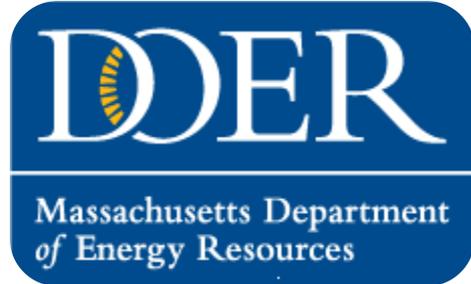


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PUBLIC LEADERSHIP,  
STEWARDSHIP, COMMITMENT

# Leading by Example Council Meeting

September 17, 2015

# Agenda

- Welcome and Introductions
- Commonwealth Energy Staffing Updates
- Policy Updates
- Recycling Updates
- MassCEC Updates
- LBE Tracking Form
- LBE 2015-2016 Priorities
- Brainstorming Session on LBE Partner Priorities
- LBE Updates
- Other and Next Meeting



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# Commonwealth Energy Staffing Updates

- Alicia Barton, MassCEC CEO leaving this month
- Eric Friedman, Acting Director of DOER Green Communities Division
- Arah Schuur, DOER Energy Efficiency Division Director
- Maggie McCarey, no longer at DOER



# Policy Updates

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# EPA Clean Power Plan Rules

- Creates “first-ever national standards that address carbon pollution from power plants”
- Makes sure fossil fuel-fired power plants operate more cleanly and efficiently
- Expands capacity for zero and low-emitting power sources
- States to develop and implement plans to achieve CO2 emissions reduction goals by 2030



Source: [Environmental Protection Agency, 2015](#)

# EPA Clean Power Plan Rules

By 2030, the Plan will **reduce carbon emissions** from power plants by **32% below 2005 levels**, or **~870 million short tons**.\*

That's equal to the annual emissions from:

**166 million cars**

(70% of our country's passenger vehicles)

OR

**powering 95% of the homes in America**

\*A U.S. short ton is equal to 2000 pounds.

Under the Clean Power Plan, utility-scale solar and wind capacity is projected to **double by 2030**, compared to 2013 levels.



**300% increase**  
in wind power since 2008\*



**2000% increase**  
in solar power since 2008\*

\*U.S. Department of Energy

**That comes with big benefits for our health.**

There's already momentum towards a clean energy future.

The Clean Power Plan increases and secures carbon and air pollution reductions that further **protect our health**.

Source: [Environmental Protection Agency, 2015](#)

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# Solar Updates

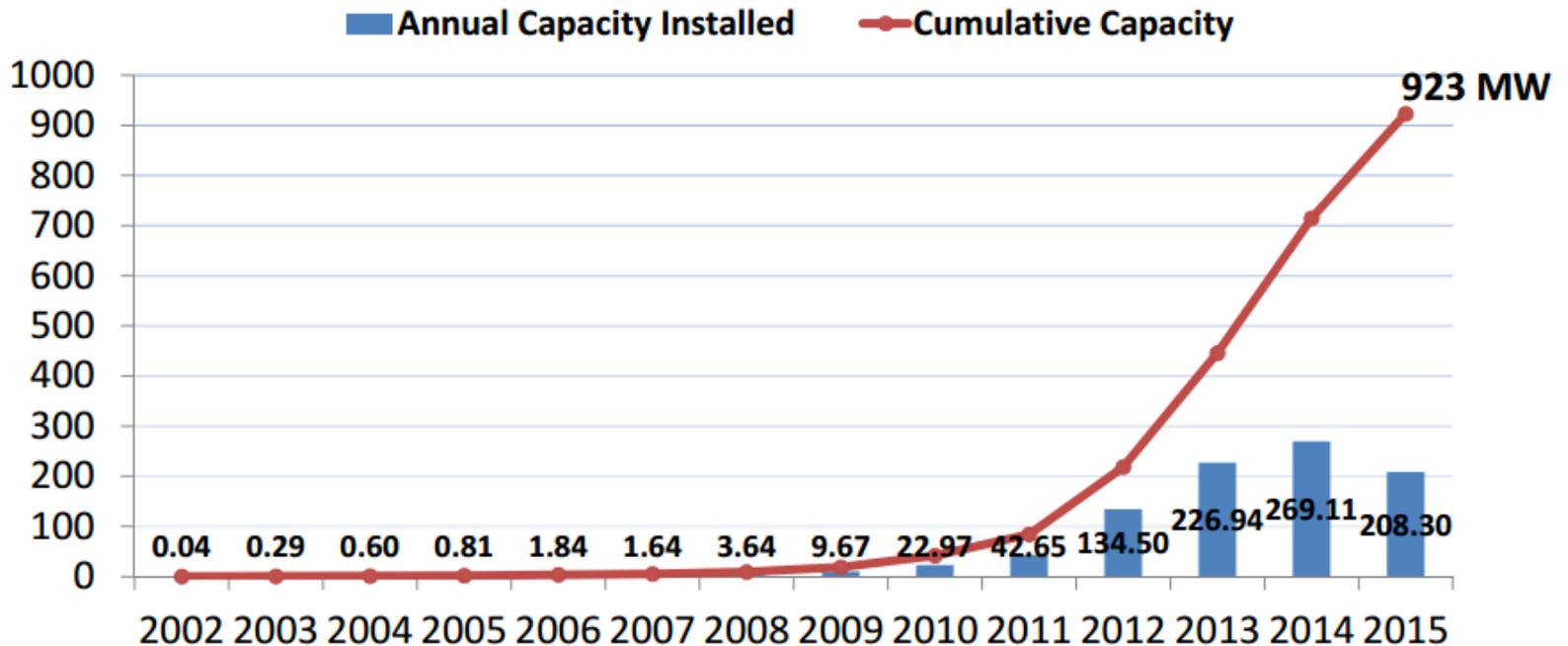


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# Solar Updates

## Installed Solar Capacity in Massachusetts



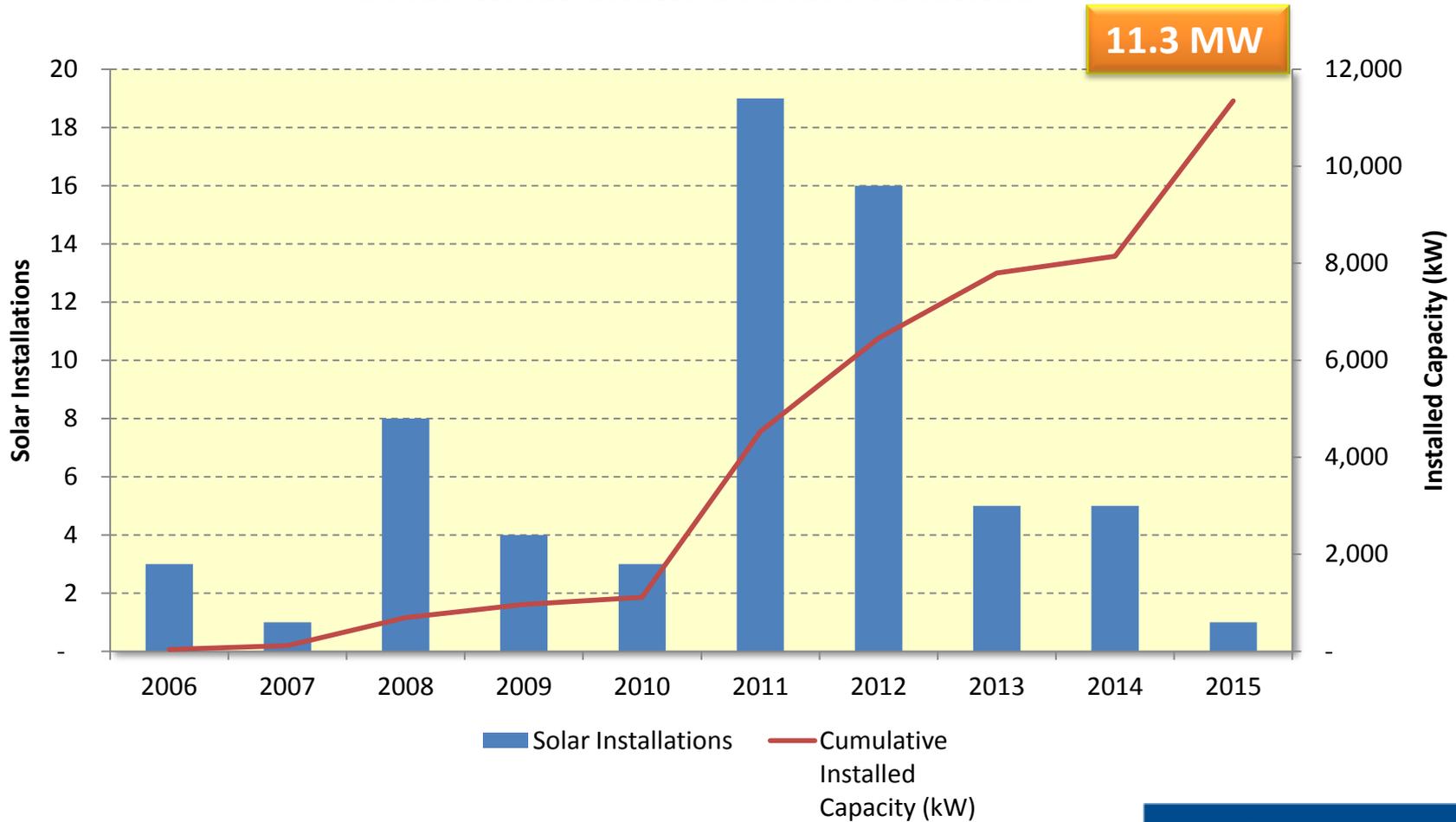
**Massachusetts has an aggressive target of 1600 MW of solar power installed for 2020. The above figures represent the cumulative amount installed as of September 2015, in 31,779 projects.**



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# Solar Updates

## Solar installations at State Facilities



# Solar Updates

- Administration proposed legislation to promote solar development
- Proposal includes raising net meter caps by 2% for both public and private entities
  - 6% proposed net meter cap for public entities, a 50% increase
  - 7% proposed net meter cap for private entities, a 40% increase
- Administration aiming to achieve 1,600 MW goal by 2020



# Coastal Communities Climate Change Grants

- \$2.2 million in grants announced for 16 projects
- Announced by Office of Coastal Zone Management in August
- Supports local effort efforts to reduce risks from coastal storms, flooding, erosion and sea level rise
- Includes:
  - \$350,000 for Boston Climate Preparedness Initiative



# Water Protection and Habitat Restoration Grants

- Over \$480,000 across 12 grants provided by the Massachusetts Environmental Trust (MET) in July
- Includes \$40,000 to Mass. Maritime Academy to map benthic habitats
- Funding from the state's 3 environmental license plates
- Since 1988, MET has provided over \$20 million in grants to organizations across Massachusetts



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# Municipal Energy Technical Assistance Grants

- \$455,000 in META grants awarded in August by DOER to 37 cities and towns for the 8<sup>th</sup> year
- Supports clean energy efforts in MA municipalities:
  - ASHRAE Level II audits
  - Solar PV site evaluation
  - Heating system replacements
- Funded through Alt. Compliance Payments (ACP)
- [View full list of recipients on DOER website](#)

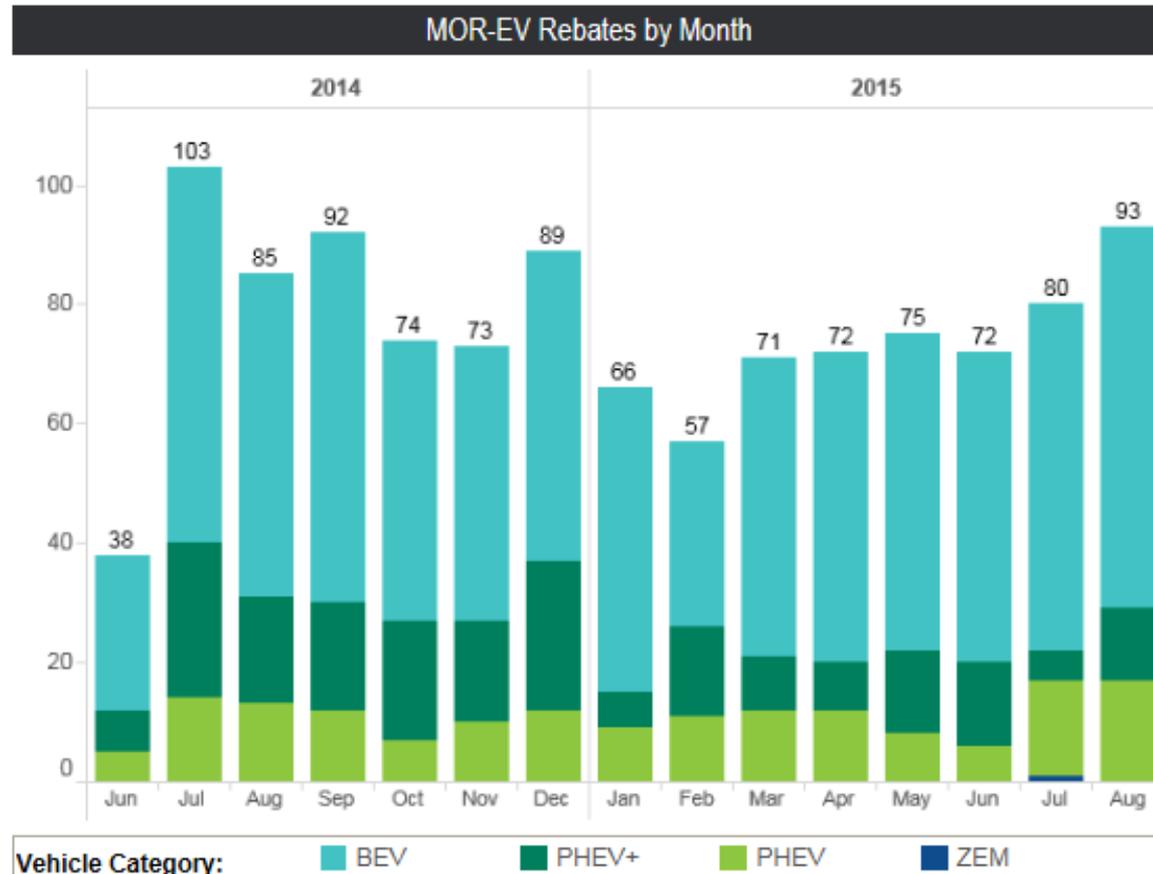
# Electric Vehicle Rebate Program



## MOR-EV

Massachusetts Offers Rebates  
for Electric Vehicles

- 1000 rebates milestone reached in July
- Over \$2.6 million rebate dollars reserved & issued
- 1,140 rebates issued to date

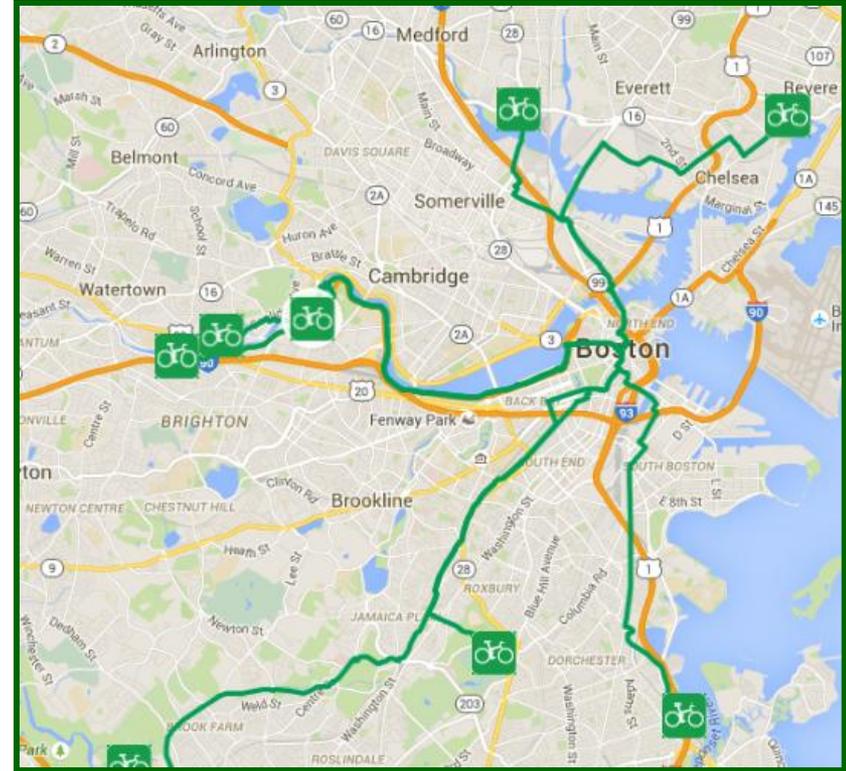


As of 8/27/15

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# Park & Pedal Program

- Provides a network of parking hubs within cycling distance of centers of employment
- Commuters can park cars for free and ride bikes into work
- **Key benefits to commuters:**
  - Avoid “last mile congestion”
  - Free parking



[www.parkandpedal.org](http://www.parkandpedal.org)

**DER**

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# Recycling Updates

# Public Recycling Initiative

- LBE, MassDEP, and RecyclingWorks collaborating to expand public recycling access at state locations
- Focusing on high-traffic and high-visibility public spaces (for a concentrated initial expansion)
- Prioritizing bottles & cans recycling



## Resources Available:

- Technical Assistance from RecyclingWorks staff
  - One-on-one consultative assistance
- Potential funding for recycling containers

Contact: [info@recyclingworksma.com](mailto:info@recyclingworksma.com)

# Mattress Recycling

- FAC90 mattress recycling statewide contract now available
  - Includes transportation and recycling (some reuse)
  - Mattresses and box springs (no futons)
- Services available on a fee-for-service basis
- More information from MassDEP/OSD coming soon



# Mass. Clean Energy Center Updates



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# LBE Tracking Form

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# LBE Tracking Form

- *New, refreshed* LBE Tracking Form for FY2015 is available on our website
- Tracking Forms are due November 30, 2015

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1 EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS  
2 DEPARTMENT OF ENERGY RESOURCES  
3 Leading by Example Program  
4 Fiscal Year 2015 Energy Tracking and Reporting Form  
5 July 1, 2014 through June 30, 2015

6 **Leading by Example Program FY15 Energy Tracking and Reporting Form**

7 Thank you for working with us to track your energy consumption and cost data for your facilities - we appreciate your time and effort.

9 Measuring and tracking energy data for Massachusetts state agencies and public higher education operations is a critical component of the state's Leading by Example Program (LBE). In order to track progress in meeting greenhouse gas, energy reduction targets, and renewable energy goals, collecting and analyzing agency and campus energy data is imperative.

13 The new tracking form for fiscal year 2015 has undergone some changes in an effort to make the tracking form more comprehensive and user-friendly. Below is a list of major changes that have occurred to the tracking form for this year.

16 **NEW ELEMENTS OF FY15 TRACKING FORM**

17 1 The first major change to the tracking form is on the "Electricity Generation" tab, formerly, "Electricity & OnSite Generation" tab. The renewable and onsite generation section is subdivided by technology to make entering data easier for the user.

20 2 The "Clean Power" tab, previously called "Installed Capacity", includes sections for both installed renewables and onsite generation as well as renewable thermal installations. Please select your agency/ campus from the drop down to prepopulate the various sections.

23 3 The "Square Footage" tab includes an expanded set of questions on square footage and space optimization plans.

25 4 The final major change to the tracking form includes a tab, "Additional LBE Questions" includes a set of questions on EV charging stations, recycling, and sustainability.

28 Do you have additional questions?  
29 Contact Andrea Hessenius with questions or data concerns.  
30 MariaAndrea.Hessenius@state.ma.us 617-626-7375



# LBE Tracking Form Demo

# LBE 2015-2016 Priorities

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# Solar and Building Performance

- Solar performance at state facilities
- LEED buildings performance
- Comprehensive projects: energy & cost savings



*Will reach out to various agencies to help gather data, insight, and results for targeted reports*



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# Large Oil Users

- State facilities consume over 6.5 million gallons of heating fuel oils every year
- Focus on large fuel oil users consuming > 100k gallons a year
- Feasibility studies and implementation funds for renewable, on-site generation, renewable thermal, or other application strategies/ technologies



# Utility Energy Conservation Measure Incentive Program

- Working with EVERSOURCE, National Grid, Unitil, Cape Light Compact
- Seeking new opportunities for deployment of Energy Conservation Measures at State and Municipal facilities
- Possible opportunities include:
  - *Helen Lamps LED can replacements*
  - *Plug Load management*
  - *LED Exit signs*
  - *LED Stairwell Lighting*
  - *Vending Misers*
  - *Refrigerators*
  - *Programmable Thermostats*
  - *Ozone Washing Machines*

# PRF62 Energy Consulting Services

## Designated DOER SWC

- PRF62, will be the primary Statewide Contract for energy related needs
- Required - Executive Branch agencies
- Optional - Legislative and Judicial branches, Higher Ed., cities, towns, districts, counties and other political subdivisions
- Replaces - DCP-0711-EX1, Facility Advisors and PRF46, Energy subcategory
- Anticipated start date: November-January



# Fleet Efficiency

## LBE Goal:

*Increase fleet efficiency & sustainable transportation efforts through advanced vehicle technologies, funding, technical guidance & information sharing*

## Upcoming initiatives include:

- Fuel Efficiency Standard for State Fleet (light-duty )
- Grant program for agencies to help cover incremental costs of standard compliance
- Guidance documents on alternative petroleum reduction technologies and strategies for light, medium and heavy duty fleets

*Will be reaching out to LBE partners for information on fleet & transportation policy*



**NO-IDLE  
ZONE**

**MassDEP's Electric Vehicle Incentive Program (MasseVIP):**

<http://www.mass.gov/eea/agencies/massdep/air/grants/massevip.html>

# Solar Canopies



## LBE Goal:

*Support continued solar canopy installations at state facilities through funding opportunities, technical guidance and collaboration*

## Progress:

- Solar Canopy Webinar
- Ongoing Solar Canopy Grant Program
- Solar Canopy Survey

## Upcoming Initiatives Include:

- Solar canopy feasibility studies to begin at 22 state facilities
- Supporting other efforts to analyze additional sites, determine appropriate financing and move projects into installation



**LBE's Solar Canopy Webinar can be found here:**

<http://www.mass.gov/eea/energy-utilities-clean-tech/webinar-future-and-archive.html>

# Building Energy Intelligence

- **Priority:** Implement innovative approaches to address real-time and broader energy saving opportunities across diverse portfolio
- Commonwealth procuring next-phase EEMS (managed by DCAMM)
- Focus on award of new contract this fall, subsequent roll-out to sites
- Further enhance collaboration with DCAMM and sites to continuously improve system and ECM implementations



# Non-Energy Sustainability Efforts

- **Priority:** Improve resources and opportunities to support implementation of broader sustainability practices
- Enhance waste and recycling data tracking and reporting
- Will provide improved communications and outreach tools:
  - Top 10 Lists on water conservation and recycling strategies
  - LBE Sustainability Challenge
  - Council Meeting guest speakers on sustainability



# Brainstorming Session on LBE Partner Priorities

- What priorities do you have?
- How can LBE be the most helpful?

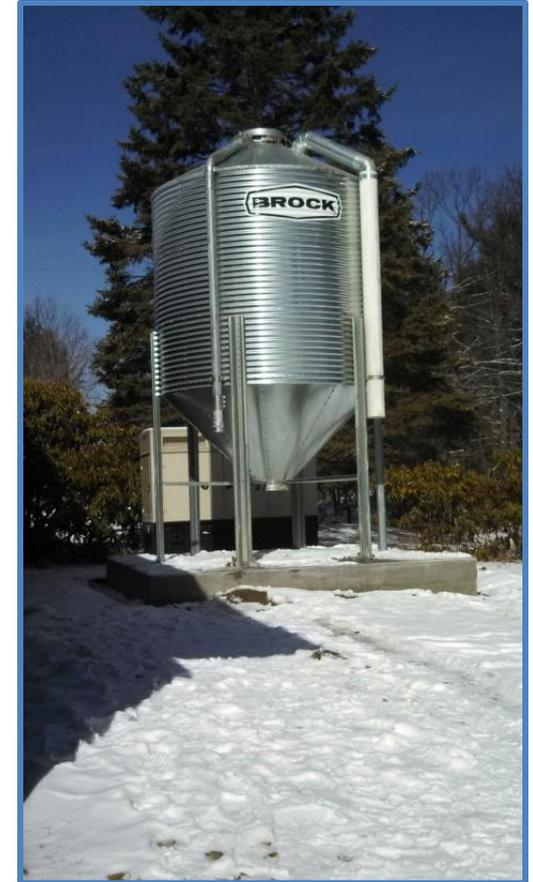
# LBE Updates

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# Renewable Thermal Grant Program

Grant opportunity for renewable thermal feasibility studies and projects having difficulty moving forward because of economic constraints

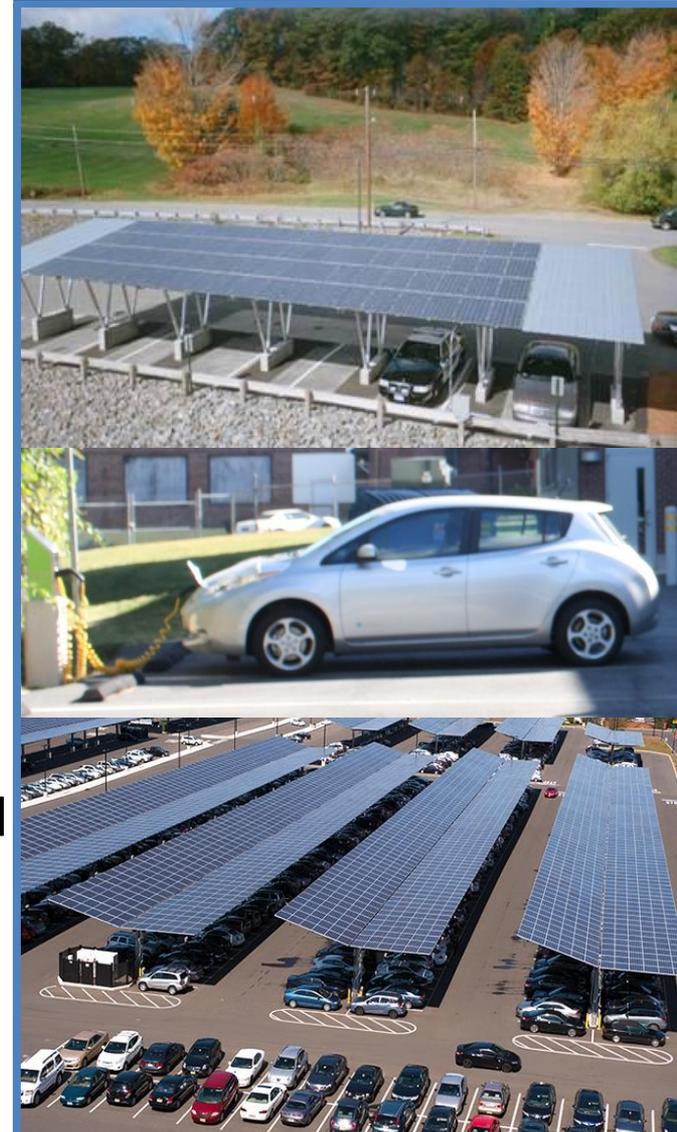
- Eligible Technologies: Biomass, Solar thermal, Air Source Heat Pumps, Ground Source Heat Pumps, Water Source Heat Pumps, CHP
- DOER expects to award feasibility grants of between \$2,500 and \$15,000 per site, and project grants of between \$50,000 and \$500,000 per site
- \$2 million still available
- Feasibility study grant and project applications due: 12/31/ 15
- Posted on LBE website



# Solar Canopy Grant Program

Grant opportunity for solar PV at parking lots, garage roofs, and pedestrian walkways on state owned land

- \$0.75/ watt up to \$600,000 per project for systems owned & operated by the Commonwealth
- \$0.50/ watt up to \$500,000 per project for systems owned by a third party
- Projects over 200 kW capacity
- All procurement options eligible
- Some on-site state consumption required
- Require minimum # of EV charging stations depending on array size
- Posted on LBE website



# Utility Energy Conservation Measure Incentive Program 2015 High Efficiency Lighting Promotion

- LED Bulbs A19, PAR and 4ft T8 Fluorescent tubes
- PAs: Cape Light, Eversource, National Grid,
- Mfgs (GE, Philips, Sylvania), FAC76 Distributors (Northeast, Granite City, Graybar, Standard, Electrical Wholesalers)
- Request deadline: Oct 2
- Installation deadline: Dec 4
- Contact [charles.tuttle@state.ma.us](mailto:charles.tuttle@state.ma.us)

# LBE Awards

- 9<sup>th</sup> annual awards for excellence in energy and environmental efforts
- Application deadline extended **to Tuesday, September 22 at 5:00pm**
- Email applications to [trey.gowdy@state.ma.us](mailto:trey.gowdy@state.ma.us)
- More information: [LBE Awards webpage](#)



## Award Categories:

- State agency/authority
- Public higher education
  - Municipalities
  - Individual awards (state and municipal)

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# Upcoming Events

- **FAC85 EPP Kick-off Event, 9/25, 11am-1pm (Boston)**
    - [Register online](#)
  - **MAPC Clean Energy Forum, 10/14, 8:30am-12pm (Boston)**
    - [Register online](#)
  - **MAFMA Fall Meeting, 11/5, 10am-12pm (Boston)**
    - RSVP: [francis.tagan@state.ma.us](mailto:francis.tagan@state.ma.us)
- 
- **Making MPG Improvement Easier, 10/7, 2pm (Webinar)**
    - [Register online](#)
  - **CURC Planning for Success, 10/8, 1-2:30pm (Webinar)**
    - [Register online](#)

# DCAMM Updates

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# Other & Next Meeting