



COMMONWEALTH OF MASSACHUSETTS

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

Webinar



May 1, 2013

Electric Vehicles 101

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

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

Green Communities Division

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



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

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



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.

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



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

*** denotes on State
contract OVM10.



And Chevrolet Spark
no ICE
100 mile range ***

Ford



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



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



Massachusetts Department
of Energy Resources

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



Smart for 2 88
MPGE highway



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 Diccio	781-641-6821	ddiccio@mirak.motosnap.com	
Natick Auto Sales, Inc., dba MHQ, Natick and Marlborough	Don Emig	508 573-2623	temig@mhq.com	

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

Where are the charging stations?

- Level 1 comes with all Plug in vehicles



Level 2 Barnstable



and Boston

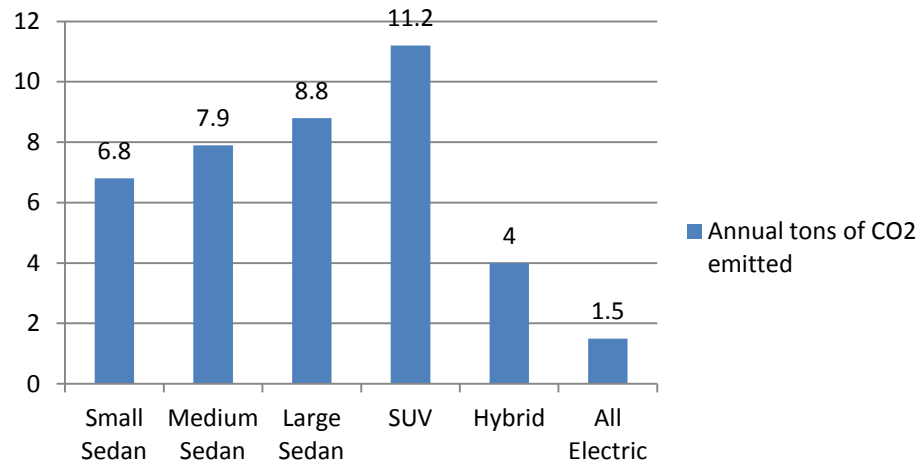


Level 2 at the fire station in Northampton

Electric vehicles and the Environment

- Major co2 reduction

Annual tons of CO2 emitted
Based on ISO New England generation profile



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

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



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



Massachusetts Department
of Energy Resources

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

