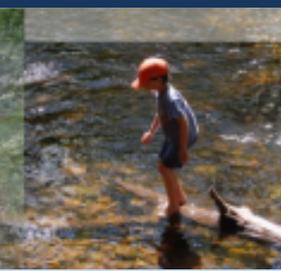
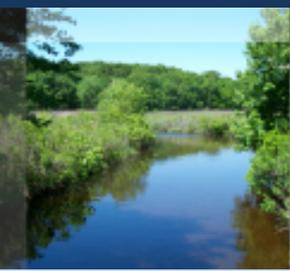
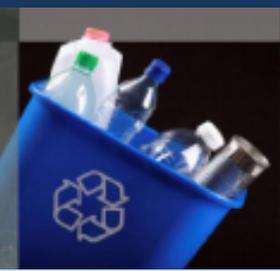




Connecticut Department of Energy and Environmental Protection



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*Transforming the Fleet to Advanced Technology
Vehicles*

Patrice Kelly
SIPRAC November 13, 2014



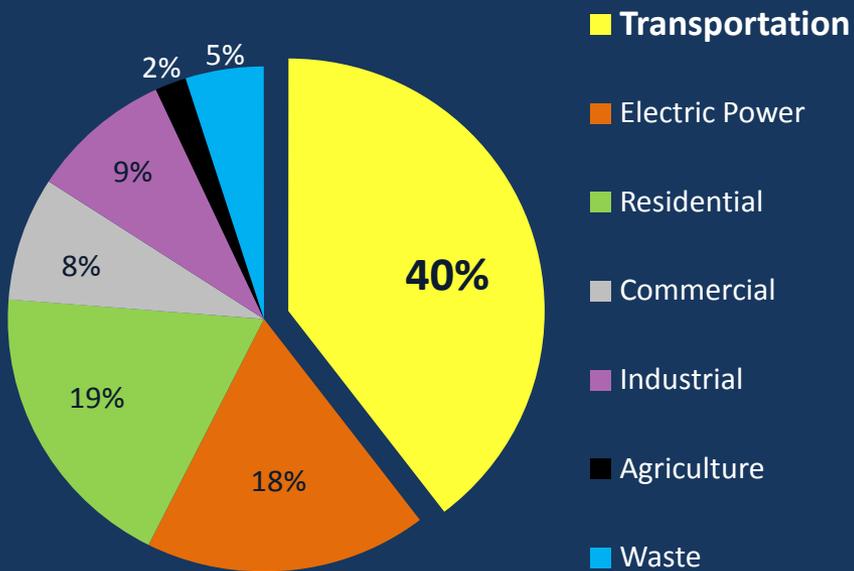
Air Pollution Challenges



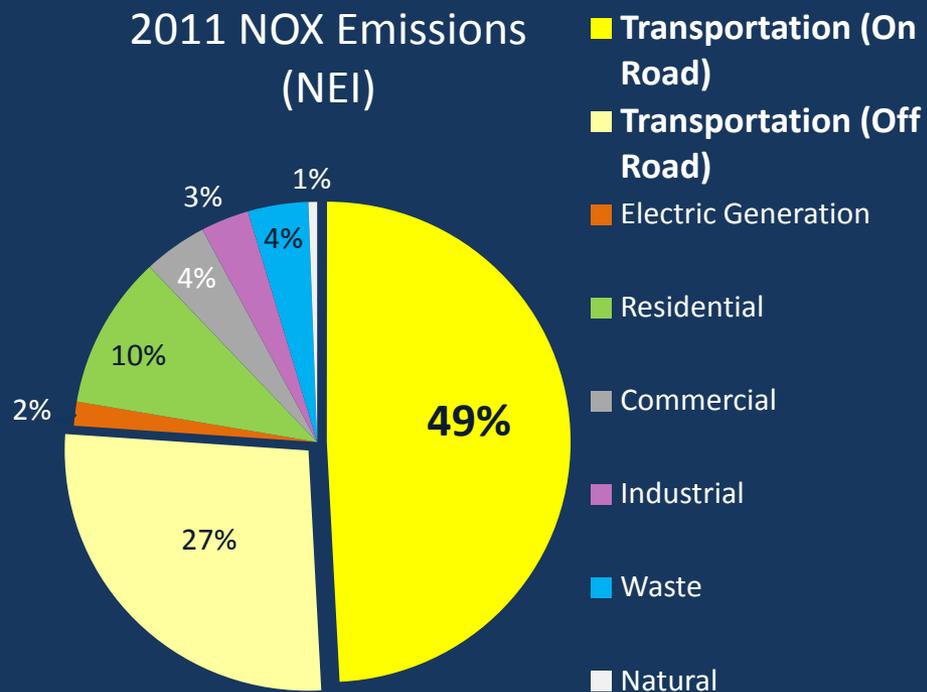
Transportation Sector: CT's Largest Source of Emissions



2010 Annual CO2 Emissions by Sector (SIT)



2011 NOX Emissions (NEI)

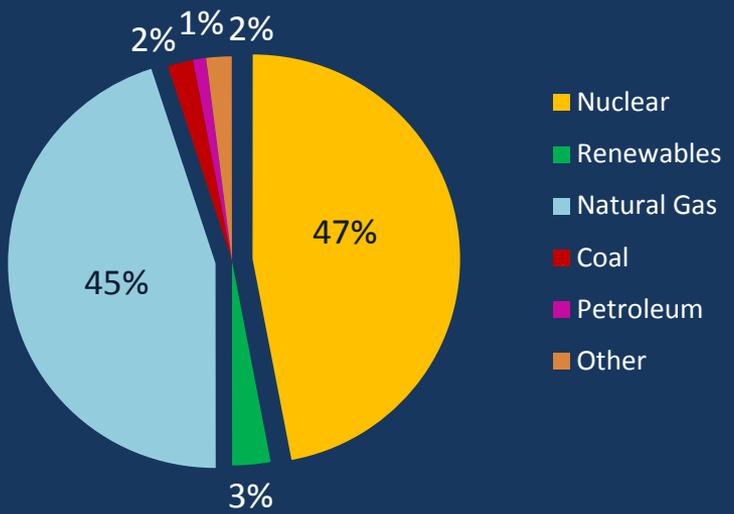


Conventional vehicles are getting cleaner due to the Low Emission Vehicle program, but people are also driving more miles



Connecticut's Clean Energy- Transportation Opportunity

Fuel Sources for Electric Power Generation in Connecticut in 2012 (EIA)



Connecticut has the 4th cleanest energy production for CO₂ emissions in the country, making electric vehicles (EVs) significantly better for than environment than conventional vehicles.

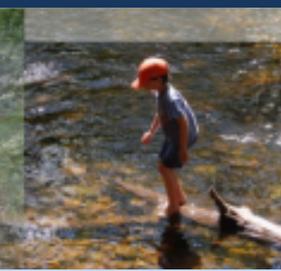
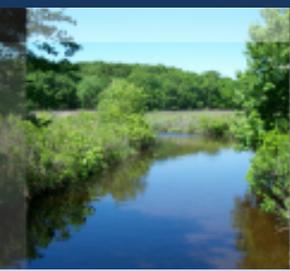
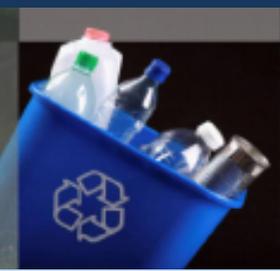
(Comprehensive Energy Strategy, 2013)

The CO₂e emissions of EVs are **lower in Connecticut** than the national average.





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State Policy



Comprehensive Energy Strategy



ZEV Memorandum Of Understanding



State Zero-Emission Vehicle Programs Memorandum of Understanding

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

1

Create Action Plan

2

Report ZEV Volumes

3

Develop a ZEV Fleet Strategy

4

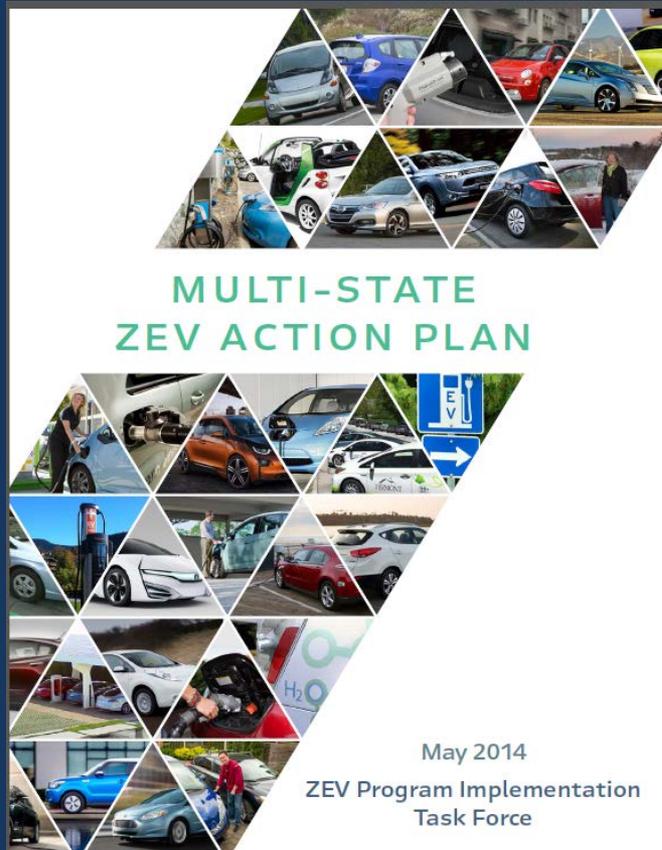
Update Building Codes and Standards

5

Hydrogen Fuel Cell Vehicles



Multi-State Action Plan



3.3 Million
Zero-emission vehicles
on the road by 2025



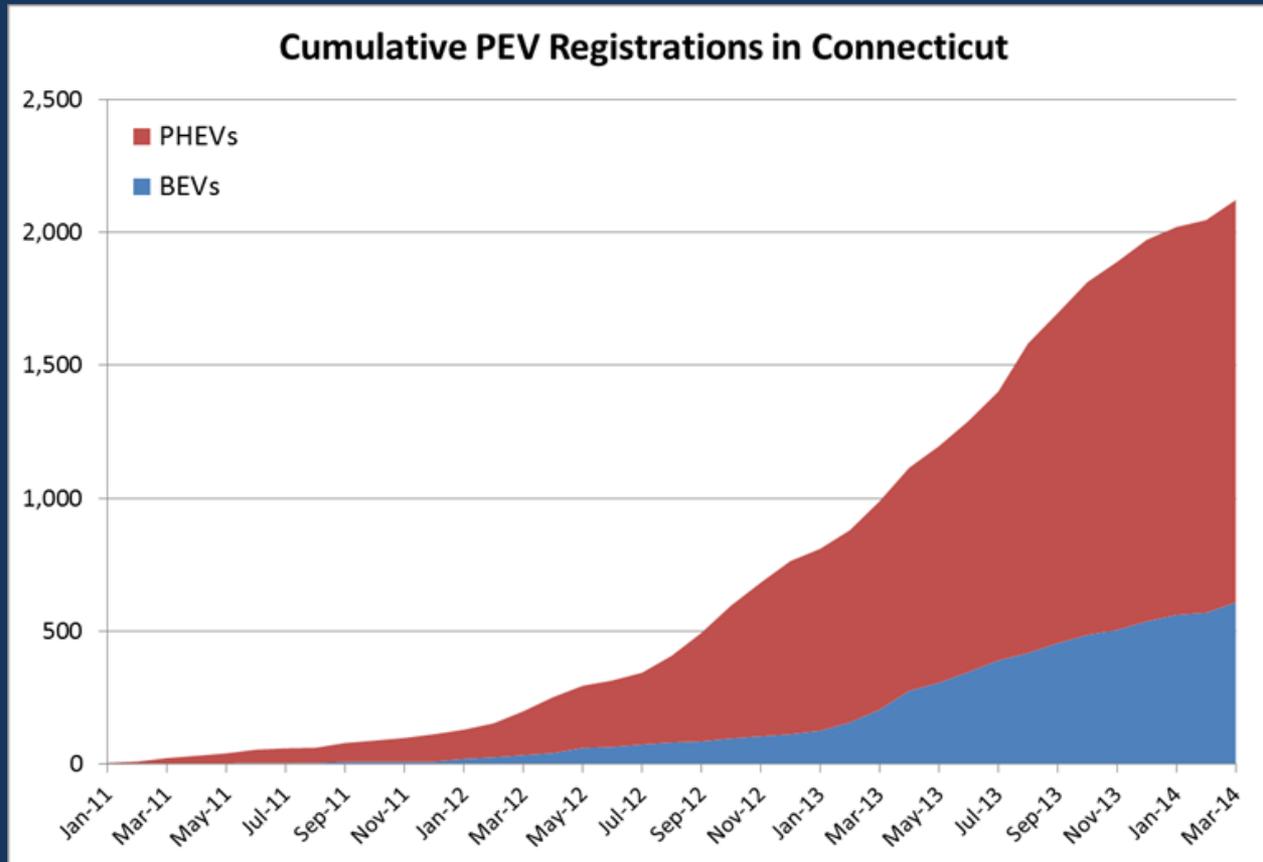
Connecticut Department of Energy and Environmental Protection



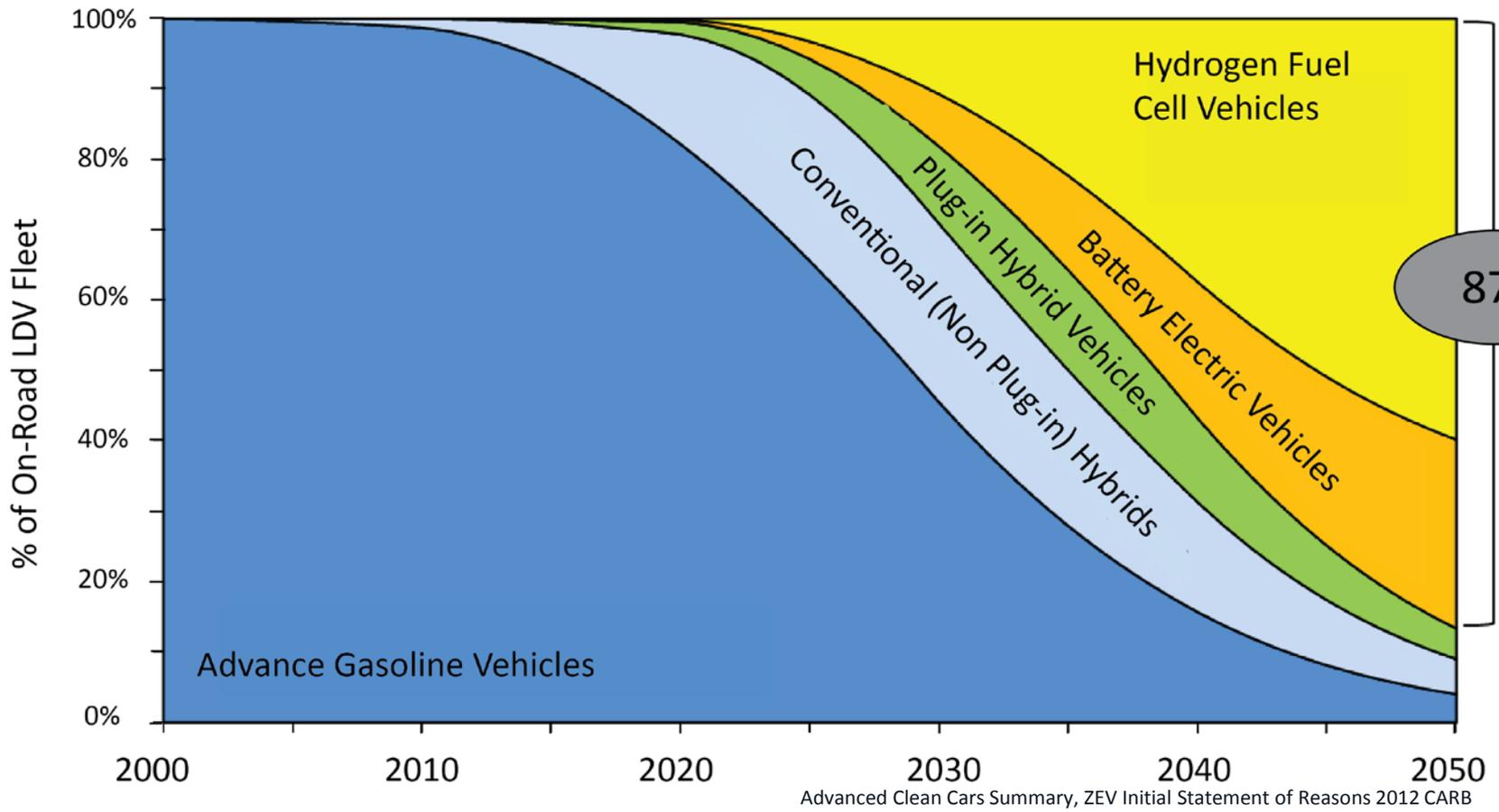
The Cars are Here



Vehicle Trends



Market Share



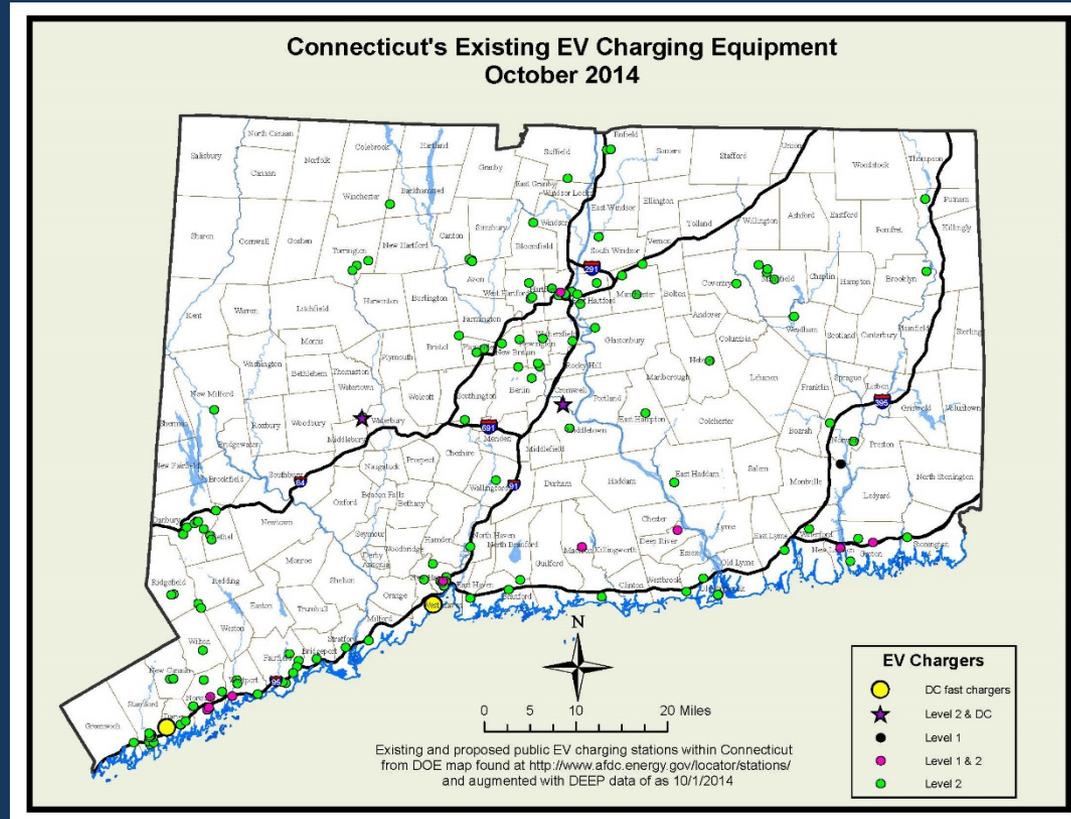


ZEV Activity in Connecticut



What We Have

272 chargers at over 150 locations around the state



Connecticut's Current Strategy

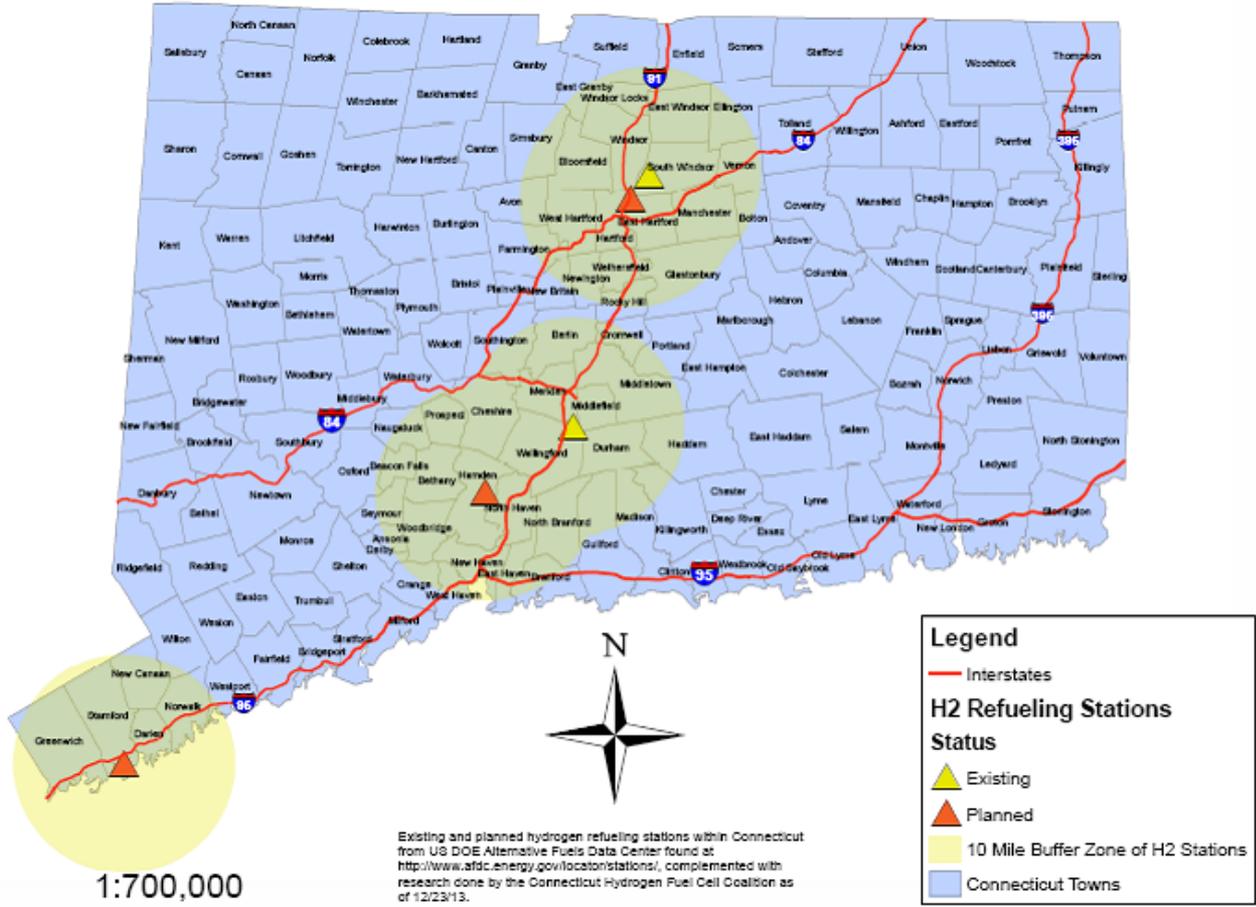
- Chargers at homes, workplaces, and multi-modal transportation hubs
- Safe and convenient chargers near destinations (food, shopping)
- Fast chargers along interstate transportation arteries



Connecticut Department of Energy and Environmental Protection

Connecticut Hydrogen Stations Deployed to Support Fuel Cell Vehicles

Connecticut's Proposed and Existing Hydrogen Refueling Stations - December 2013



Outreach and Education are Key

Once people drive advanced technology vehicles they love them

The Department will continue working with the dealers on new collaborations for ZEV success

We encourage you to invite local dealers to do ride and drives at your workplaces



Connecticut Department of Energy and Environmental Protection



Fleets



Connecticut Department of Energy and Environmental Protection

ZEVs Support Success

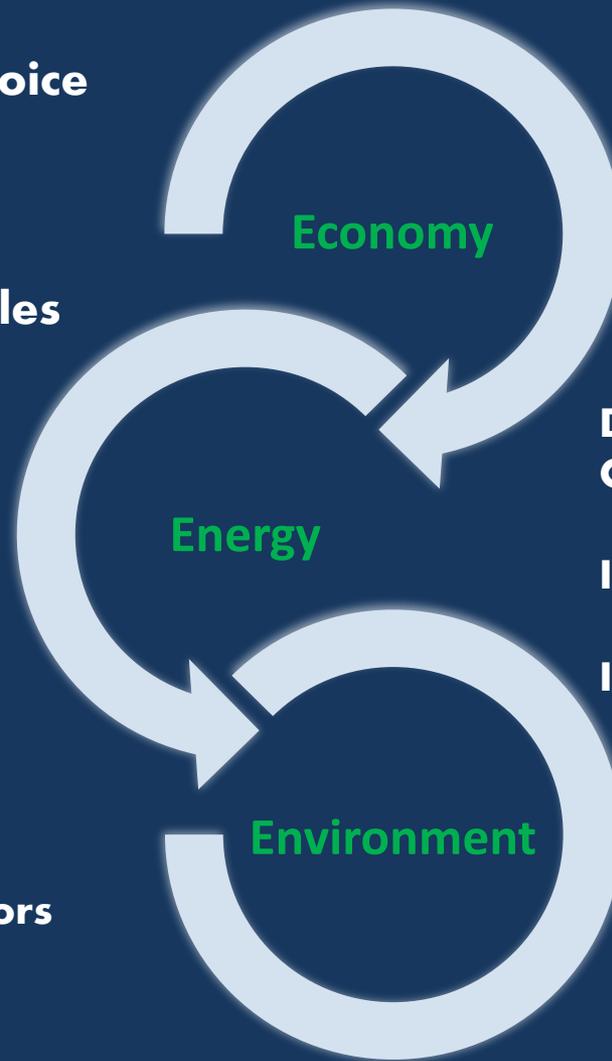
Will Expand Consumer Choice

Add Jobs

Improve Manufacturer Sales

Zero Emissions

Reductions to Ozone Precursors



Diversify Transportation Fuel Options

Increase Energy Security

Improve Consumer Choice



Connecticut Department of Energy and Environmental Protection



EV Charging Station Grants



Goals

- To enhance the market for electric vehicles (EVs) in Connecticut
- Give motorists the option to re-fuel with locally-generated electricity from domestically-produced fuels
- Provide publicly-accessible EV charging stations in places where they are needed in the state



Source of Funds

Current funding is made available pursuant to the Northeast Utilities-NStar merger agreement of April 2012.



The Incentives: Private Program

- Minimum Amounts: \$2,000 per unit or \$4,000 per location
- Priority Areas: maximum award $\frac{1}{2}$ the cost up to \$5,000 per unit or \$10,000 per location.
 - No cost to public
 - Open 24/7
 - At major traffic generator (town hall, downtown)
 - Area presently underserved



The Incentives: Municipal/State Agency Program

- Minimum Amounts: $\frac{1}{2}$ the cost up to \$2,000 per unit or \$4,000 per location
- Priority Areas: maximum award 100% of the cost up to \$10,000.
 - No cost to public
 - Open 24/7
 - At major traffic generator (town hall, downtown)
 - Area presently underserved



The Requirements:

- Open to the Public
- Post on U.S. Department of Energy Website:
<http://www.afdc.energy.gov/locator/stations/>
- Not-for-Profit
- Install Signage provided by DEEP



EV Charging Signage



Connecticut Department of Energy and Environmental Protection

Preferences

- Operational ASAP
- No Charging Fee or Nominal Fee for Three Years
- Operating 24/7
- Providing lighting, and shelter
- Situating each EV charging unit so it can accommodate at least two vehicles.



Location Preferences

- At a Major Traffic Generator
- Along transportation corridors, including state highways
- Near restaurant, retail and/or entertainment opportunities
- At high profile/high traffic installations, such as those at train stations and airports





Current Status & Opportunities

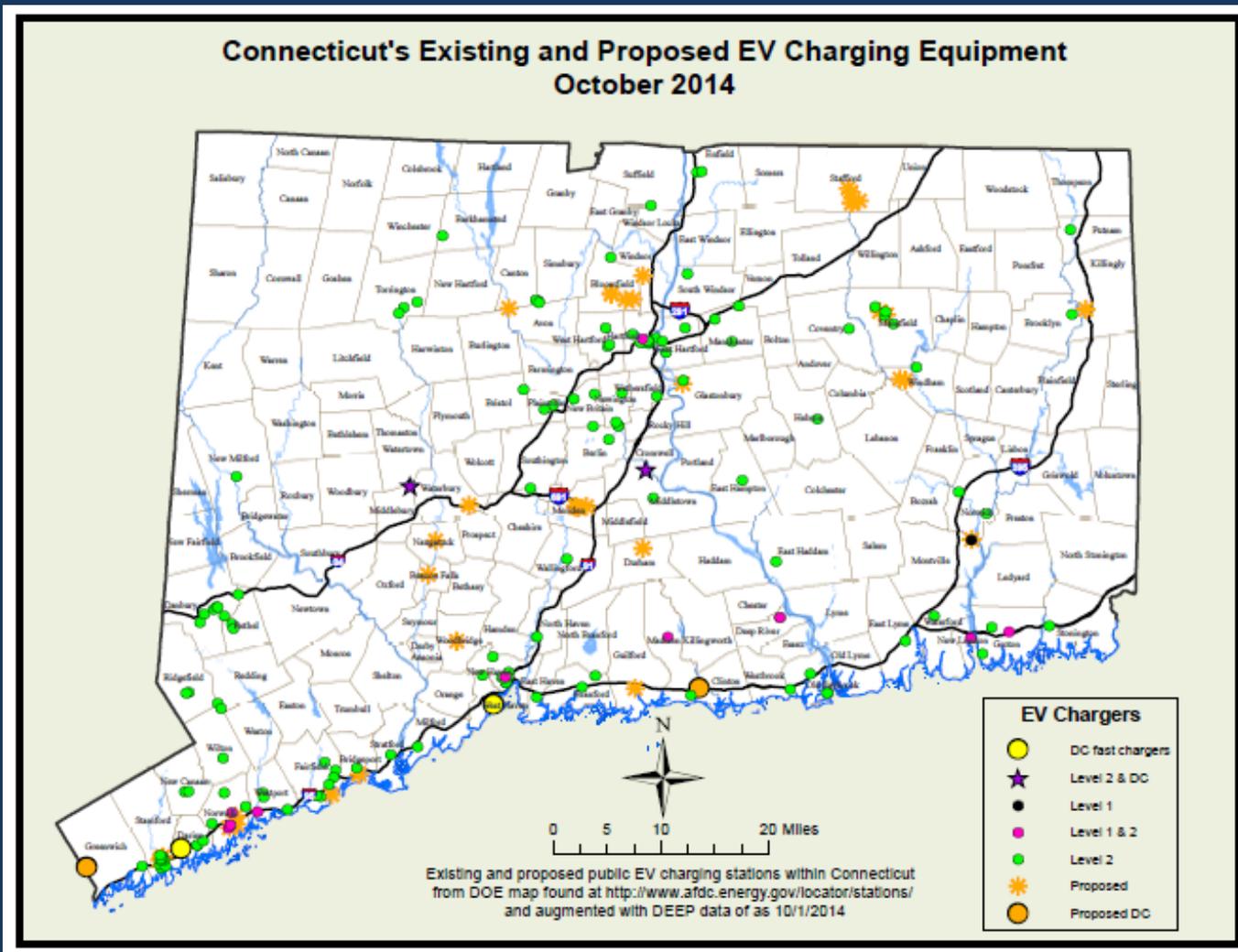


Awards to date:

- Private Program for Businesses & Organizations:
 - 73 New Charging Units
 - 42 Recipients
 - 54 Locations
- Municipal/State Agency Program:
 - 28 New Charging Units
 - 15 Recipients
 - 21 Locations



Existing and Proposed CT EV Charging Stations



Round 2 Municipal/State Agency Incentive Program

- Opened October 6, 2014
- Closes November 18, 2014
- Applications are being accepted.



For More Information: www.ct.gov/deep/evconnecticut



Department of ENERGY & ENVIRONMENTAL PROTECTION

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ENERGY ENVIRONMENTAL QUALITY NATURAL RESOURCES OUTDOOR RECREATION PURA

Air

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- Compliance Assurance
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EVConnecticut is a partnership between the Connecticut Department of Energy and Environmental Protection and the Connecticut Department of Transportation.



EV Charging Station Incentive Programs

Learn about current state incentives (up to \$5,000 per charger) and federal tax credits available for facilities installing publicly accessible EV charging stations.

View a list of companies that are available to provide EV charging equipment or



Connecticut Department of Energy and Environmental Protection

How Can We Reach You?



Connecticut Department of Energy and Environmental Protection



Thank You

Patrice Kelly

Patrice.Kelly@ct.gov

Bureau of Air Management

