Helping Massachusetts Municipalities Create a Cleaner Energy Future

COMMONWEALTH OF MASSACHUSETTS

Deval L. Patrick, Governor
Richard K. Sullivan, Jr., Secretary
Mark Sylvia, Commissioner

Electric Vehicles 101

Making Your Municipality EV-Ready
&
MassDEP Electric Vehicle Incentive Program

Webinar

May 1, 2013

Thank you for joining us.

The webinar will start in a few minutes…

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Introduction: Green Communities Division

Lisa Capone

Deputy Director

Green Communities Division

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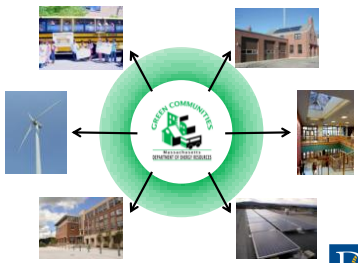
Green Communities Division

Serves as the hub for all Massachusetts cities and towns on energy matters



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Green Communities Division - Programs & Resources for Municipalities

- Green Communities Designation and Grant Program
- MassEnergyInsight energy tracking and analysis tool
- Municipal Energy Efficiency Program
- Energy Management Services Technical Assistance
- Clean Energy Results Program (CERP)
- Mass Municipal Energy Group (MMEG)
- Website filled with tools & resources www.mass.gov/energy/greencommunities
- Email updates via e-blasts – Sign up by sending an email to: join-ene-greencommunities@listserv.state.ma.us

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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:

SERO – LAKEVILLE: Seth Pickering
Seth.Pickering@state.ma.us

NERO – WILMINGTON: Joanne Bissetta
Joanne.Bissetta@state.ma.us

CERO – WORCESTER: Kelly Brown
Kelly.Brown@state.ma.us

WERO – SPRINGFIELD: Jim Barry
Jim.Barry@state.ma.us

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Green Communities Grant Program Criterion 4

- The Green Communities Act promotes cleaner energy in the municipal transportation sector.
- Criterion 4 of the Designation and Grant program calls for Green Communities to "purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable."
- Saves fuel and reduces greenhouse gas emissions by municipal vehicles, which has a positive impact on the environment and saves the municipality money in the long run.

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Recording & Presentation

- The webinar is being recorded and will be available on our website in approximately 48 hours at:
  www.mass.gov/energy/greencommunities
- The slide presentation will also be posted at:
  www.mass.gov/energy/greencommunities
- Website and contact information is listed at end of presentation

Presenters

Steve Russell
DOER Alternative Transportation Program Coordinator/Mass. Clean Cities

Richard Blanchet
Environmental Analyst, MassDEP

Poll Question #1

- Why are you participating in today's webinar? Are you:
  - Considering investment in EVs for the first time?
  - The owner of one or more EVs looking to add charging stations?
  - Looking to expand your existing EV fleet?
  - Looking to expand your existing EV charging infrastructure?
  - Other

Why Electric vehicles

- BEVs (Battery Electric Vehicles)
  - Same performance as conventional vehicles
  - No onboard ICE (internal combustion engine) or complex transmission system
  - Significant reduction in maintenance costs
  - Lower fuel costs/ consistent fuel costs
  - No localized emissions
  - Quiet operation
  - Electric 2 cents per mile/Gasoline – 14 cents per mile

Electric and plug in Electric Vehicles

Chevrolet Volt
Plug in Hybrid
20 mile battery only range ***

*** denotes on State contract OVM10.

And Chevrolet Spark
no ICE
100 mile range ***

Ford Focus battery
electric no ICE
107 mile range ***

Ford C-Max Energi
20 miles battery
100 MPGE
Plug in Hybrid ***

Electric and plug in Electric

Toyota Prius Plug in Prius
95 MPGE 12 mile battery ***

2013 Nissan leaf 112 mile battery range no ICE 106 MPGE

Smart for 2 88 MPGE highway

Comm Pass OVM 10 Vehicles that are available on State contract:

Dealer contact information for OVM10 dealers:

Imperial Chevrolet and Imperial Municipal Partners, Mendon	Frank C. Chase	508-422-1000 X4501	Bwaldron@imperialmunicipal.com
Imperial Ford and Imperial Municipal Partners, Mendon	Frank C. Chase	508-422-1000 X4501	Bwaldron@imperialmunicipal.com
Mirak Chevrolet, Arlington	David Diciccio	781-641-6821	ddiciccio@mirak.motosnap.com
Natick Auto Sales, Inc., dba MHQ, Natick and Marlborough	Don Emig	508 573-2623	temig@mhq.com

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EVSE – How do you fuel an EV?

- Required time for charging PHEVs and BEVs
- Three charging levels 1,2 and DCQ (fast charging)
- Specific equipment requirements

Level	Voltage	Charge Type	Estimated Charge Time
1	120 VAC	Common residential grounded receptacle from source to vehicle's onboard charger.	8 to 30 hours
2	240 VAC	Dedicated 40 amp circuit from source to vehicle's onboard charger.	3 to 8 hours
3	High-voltage (VDC)	Direct current from off-board charger; up to 400 amps.	15 to 30 minutes

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Where are the charging stations?

- Level 1 comes with all Plug in vehicles

Level 2 Barnstable

and Boston

Level 2 at the fire station in Northampton

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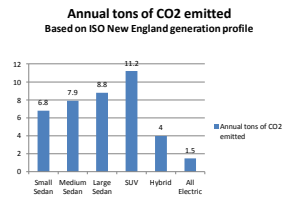
Electric vehicles and the Environment

- Major co2 reduction



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Poll Question #2

- What do you consider the biggest roadblock to more widespread use of EVs in municipal fleets?
  - High cost of vehicles?
  - Availability of suitable vehicles?
  - Logistics associated with siting charging stations?
  - Acceptance by municipal employees or residents?
  - Other

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Massachusetts Electric Vehicle Incentive Program - MassEVIP

- Official announcement on Earth Day 2013 in Greenfield and Chelmsford
- Provides incentive funding to Massachusetts municipalities to acquire:
  - Battery-electric or plug-in hybrid vehicles
  - Level 2 charging stations

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MassEVIP Incentives

- $7,500 for battery electric vehicles
- $5,000 for plug-in hybrids
- Up to $15,000 for the installation of Level 2 charging station

Program Requirements: Vehicles

- Municipalities can use vendors on state contract OVM-10 for the purchase of up to 5 electric vehicles
- Municipalities may also purchase a battery electric and/or plug-in hybrid vehicle identified on CA's list that is not currently on the OVM-10 list; however, must do own bid process
- Will commit to using the vehicle for municipal purposes for at least 36 months

Program Requirements: Charging Station

- Municipality must purchase at least one battery electric vehicle
- Charging station must be publicly accessible and space used specifically for electric vehicles
- Municipalities must use vendors on RFR-2011-ENE-008 to install a Level 2 charging station

Application Process

- Complete an application form and submit to MassDEP
- Application period from early May to late June
- After June 30, applications are reviewed
- MassDEP issues approval of Grant Application
- Municipality must sign an End-User Agreement
- Municipality can then complete vehicle purchase and proceed with Level 2 charging station, if applicable

Application Process (continued)

- Application form and instructions are available on MassDEP's webpage: www.mass.gov/eea/agencies/massdep/air/grants/massevip.html
- For more information on vehicles and EVSE installation information go to MA Clean Cities web page:
  - www.mass.gov/energy/cleancities

MassEVIP Workshops

Date: May 15, 2013 @ 10:00 – 12:00 **MassDEP's Boston Office** 1 Winter St., 2nd Fl. Boston, MA 02108	Date: May 16, 2013 @ 1:30 – 3:30 **MassDEP Southeast Region - Lakeville** **20 Riverside Drive** **Lakeville, MA 02347**
Date: May 22, 2013 @ 9:30 to 11:30 **MassDEP Central Region - Worcester** 627 Main Street Worcester, Massachusetts 01608	Date: May 29, 2013 @ 10:00 – 12:00 **MassDEP Northeast Region - Wilmington** 205B Lowell Street Wilmington, Massachusetts 01887
Date: May 30, 2013 @ 1:00 to 3:00 **MassDEP Western Region - Springfield** 436 Dwight Street Springfield, MA 01103	

Questions

Contacts

- For more information on EVSE's and vehicles contact Stephen.russell@state.ma.us
  Phone: 617 626-7325
- For information on the EV grant program contact: richard.blanchet@state.ma.us
  Phone: 617-654-6585