



SERO – LAKEVILLE: Seth Pickering  
[Seth.Pickering@state.ma.us](mailto:Seth.Pickering@state.ma.us)



*Helping Massachusetts Municipalities Create A Greener Energy Future*



# Recording & Presentation

- The webinar is being recorded and will be available on our website in approximately 48 hours at:  
<http://www.mass.gov/eea/energy-utilities-clean-tech/webinars.html>
- Click on the camera icon top right of your screen to save any slides for future reference
- Use the Q & A icon on your screen to type in questions
- The slide presentation will also be posted at:  
<http://www.mass.gov/eea/energy-utilities-clean-tech/webinars.html>



*Helping Massachusetts Municipalities Create A Greener Energy Future*



# Poll Questions for DOER to add to Webinar

To add after Solarize Mass presentation

- Choose all that apply: My community has:
  - participated in the Solarize Mass program in the past / considered applying to the Solarize Mass program / heard of the Solarize Mass program

After Hydropower presentation

- Does your community operate its own waste water treatment plant?
  - Yes / No / I Don't Know



# **What's New at the Massachusetts Clean Energy Center**

**Programs and Initiatives for Municipalities**

**February 22, 2017**

# Our Mission

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**Build** sustainable industry to create jobs, long-term economic growth



**Cultivate** a robust marketplace for innovation in clean technologies



**Accelerate** cost reduction for clean energy technology



**Support** training and education to build a skilled workforce

# Presentation Outline

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- What's New with:
  - Solarize Mass
  - Conduit Hydropower
  - Community Microgrids and Energy Storage

# What's New with Solarize Mass

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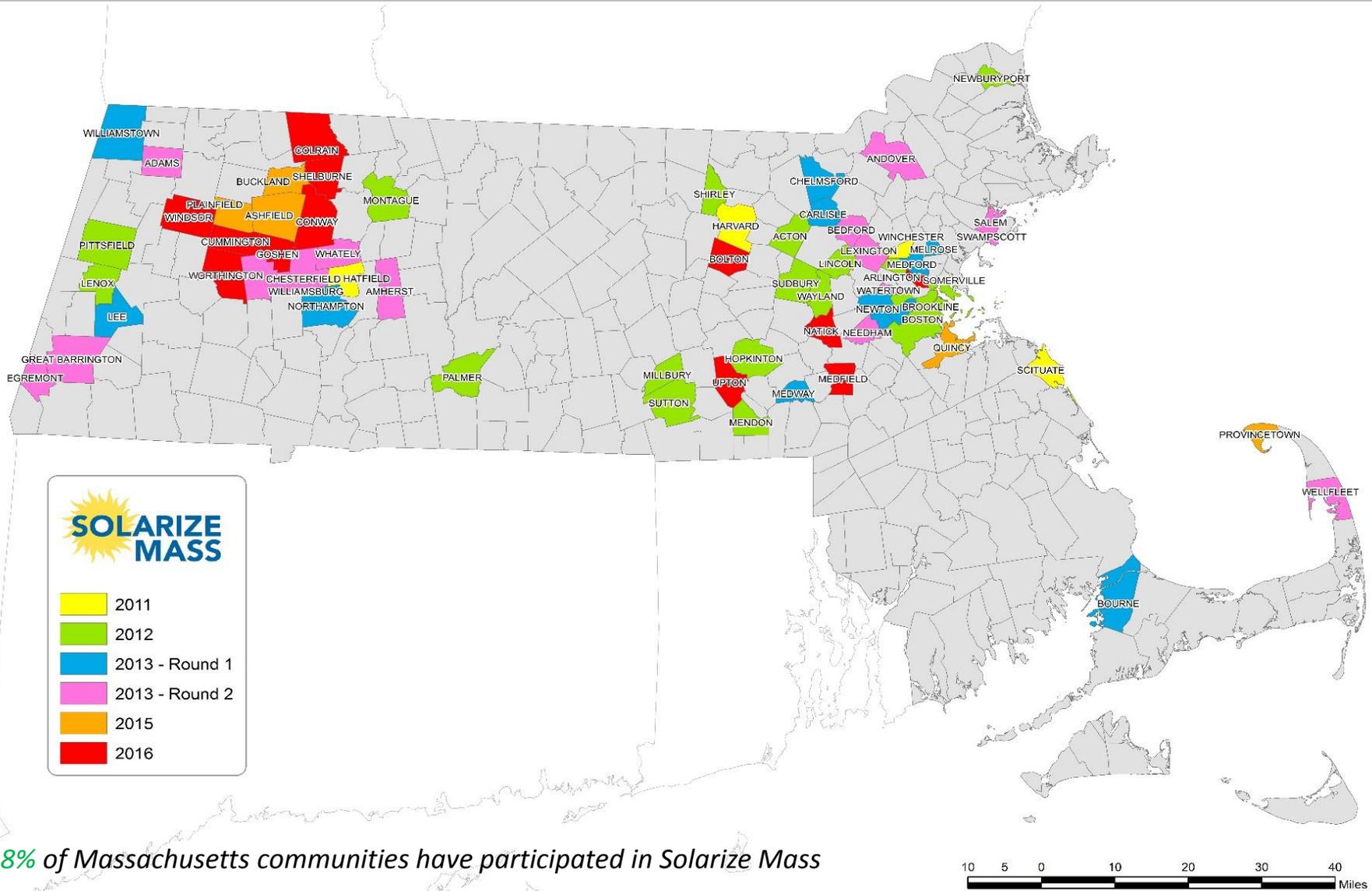


# Outline

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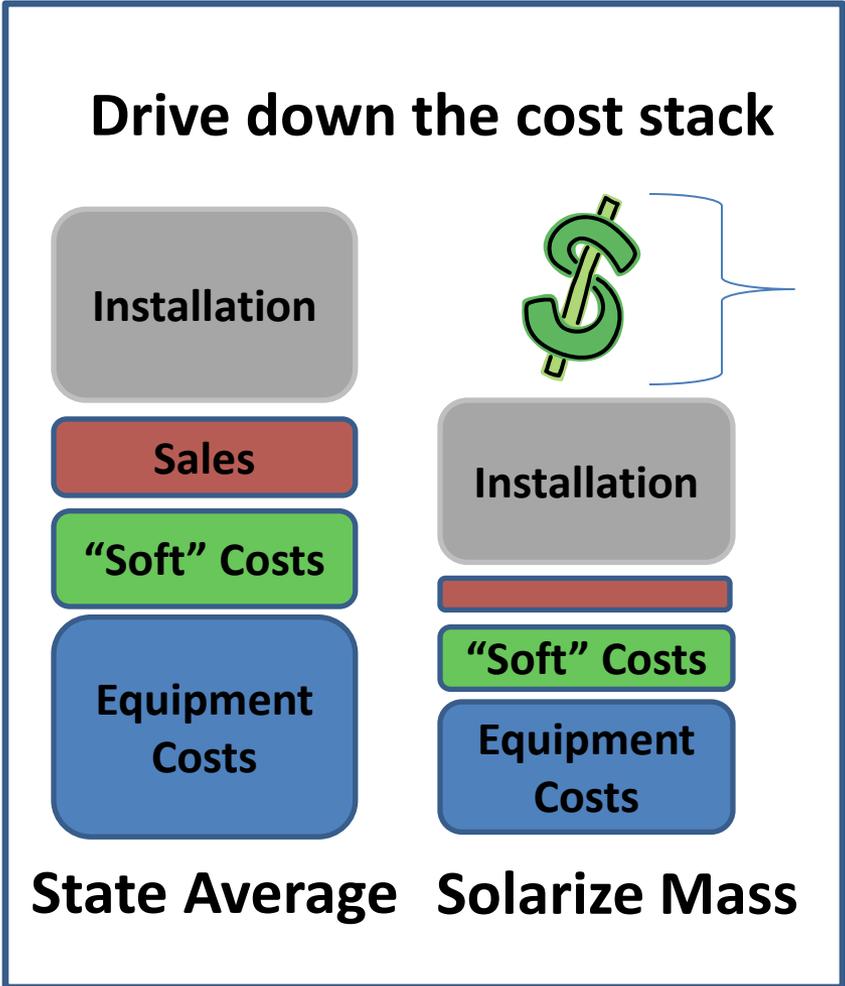
- Solarize Mass Background and Results
- Best Practices and Recommendations
- 2017 Solarize Mass program
  - Overview of Solarize Mass Plus Pilot
- How Communities Can Participate

# Solarize Mass Communities



# Goals of Solarize Mass

- Increase education and community outreach
- Model to simplify process
- Reduce installation costs
- Reduce time to contract
- Increase adoption



# Roles

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## MassCEC/DOER

Community selection

Engage technical consultants

Marketing/Education

State Incentive Program

## Community

Lead Competitive Installer Selection

Solar Coach

Volunteers

Outreach in Community

## Installer

Free Site Assessments

Fixed Pricing and Ownership Options

Contracting  
Installation



## Homeowner

Sign up for a site assessment

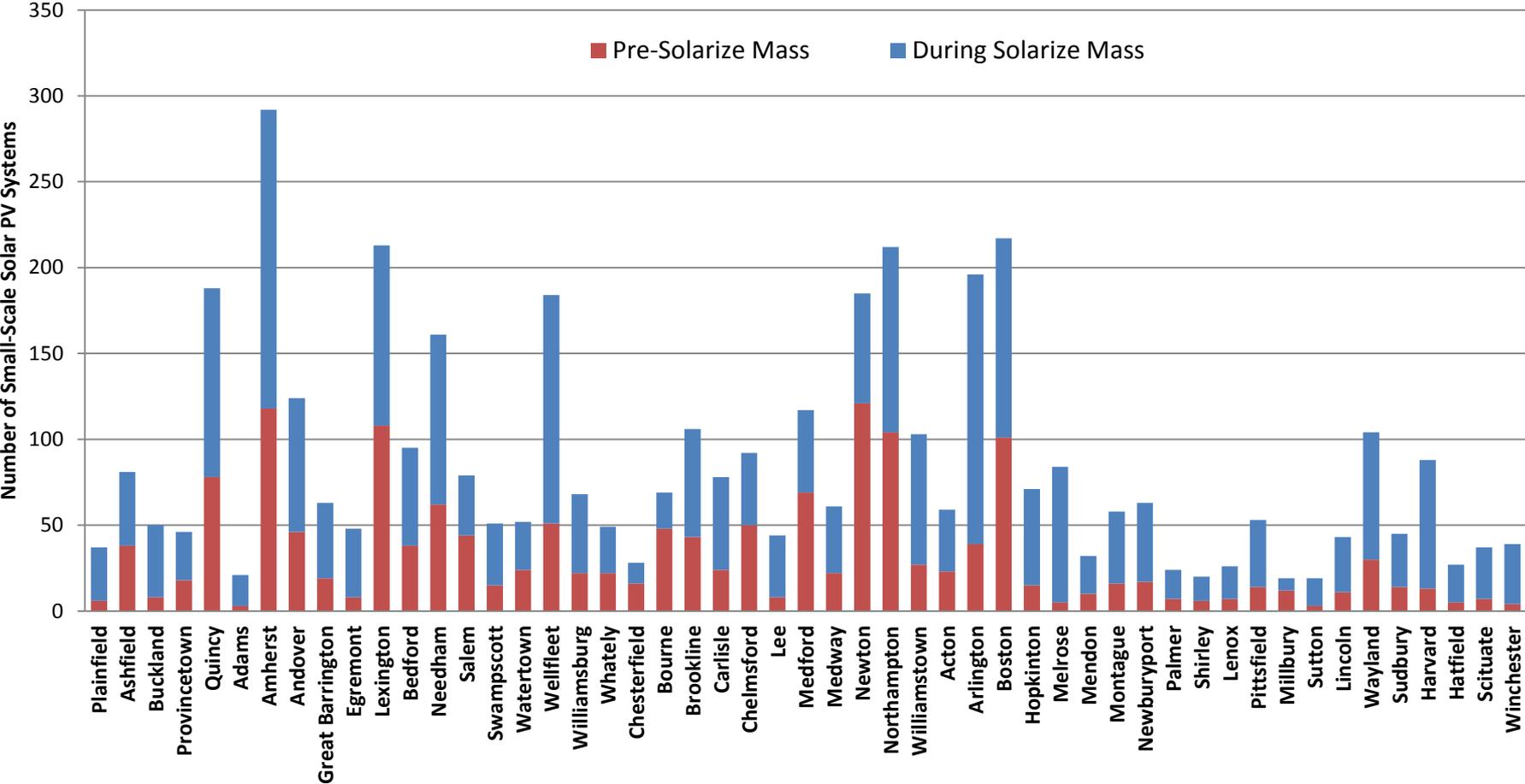
Talk to neighbors!

# Program Results to Date

Year	Communities	Contracts Signed	Contracted Capacity (kW)	Percent Savings Compared to Industry
2011	4 communities	162	829.3	-
2012	17 communities (13 proposals)	803	5,146.1	20%
2013 R1	10 communities (9 proposals)	551	3,838.2	18%
2013 R2	15 communities (10 proposals)	932	6,140.5	19%
2015	5 communities (3 proposals)	254	1,748.5	21%
2016	12 communities (7 proposals)	TBD	TBD	TBD
<b>Total</b>	<b>63 communities</b>	<b>2,702</b>	<b>17,703.2</b>	<b>18 – 21% Average</b>

- ~10% of projects contracted canceled before install. This is consistent with numbers under historic statewide Commonwealth Solar II Rebate

# Solarize Mass Adoption 2011 - 2015



Solarize Mass Communities

\* 43 of 51 communities doubled amount of solar in community

# Outline

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- Solarize Mass Background and Results
- Best Practices and Recommendations
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# Best Practices and Recommendations

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- Use the application process as a blueprint
  - Outreach and marketing plan
  - Engage volunteers and clarify roles
  - Gauge interest of community members in program
- Speak with volunteers and municipal representatives in communities who have participated
  - Learn about their successes, what worked and what didn't
  - Gain a knowledgeable frame of reference for your outreach plan

# Marketing and Outreach Methods

<b>“How Important were the following sources in encouraging you to participate in Solarize Mass?”</b>	<b>2013 Important</b>	<b>2014 Important</b>
Neighbor/Friend	45%	50%
Local community or civic group	48%	60%
Solar coach or town official	42%	58%
Solar installer	57%	65%
Community meetings or events	51%	66%
Lawn signs/Banner	38%	40%
Mailing/Door hanger/Flyer	21%	31%
Traditional/Online media (TV, radio, newspaper, etc.)	34%	45%
Social media (Facebook, google groups, twitter, etc.)	13%	20%
Other	11%	12%

**Take-Away: Some techniques work better than others, but are community-specific**

# Outline

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# 2017 Solarize Mass Program

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- Community RFP Launched Mid-October 2016
- Funding for 10 communities or groups of communities
  - Rolling community application process
  - First come, first served until funding fully expended
  - May partner with up to 3 neighboring communities
- Looking for applications that have a strong community outreach plan, engaged volunteers and proof of interest in the community for the program

# 2017 Solarize Mass Program

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- Applications must meet Community Eligibility Requirements:
  - Community must be serviced by an investor owned electric utility (Eversource, National Grid, Unitil) or MLP that pays into Renewable Energy Trust
  - Have at least 1,000 owner-occupied residences within community or within partnership of communities
  - Cannot have participated in the 2016 Solarize Mass program

# 2017 Solarize Mass Plus Pilot

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- Standard Solarize Mass model paired with a complimentary technology
- Examples:
  - Solarize Mass Plus Air-Source Heat Pumps
  - Solarize Mass Plus Solar Hot Water
  - Solarize Mass Plus Electric Vehicles
- Modified Installer RFP targeted at Installer who can provide both Solar PV and selected technology, or a pre-formed partnership of Installer companies
- Technical consultant provided has expertise in the additional technologies

# Outline

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- Solarize Mass Background and Results
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- How Communities Can Participate

# Solarize Mass

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## Solarize Mass

Solarize Massachusetts (Solarize Mass) seeks to increase the adoption of small-scale solar electricity in participating communities by reducing installation prices for participants.

▶ [Who's Eligible?](#)

▶ [How Do I Apply?](#)

▶ [Program Background](#)

▶ [Program Contact](#)





[Home](#) > [Solarize Mass \(Government/Non-Profit\) - How Do I Apply?](#)

## Solarize Mass (Government/Non-Profit) - How Do I Apply?

### How Do I Apply?

MassCEC and DOER are currently accepting community proposals for the 2017 Solarize Mass program, with a goal of selecting up to 10 communities or groups of communities. Of these ten communities, MassCEC may elect to select up to two (2) communities (or groups of communities) who have specifically applied to participate in a Solarize Mass Plus multiple-technology pilot. Interested communities should review the request proposal documents below. Completed applications should be submitted to [Solarize@MassCEC.com](mailto:Solarize@MassCEC.com).

MassCEC will accept community applications until program funds have been fully allocated.

Applications will be evaluated on a first-come, first-served basis.

Community application documents:

- [Solarize Mass Community RFP](#)
- [Attachment A - Signature and Acceptance Form](#)
- [Attachment B - Draft MassCEC - Community Contract](#)
- [Attachment C - Community Solar Coach Program Duties and Commitments Form](#)
- [Attachment D - Community Proposal Checklist and Application](#)
- [Attachment E - Solarize Mass Volunteer Support and Commitment Form](#)
- [Attachment F - Solarize Mass Community Best Practices Guide](#)
- [Attachment G - Template Installer RFP and Related Template Documents](#)

Installers interested in applying to participate in a Solarize Mass program should review the [Installer Resources page](#)

#### Massachusetts Clean Energy Center

63 Franklin Street, 3rd Floor Boston, MA 02110

Phone: 617-315-9355 | Fax: 617-315-9356

[info@masscec.com](mailto:info@masscec.com)

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# Solarize Mass

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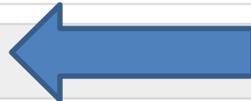
## Solarize Mass

Solarize Massachusetts (Solarize Mass) seeks to increase the adoption of small-scale solar electricity in participating communities and reduce installation prices for participants.

▶ Who's Eligible?

▶ How Do I Apply?

▶ Program Background



▶ Program Contact



## Solarize Mass Results

- [Solarize Mass Program Results \(2011 - 2016\)](#)
- [Solarize Mass Pilot Overview](#)
- [Solarize Mass 2012 Program Update](#)

## Solarize Mass Resources

The below resources provide more information about developing and implementing a Solarize Mass or similar program.

- [Solarize Mass Community Best Practices Timeline](#)
- [The Solarize Guidebook: A community guide to collective purchasing of residential PV systems](#)
- [Planning and Implementing a Solarize Initiative, A Guide for State Program Managers](#)
- [Recommendations for Permitting and Structural Review](#)

## Solarize Mass Community Marketing Proposals

Solarize Mass community marketing proposals from 2012 through 2016 are provided below to assist communities and other interested parties in considering different strategies for implementing a Solarize or similar solar adoption campaign. Developing a marketing proposal prior to the launch of a solar adoption campaign can provide a useful roadmap for communities, and may benefit program results.

Solarize Mass Community Marketing Proposals (2012 - 2016)					
	<a href="#">Bolton</a>	<a href="#">Medfield</a>	<a href="#">Natick</a>	<a href="#">Shelburne- Colrain- Conway</a>	<a href="#">Somerville</a>
2016	<a href="#">Upton</a>	<a href="#">Windsor- Cummington- Goshen- Worthington</a>			
2015	<a href="#">Plainfield- Ashfield- Buckland</a>	<a href="#">Provincetown</a>	<a href="#">Quincy</a>		
				<a href="#">Great</a>	

# Questions?

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Elizabeth Youngblood

Senior Project Manager

[eyoungblood@MassCEC.com](mailto:eyoungblood@MassCEC.com)

617-315-9335

Review the Solarize Mass website and reach with any questions:

[www.solarizemass.com](http://www.solarizemass.com)

[Solarize@MassCEC.com](mailto:Solarize@MassCEC.com)

# Conduit Hydropower Opportunities

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Municipal **water** and **wastewater** systems present opportunities to generate **electricity** from water flowing under gravity or pressure

# Conduit Hydropower Resources

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- Tools for evaluating your water or wastewater system on MassDEP's website
  - Background, introduction to technologies, examples of systems: "In-Conduit Hydropower – Phase I Report"
  - Excel-based screening tool and user's manual
  - [www.mass.gov](http://www.mass.gov), search for "In-Conduit Screening Tool"
- Grants for conducting feasibility studies and constructing facilities
  - Must be in a Renewable Energy Trust community
  - [www.masscec.com](http://www.masscec.com), search for "Commonwealth Hydropower"
- Contact Amy Barad, [abarad@masscec.com](mailto:abarad@masscec.com), 617-315-9310

# Got Sludge?

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- High cost of wastewater sludge disposal got you down?
- MassCEC is collecting data on quantities, disposal costs, and concerns
- Help us develop better options by improving our data
- Contact Amy Barad, [abarad@masscec.com](mailto:abarad@masscec.com); 617-315-9310

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# What's New With Microgrids and Energy Storage?

# What are Microgrids?

**Microgrids** are small, “islandable” electricity, heat and/or cooling distribution systems that coordinate and distribute energy supplied from multiple generation sources to a network of users in a spatially defined area.

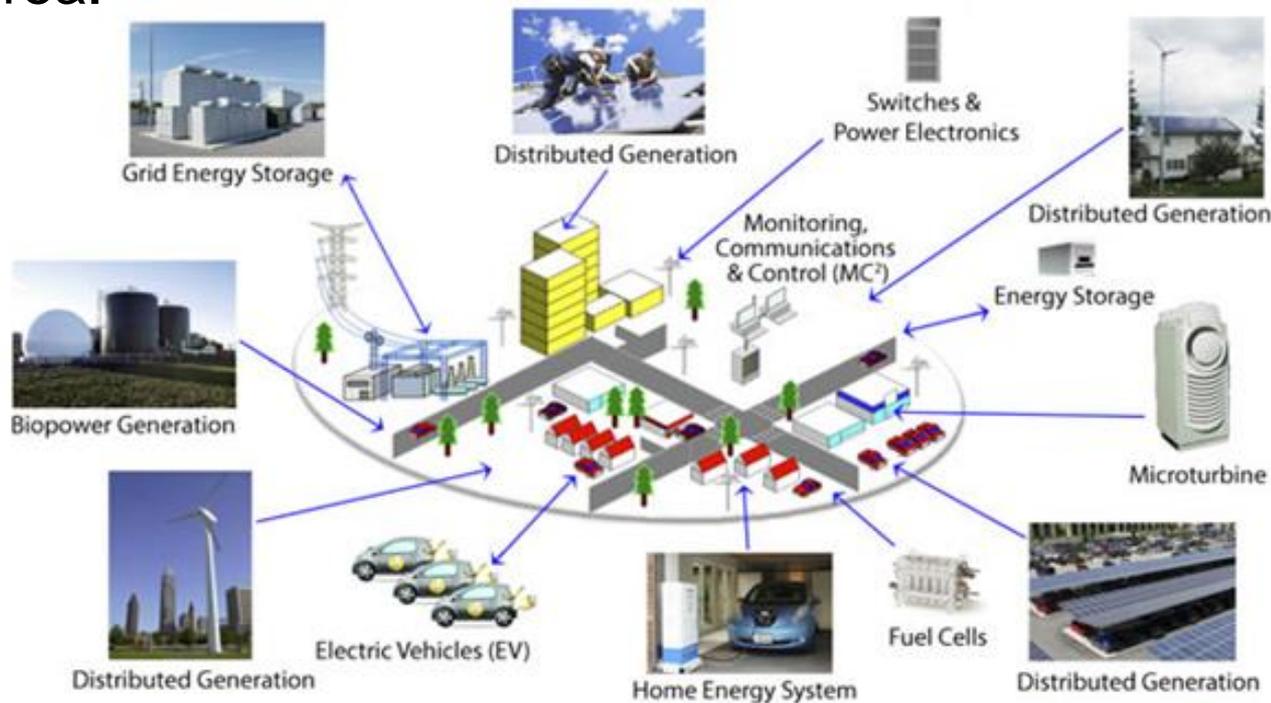


Image Courtesy of [Clean/Coalition](#)

# Why are we pursuing microgrids?

- Leverage efficiency and GHG reduction benefits of CHP
- Reduce energy costs
- Provide energy resilience for critical facilities
- Enabling platform for renewable energy and energy storage
- Support utility distribution system
- Spur economic development

# Clean Energy Community Microgrids: Technical and Commercial Feasibility Assessment Grants

## How to Apply:

- Respond to Request for Expressions of Interest
- Community receives and assessment from consultant
- Stakeholder-Supported Business and Finance Model Templates
- Community benefits from assessment of best practices

## Criteria:

- Community/multi-user microgrids in Massachusetts
- Have active and engaged support of the local utility
- Demonstrate a strong potential to reduce GHG emissions
- Encompass a public or private critical facility
- Attract third party investment
- Highlight Massachusetts-based clean energy/microgrid technology
- Support the distribution system

# Advancing Commonwealth Energy Storage (ACES)

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Showcase examples of future storage deployment, grow state's energy storage economy, and contribute to the Commonwealth's clean energy innovation leadership

For communities, its an opportunity to pilot energy storage projects with unique use cases/business models

# Award Overview

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- \$10M available in grant funding
- Awards from \$100,000 - \$1.25M
- Minimum 50% project cost share required
- Technical assistance for project monitoring and verification of non-monetizable benefits
- Projects must be located in Massachusetts

# Estimated Timeline

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Solicitation Released	Within 2 – 3 weeks
Informational Webinar	March 2017
Deadline for Written Questions	1 Month before Application Deadline
Application Deadline	4 Months from Solicitation Release
Grant Award Notifications	1 Month from Application Deadline
Contracting Process Begins	Within 1 Month from Award Notification
Project Installed	Within 18 months of Contracting
Project Performance Monitoring Period Ends	Three years from start of operation

These dates are subject to change at DOER's and MassCEC's discretion.

# Questions?

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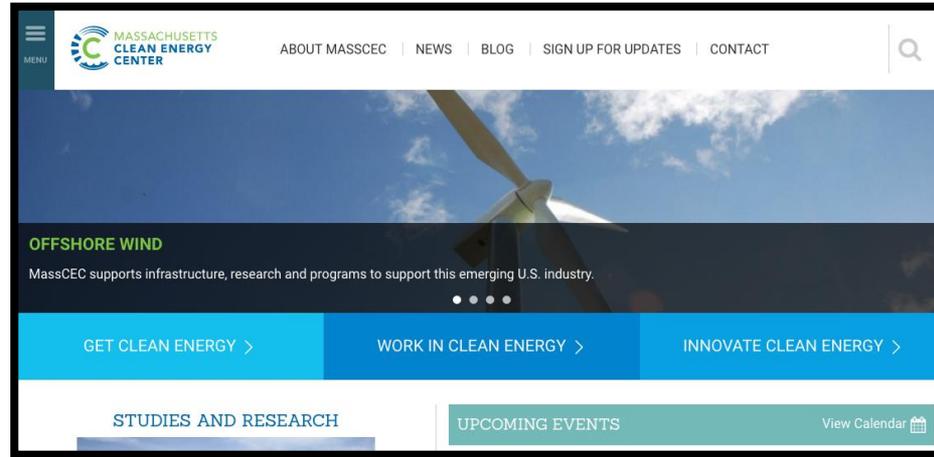
For questions regarding the  
Community Microgrids  
Program,  
contact Maeghan Lefebvre at  
[mlefebvre@masscec.com](mailto:mlefebvre@masscec.com).

Learn more at  
[www.masscec.com/microgrids](http://www.masscec.com/microgrids).

For questions regarding the  
ACES Program,  
contact Karen Kao at  
[kkao@masscec.com](mailto:kkao@masscec.com).

Learn more at  
[www.masscec.com/energy-  
storage](http://www.masscec.com/energy-storage).

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