



COMMONWEALTH OF MASSACHUSETTS

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

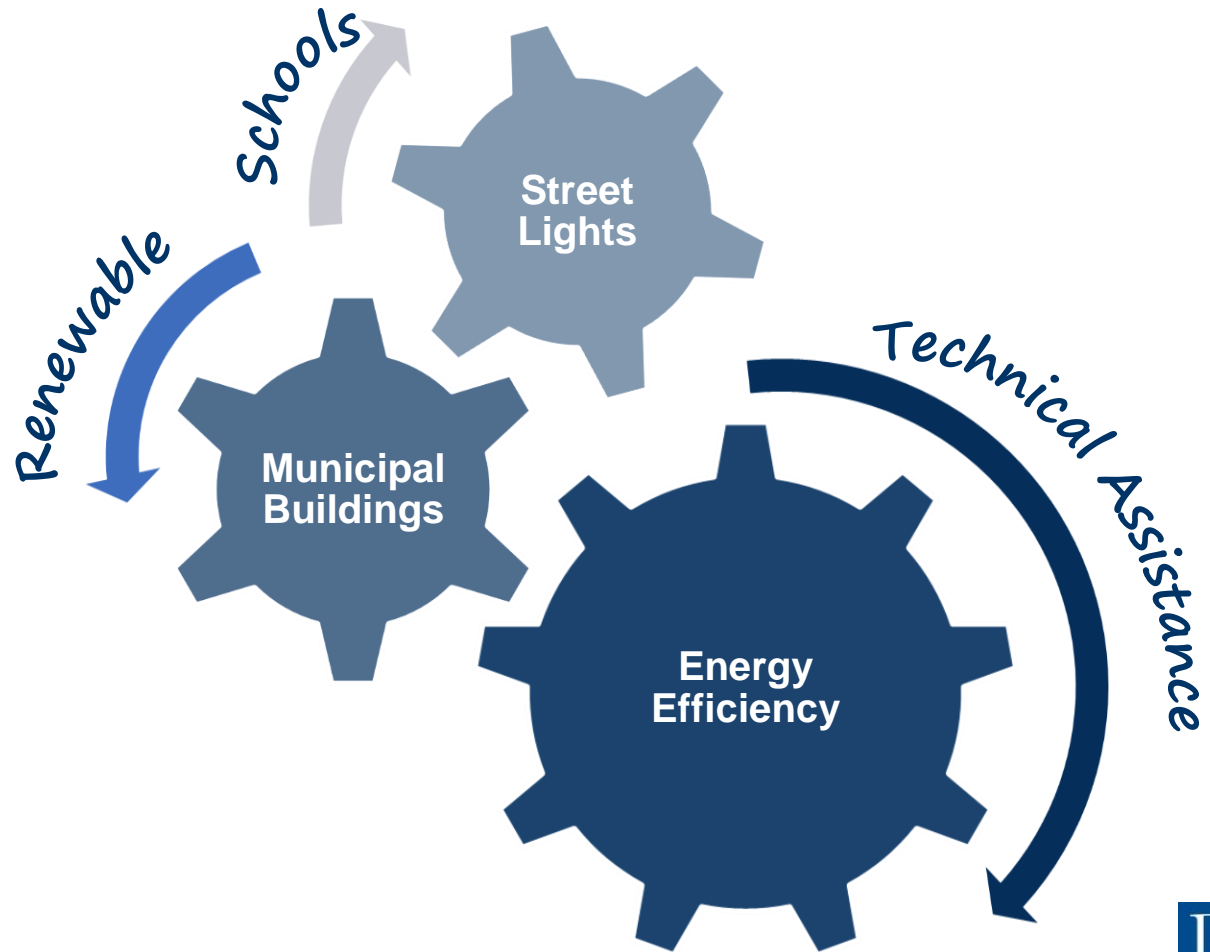
*Green Communities Division
Webinar*

February 7, 2019

What's New with Alternative Fuel Vehicles

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/orgs/green-communities-division-massdoer

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:



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



NERO – WILMINGTON: Neal Duffy
Neal.Duffy@state.ma.us



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



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



Helping Massachusetts Municipalities Create A Greener Energy Future



Upcoming Events

- TBD: Next webinar – “*The New 3-Year Plans and How they Impact Municipalities.*”



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Today's Presenters

- **Steve Russell**, MA DOER Clean Cities Coordinator
 - *Alternative Vehicle Update and Grant Opportunities*
- **Marc Fournier**, Deputy Director of Andover Public Works/Highway Superintendent
 - *Case Study: XL Hybrids and Lasell College*
- **Haidee Janak**, MassDEP, Transportation Programs Branch Chief
 - *Update on MassEVIP and VW Settlement Funds*



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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/orgs/green-communities-division-massdoer
- 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



Alternative Vehicle Update and Grant Opportunities

- Presented by Stephen Russell, MA Clean Cities Coordinator



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Alternative Fuel and Technology Landscape

- Battery Electric Vehicles
- Hybrid Upfit
- Bi-Fuel Propane
- Propane school buses
- Biofuel



DOER Funding Opportunities

- Grants to provide a financial incentive for the replacement and conversion of conventional vehicles to integrate alternative, cleaner burning, fuel reducing technologies
 - To demonstrate the cost-effectiveness of **retrofitting vehicles** currently on the road; and
 - To demonstrate the cost effectiveness of the conversions to encourage more widespread **deployment of idle reduction technology**

Poll Question #1

Does your fleet include vehicles that could be retrofitted with hybrid technology:

Yes

No

Not Sure



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Hybrid Retrofit Technology for LD Vehicles (other than CNG/propane)

- Grant to add electric technology to light duty (LD) fleets
- Financial incentives of up to \$10,000 per vehicle for 80% of differential cost provided. Eligible vehicles class 1-2
- Total Available Funding: \$347,594
- <https://www.commbuys.com/bso/external/bidDetail.do?docId=BD-19-1041-ENE01-ENE01-34264&external=true&parentUrl=bid>

Deployment of Fuel Reduction Technologies for MD and HD Vehicles (other than CNG/propane)

- Grant to add electric, hydraulic hybrid, battery electric technology, or solar technologies to medium-duty (MD) and heavy-duty (HD) vehicles for **public** and private fleets.
- Financial incentives of up to \$40,000 per vehicle for 80% of differential cost provided. Eligible vehicles class 3-8
- Total Available Funding: \$400,000
- <https://www.commbuys.com/bsa/external/bidDetail.sdo?docId=BD-19-1041-ENE01-ENE01-34096&external=true&parentUrl=bid>

Replacement of Diesel Waste Collection Vehicles with CNG Powered Vehicles

- Grant to replace **municipally** and privately owned diesel waste collection vehicles with CNG powered vehicles. Financial incentives will cover 80% of the differential cost up to \$40,000 per vehicle.
- Total Available Funding: \$400,000
- <https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-19-1041-ENE01-ENE01-34269&external=true&parentUrl=bid>

Deployment of CNG/Propane Replacement for Vehicles

- Grant to public and private fleets that would like to convert or replace conventionally fueled vehicles with CNG/propane technology.
- Financial incentives of 80% of the differential cost up to \$10,000 per vehicle. Eligible vehicles class 1-8
- Total Available Funding: \$469,370
- <https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-19-1041-ENE01-ENE01-34105&external=true&parentUrl=bid>

State Contracts

- VEH 98 - for vehicles including electric Blue Bird buses and BEVs
- FAC 88 - electric lawn and grounds equipment
- VEH 106 - Telematics
- VEH 102 - for idle reduction technologies
 - XL hybrid
 - Lightning Hybrid
 - Solar for trucks
 - Electric vehicle charging stations

DOER Contact

Steve Russell: Clean Cities Coordinator

Stephen.Russell@mass.gov

617 626-7325



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Case Study: XL Hybrids and Lasell College

- Presented by Marc Fournier -- MCA, LEED AP, Deputy Director of Public Works/Highway Superintendent, Andover, MA (formerly from Lasell College)



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Lasell College XL Hybrid Initiative

In 2015-2016, a \$34,000 MA DOER Grant enabled the college to install XL Hybrid technology on 5 vehicles



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3 Chevrolet 2500 Passenger Vans



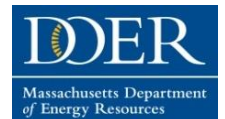
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2 Ford Shuttles



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Success expands into other vehicles on campus!



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We hope to install
XL Hybrid
technology on Ford
vehicles at the
Andover DPW soon



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Poll Question #2

If you are involved with vehicle purchasing decisions in your community, would you recommend including hybrid technology in the next Light or Medium Duty vehicles you purchase?

Yes

No

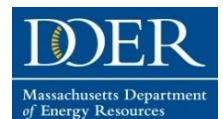
Not sure

I'm not involved in vehicle purchasing decisions

The latest Intergovernmental Panel on Climate Change (IPCC) report on global warming makes grim reading. Why we really need to be doing this now...



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The old days at UMass Amherst!



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Update on MassEVIP and VW Settlement Funds

- Presented by Haidee Janak— Transportation Branch Chief, MassDEP



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Poll Question #3

Does your municipality currently have a battery-electric or plug-in hybrid vehicle in its fleet?

Yes

No, but we're thinking about it

No

Not sure

MasseVIP EV Charging Programs

Workplace and Multi-Unit Dwelling Charging Programs

- ❖ **First come first served**
- ❖ 60% cost of charging station hardware costs up to \$50K per street address
- ❖ Level 1 and Level 2
- ❖ WPC --15 or more employees on site
- ❖ MUD – 10 or more units

Public Access Charging Program

- ❖ **Application Deadline March 18, 2019**
- ❖ 80% costs of charging station and installation costs up to \$6,250 per port. Maximum of \$50,000 per street address
- ❖ Level 2
- ❖ Available for the general public to use minimum of 12 hours a day



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MassEVIP Fleets Program

Electric Vehicles

Per Vehicle Incentive BEV Purchase	<i>Per Vehicle Incentive BEV Lease</i>	Per Vehicle Incentive PHEV Purchase	<i>Per Vehicle Incentive PHEV Lease</i>	Per Vehicle Incentive ZEM Purchase
Up to \$7,500	<i>Up to \$5,000</i>	Up to \$5,000	<i>Up to \$3,000</i>	Up to \$750

- ❖ BEV = battery electric vehicle; PHEV = Plug-In Hybrid Electric Vehicle
ZEM = Zero Emission Motorcycle
- ❖ Max # of EV Incentives is 25 including previously awarded incentives

EV Charging Equipment

Number of BEVs Acquired	2 BEVs	4 BEVs	6 OR MORE BEVs
Charging Equipment Funding	Up To \$2,500	Up To \$5,000	Up to \$7,500

- ❖ Level 2 Chargers for **Fleet Vehicle use only**
- ❖ Max of \$7,500 in funding including previously awarded incentives



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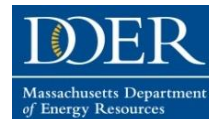
VW Open Solicitation program

Eligible Equipment

- Large Freight & Port Drayage Trucks
- **School/Shuttle/Transit Buses**
- Freight Switchers
- Ferries/Tugboats
- Shore Power for Ocean Going Vessels (OGV)
- Medium Local Freight Trucks
- Airport Ground Support Equipment (GSE)
- Forklifts & Port Cargo Handling Equipment (CHE)



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VW Open Solicitation program

Details

- ❖ **Application Deadline: March 18, 2019**
- ❖ Repower w/new diesel, alternate fueled or electric engine
- ❖ Replace w/new diesel, AF or all electric vehicle/equipment
- ❖ All eligible equipment must meet model year requirements

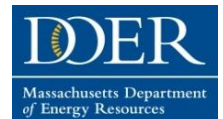
Different equipment is eligible for funding under the EPA's Diesel Emissions Reduction Act (DERA), with MassDEP launching a grant program in the near future. Additionally, MassDEP can choose to direct VW funding towards DERA in the future under the "DERA Option" so has a space on the OS program forms to list potential DERA projects to inform decision making.

Program Webpages

- ❖ **Matrix of VW and MassEVIP Grant Programs**
<https://www.mass.gov/files/documents/2019/01/18/massevip-matrix.pdf>
- ❖ **MassEVIP Workplace Charging Program**
<https://www.mass.gov/how-to/apply-for-massevip-workplace-charging-incentives>
- ❖ **MassEVIP Multi-Unit Dwelling Charging Program**
<https://www.mass.gov/how-to/apply-for-massevip-multi-unit-dwelling-charging-incentives>
- ❖ **MassEVIP Public Access Charging Program** <https://www.mass.gov/how-to/apply-for-massevip-public-access-charging-incentives>
- ❖ **MassEVIP Fleets Program** <https://www.mass.gov/how-to/apply-for-massevip-fleets-incentives>
- ❖ **VW Open Solicitation Grant** <https://www.mass.gov/how-to/apply-for-a-vw-open-solicitation-grant>
- ❖ **Diesel Emissions Reduction Act Program** <https://www.epa.gov/grants/clean-diesel-funding-assistance-program-fy-2019>



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MassDEP Contact Information

MassEVIP Programs

E-Mail: massevip.massdep@mass.gov

Phone: 617-556-1015

VW Open Solicitation Program

E-Mail: vw.settlement@mass.gov

Phone: 617-556-1138



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Green Communities Grants

- Eligible Green Communities can apply for funding:
 - publicly accessible charging stations
 - Plug-in hybrid and battery-electric hybrid vehicles
 - Limit 2 (each) per applicant
- Green Communities grants also fund hybrid retrofits/upfits of light and medium-duty vehicles in municipal and school fleets



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Utility Programs

- ❖ Prioritizing public parking areas
- ❖ Workplaces the public can access
- ❖ Covers up to 100% of the related infrastructure and installation costs

Eversource “make ready” infrastructure program

<https://www.eversource.com/content/ema-c/residential/save-money-energy/explore-alternatives/electric-vehicles/charging-stations/artner-with-eversource>

Contact Mark Rooney – Mark.Rooney@eversource.com

“Go Green” with National Grid

<https://www.nationalgridus.com/MA-Business/Energy-Saving-Programs/Electric-Vehicle-Charging-Station-Program>

Contact Mark Siegal – Mark.Siegal@nationalgrid.com



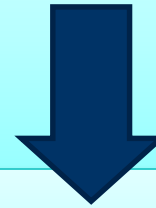
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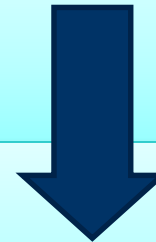
Many Options to Consider for EVSE

Determine where to install charging station – things to consider:

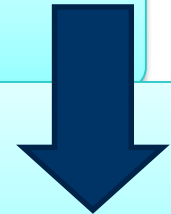
- 1) Accessibility and ease of use
- 2) Visibility
- 3) Safety for installers, users and the public



Contact local electric utility to ID how they will support charging station installation



Determine make/model of equipment to acquire



If seeking grant funding for equipment, determine which program best fits community's needs and timeline

Thank you!

Questions??



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