

# Moving to Zero Emissions in the Northeast

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NORTHEAST STATES FOR COORDINATED AIR USE MANAGEMENT

NEW JERSEY CLEAN AIR COUNCIL HEARING

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# Presentation Outline

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- About NESCAUM
- ZEV Program requirements
- Multi-state coordination to support/accelerate ZEV market expansion
- State policy successes



# About NESCAUM

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- Created by N.E. governors in 1967
  - First regional power plant pollution cap
  - Regional effort to reduce mercury releases
  - Facilitating multi-state governors' efforts on zero emission vehicles (ZEVs)
- Association of air quality control agencies of the states of CT, MA, ME, NH, NJ, NY, RI, VT
  - Technical and policy advisor on regulatory issues
  - Facilitator of coordinated multi-state action
  - Acting collaboratively for decades to address state and regional air quality, climate, and transportation problems

# Multi-State ZEV MOU



WHEREAS, the Signatory States have adopted regulations requiring increasing sales of zero-emission vehicles (ZEVs), or are considering doing so; and

WHEREAS, accelerating the ZEV market is a critical strategy for achieving our goals to reduce transportation-related air pollution, including criteria air pollutants, mobile source air toxics and greenhouse gas emissions (GHGs), enhance energy diversity, save consumers money, and promote economic growth; and

WHEREAS, our states are committed to reducing air pollution, including the emission of GHGs and other air pollutants from the mobile source sector; and

WHEREAS, many of our states have obligations or otherwise seek to reduce GHGs consistent with science-based targets by 2050; and

WHEREAS, motor vehicles are among the largest sources of GHGs and criteria air pollutants that adversely affect the health and well-being of our citizens in all of our states; and

WHEREAS, providing transportation alternatives such as ZEVs will help improve air quality, reduce the use of petroleum-based fuels in the transportation sector, protect consumers against volatile energy prices, and support the growth of jobs, businesses and services in a clean energy economy; and

WHEREAS, an increasing variety of vehicles that operate on hydrogen and low-cost electricity are commercially available and have the potential to significantly reduce emissions of criteria pollutants and GHGs, enhance consumer choice, and allow for home fueling; and

In October 2013, eight Governors announced an initiative to put 3.3 million ZEVs on their roads by 2025 to:

- Reduce GHG emissions
- Improve air quality and public health
- Enhance energy diversity
- Save consumers money
- Promote economic growth

Multi-State ZEV Action Plan released May 2014

**Governor Murphy's Signature Added**  
**March 2018!!**

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# What are the ZEV MOU States Doing to Accelerate ZEV Adoption?

# The ZEV Program

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More than 30 EV Models  
Available today

- In effect in CA and 9 other states = **28%** of the US market
- Automakers must sell increasing numbers of BEVs, PHEVs or FCEVs through 2025
- Requirement defined in terms of credits, not cars
- Automakers may trade credits from state to state
- 2.2M credits required by 2025 across all nine §177 ZEV states.
  - New Jersey's 21% share could be met with:
    - 120,000 Bolt-like BEVs, or:
    - 120,000 fuel-cell vehicles, or:
    - 500,000 Leaf-like BEVs, or:
    - 300,000 Leaf-like BEVs and 400,000 Volt-like PHEVs, or...

# Multi-State ZEV Task Force

~~Eight~~ Nine states working together to identify and remove barriers to ZEV adoption

Formed in 2013 in a Governor's Memorandum of Understanding

Facilitated by NESCAUM

All Task Force member states have adopted California's ZEV requirements per CAA §177

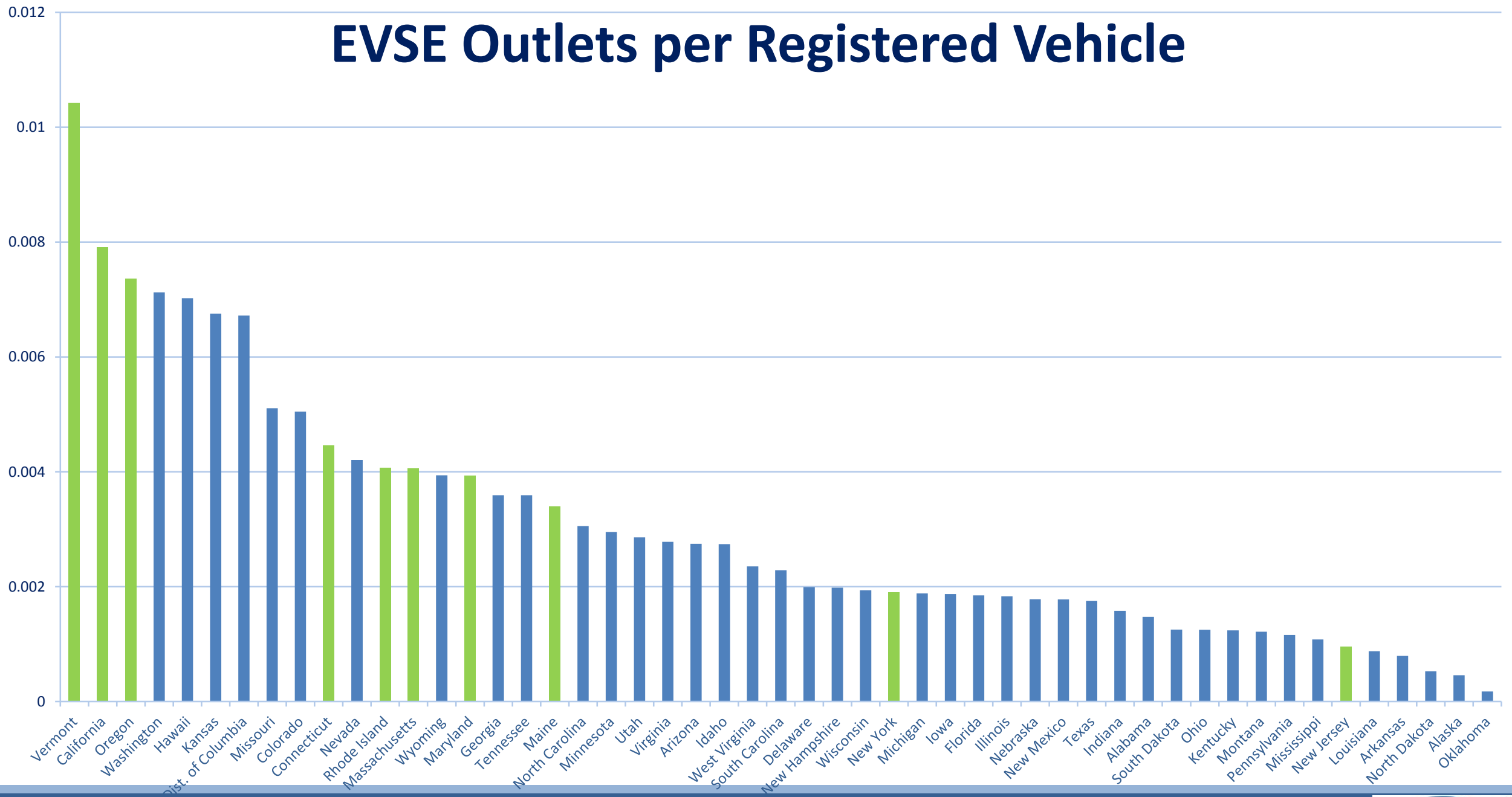


# ZEV Task Force Focus Areas For 2018-2020

- Infrastructure
- Incentives
- Consumer Education and Outreach
- Fleets
- Dealerships



# EVSE Outlets per Registered Vehicle



# State Support for ZEV Infrastructure: Example Policies

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Maryland: EVSE Rebate Program 2.0

[http://energy.maryland.gov/transportation/Pages/incentives\\_evsebate.aspx](http://energy.maryland.gov/transportation/Pages/incentives_evsebate.aspx)

Massachusetts: EVIP program for Workplace charging

<https://www.mass.gov/how-to/massevip-workplace-charging>

New York: Tax credits for public/workplace EVSE; NYPA and DEP incentive programs for local governments

<https://www.nyserda.ny.gov/All-Programs/Programs/ChargeNY>

Rhode Island: “Charge Up!” program offers incentives for agencies and municipalities to install public EVSE

<http://www.energy.ri.gov/transportation/ev/charge-up.php>

# ZEV Purchase Incentive Programs (partial list)

## Connecticut: CHEAPR Electric Vehicle Rebate Program

- \$5,000 for FCEVs, up to \$3,000 for BEVs, and up to \$2000 for PHEVs
- Over \$5,000,000 awarded since 2016



## Maryland: Excise Tax Credit

- Up to \$3,000. Linked to Battery Size. PHEVs eligible.
- <http://www.mva.maryland.gov/About-MVA/INFO/27300/27300-71T.htm>

## Massachusetts: MOR-EV program

- Up to \$2500 for BEV and FCEV, up to \$1500 for PHEV
- Over \$12,000,000 awarded since 2014, \$20M cumulative commitment
- <https://mor-ev.org/>



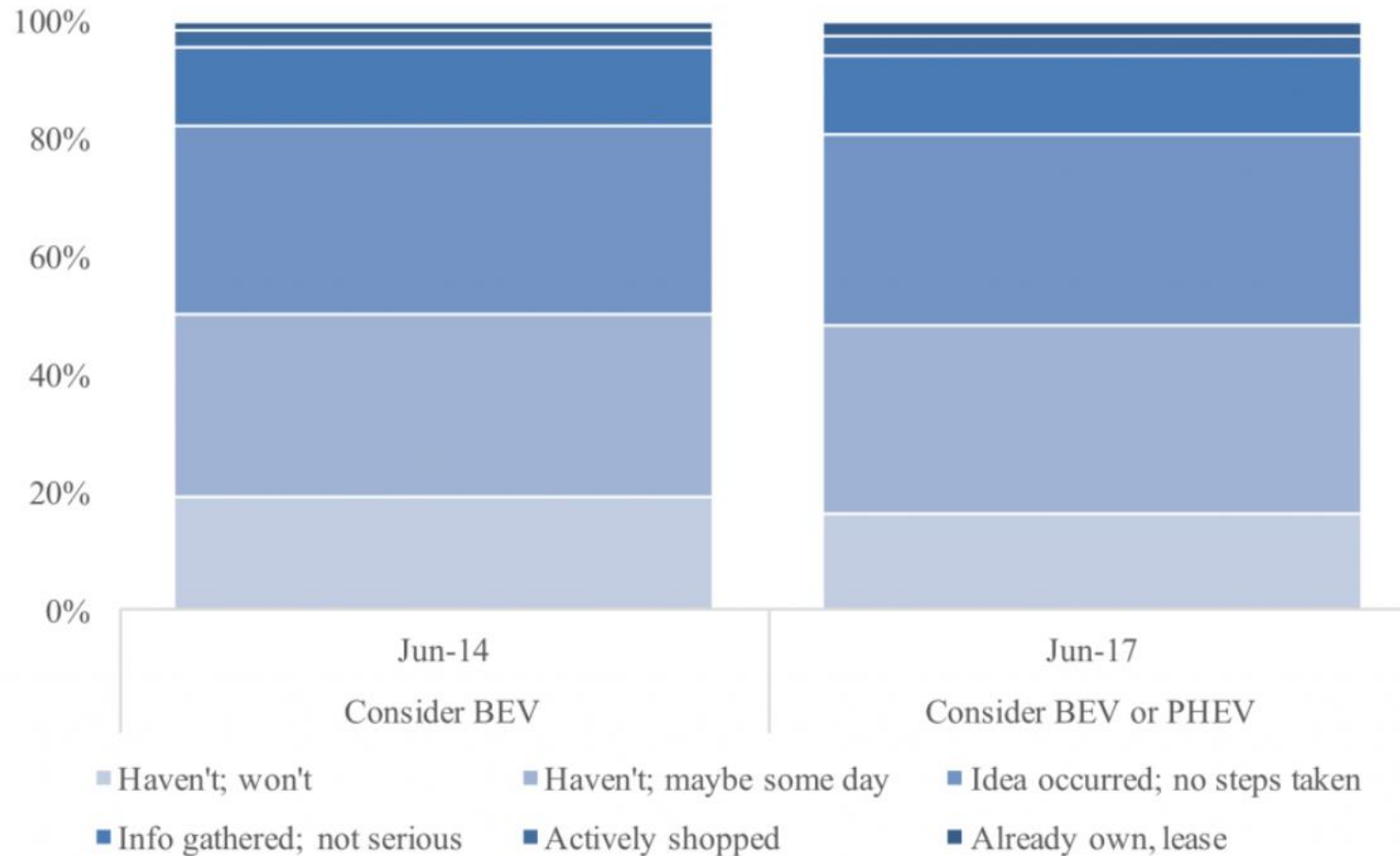
## New York: Drive Clean Rebate for Plug-in Electric Cars

- Up to \$2000
- Launched in 2017
- <https://www.nyserda.ny.gov/All-Programs/Programs/Drive-Clean-Rebate>

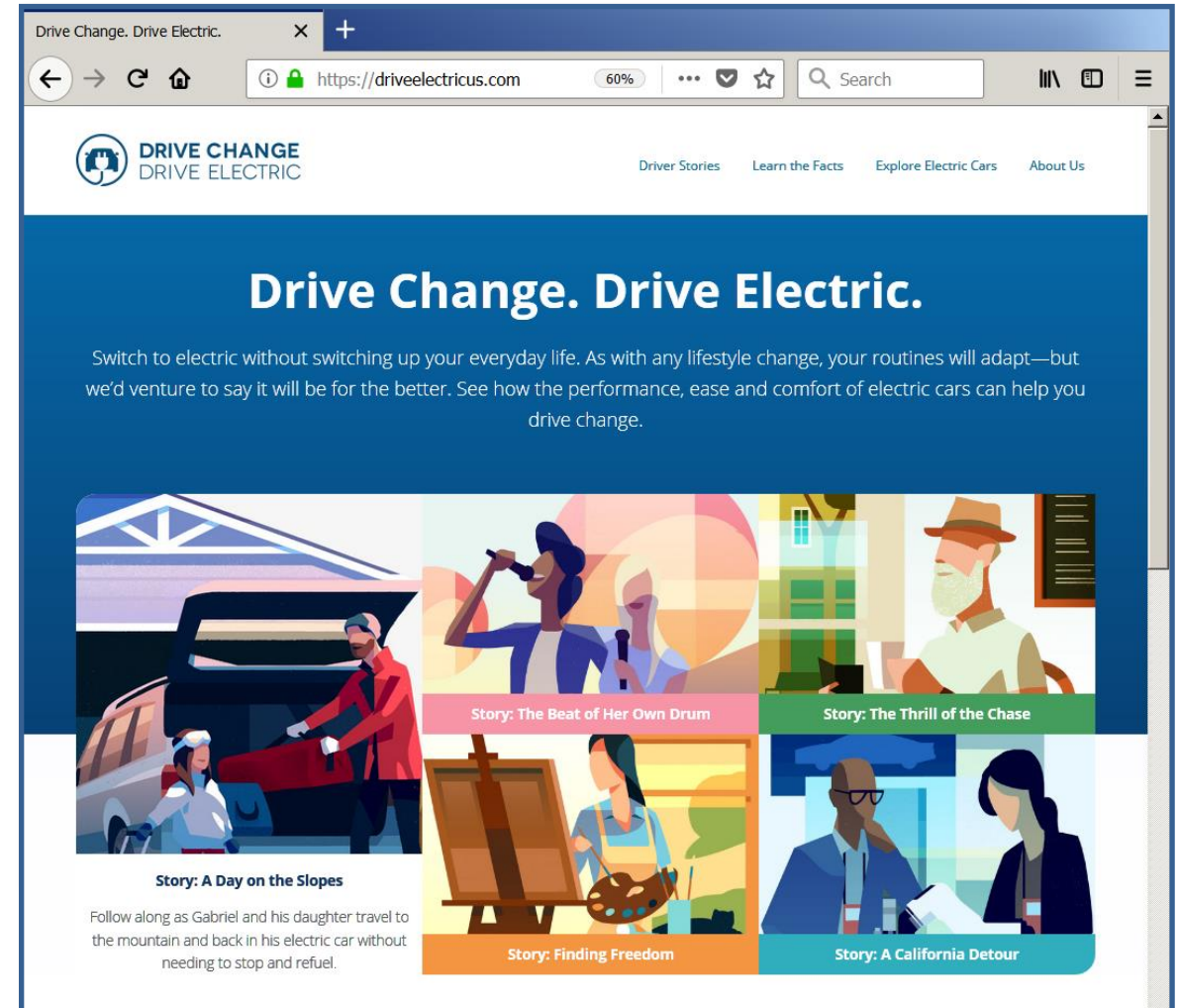


# Consumer Awareness

**No more consumers had considered purchasing a plug-in electric vehicle in 2017 than had in 2014**



# Consumer Awareness



# **MASS DRIVE CLEAN:**

## Massachusetts' EV Test Drive Program



- Experiential opportunities shown to be effective at shifting/expanding customer opinion
- Mix of funding sources; growing with utility and corporate sponsorship
- Over 3,300 test drives at 40 sites in the past three years
- Conducted at workplaces, community and public events
- Professionally staffed, smartly designed, no-sales pressure test drive opportunities
- Data is collected pre- and post- test drive
  - 84% reported overall higher opinion of ZEVs after test drive
  - 75% expect to consider a ZEV as their next purchase
  - Six months after their test drive, 25% have visited a ZEV dealer and 12.5% have purchase or leased a ZEV.
- Now looking to spark employers to sponsor test drives and champion growth of EVs through corporate commitments building on Drive the Dream programs in CA and VT.



# FLEETS

- States can lead by example by greening their own fleets and encouraging cities and towns to do the same.
- Massachusetts DOER's Green Communities Program encourages municipalities to set green fleet targets



**GREEN FLEET**

[Home](#) [Operations](#) [Vehicles/Equipment](#) [Biofuels](#) [Clean Diesel](#) [Electric](#) [Gasoline](#) [Hybrids](#) [Hydrogen](#) [Natural Gas](#) [Propane Autogas](#)

### Electric Vehicles

#### NYC Fleet Hits 1,000 EVs Ahead of Schedule

April 26, 2017

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Photo courtesy of NYC

#### Legislation

- » Minnesota Increases Biodiesel Mandate to 20 Percent
- » Senators Reinroduce Bipartisan Vehicle Technology Bill
- » Diesel Emissions Reduction Act Extension Introduced

#### FleetFAQ

 **Fleet Management And Leasing**  
Jack Firriolo from Merchants will answer your questions and challenges  
[View All](#)

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#### Grants & Subsidies

- » Federal Grants
- » State Grants

# DEALERSHIPS

- ZEV Task Force states consulting regularly with dealership associations via Dealerships Workgroup.
- Exploring opportunities to work together toward shared goal
- Example: GNYADA-NESCAUM-NYSERDA booth at 2018 NYIAS



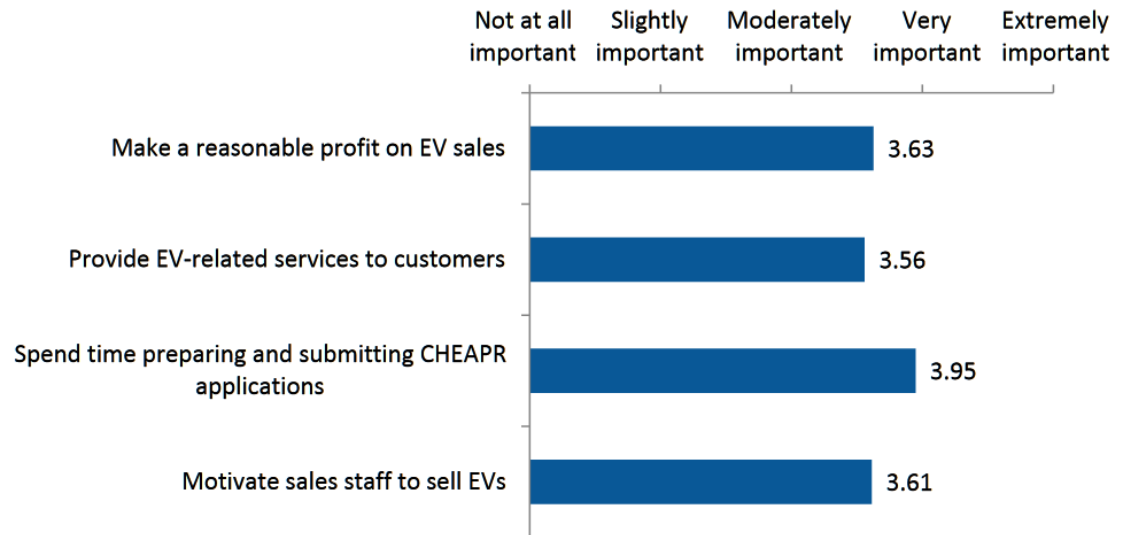


# Dealer Recognition and Incentives



<http://www.ct.gov/deep/site/default.asp>

How important is the dealer incentive in making it possible for your dealership to do each of the following?



Note: Question only asked of respondents who said they were aware of the dealer incentive

Respondents=59

1 = Not at all important, 5 = Extremely important

# Questions?



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