Electric Vehicles in New York and the Northeast

Ruth Horton September 11, 2012



NYSERDA

Approach for AFV Market

- Advance innovative energy solutions in ways that improve New York's economy and environment
- Forge public/private partnerships and collaborations
- Market Transformation to break down barriers
 - Technology development
 - State and local policies
 - Demonstrations
 - Incentives
 - Public information



Transportation Programs

- ✓ Alternative Fuel Vehicles Funding for new or repowered vehicles that run on CNG, electric, propane, or hybrid drive.
- ✓ Alternative Fuel Infrastructure Funding for new fueling/charging stations and distribution facilities for bio-fuels, CNG, electric, or propane.
- ✓ Emission Control Equipment Funding for diesel truck retrofits that reduce harmful air pollution.
- ✓ Transportation and Power Systems R&D to develop and demonstrate new components, technologies and innovative strategies across transportation sector.
- ✓ Regional Collaborations through Transportation Climate Initiative -- Focusing on policy initiatives

Past NYSERDA EV Activities

NYSERDA has been working on EVs for years:

- Partnership with BAE Systems to develop hybrid-electric transit buses
- Truck stop electrification and electric trailer refrigeration units
- Joint program with NYPA to deploy EVs for commuters in NYC area to drive to and charge at train stations
- EPRI and ConEd report analyzing EV impacts on congested electric grid in and around NYC
- Electric trucks funded under early CMAQ programs





Voucher Incentive Programs

- EV Truck VIP
 - EV Class 3-8 trucks in 30 counties including all of NYC area
 - \$9 million available, up to \$20,000/ truck, or ~ 25% of incremental cost
- NYC Private Fleet VIP
 - Vouchers for CNG, Hybrid, EV trucks in NYC only
 - \$6 million available, up to 80% of incremental cost or \$40,000/truck
- Streamlined program delivery
- Incentive goes to dealer based on list of vehicles
- CMAQ funds





Infrastructure - PON 2301, EVSE Demonstration

- Demonstration projects for EVSE at public and fleet locations
- Projects must incorporate innovative technologies or business models
- Ten projects funded under first round
 - 400 electrified parking spaces around the state (~325 Level 2 EVSE)
 - Will collect data for 4 years
 - Over \$4 million committed (state funds)
- Another \$4 million of state funds available for Round 2 to be awarded by end of the year





PON 2301 EVSE Project Highlights

- New York Power Authority (124 single EVSE)
 - Installation of EVSE at transit hubs and town centers, linked to solar installations
- Coulomb/National Grid (81 dual EVSE)
 - Collaboration to test low-cost installations and new reservation system
- Access Technology Integration (19 single EVSE)
 - Traditional parking lot management company integrating EVSE into base parking lot technology
- PlugIn Štations Online (3 dual EVŠE)
 - EVSE at apartment complexes for residents
- Price Chopper Supermarkets (12 single EVSE)
 - EVSE at popular shopping locations



EVSE Data Collection and Support

- Energetics, Inc. lead contractor
- Data collection from EVSE demonstration projects (with INL)
- Research and planning support on EVSE issues in New York
 - White papers on Public Utility Commission's EV activities around US and various utility approaches to EV deployment
- Outreach to decision-makers, fleets, and the general public through materials, websites, and conferences



Other EV-Related Activities

- City of Albany EV Planning Study
- Enterprise Rent-a-Car EV Pilot at NYC airports
- Over 100 EVSE installations through ARRA Clean Cities funding
 - Buffalo, Syracuse, Hudson Valley, NYC







NYSERDA and the Transportation and Climate Initiative



TCI Goals

Eleven states and DC launched the TCI in June 2010 to

- Reduce greenhouse gases in the transportation sector and help build the clean energy economy.
- Create benefits and funding opportunities for states that are leading the way.
- Align with federal government actions, goals and emerging inter-agency approaches.
- Build on existing regional efforts.

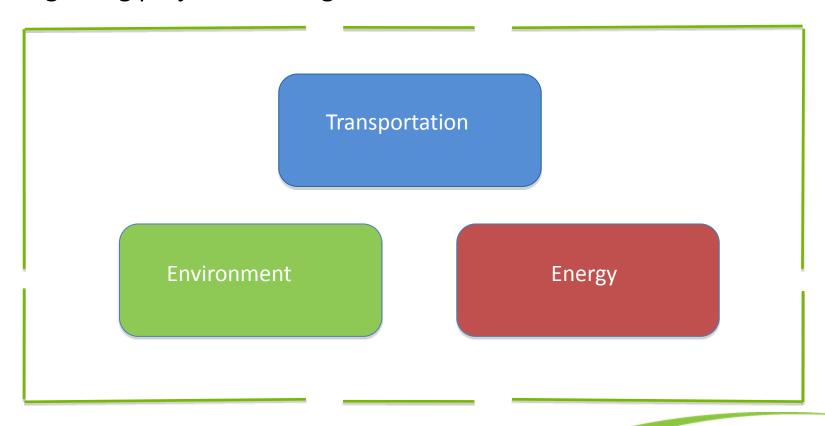






Collaboration is Key

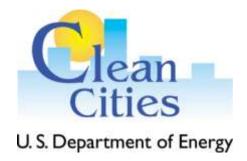
The top environment, transportation, and energy officials from participating TCI states are now all "in the same room," collaborating and guiding project work together for the first time.





DOE EV Planning Grant

- NYSERDA (on behalf of TCI) received a \$1 million Electric Vehicle Readiness Grant from DOE in September 2011 to plan for the rollout of EV infrastructure
- NYSERDA and TCI are working with 16 of the region's Clean Cities Coalitions to complete the grant. Under the grant, we are:
 - Engaging stakeholders
 - Conducting a literature review
 - Creating siting and design guidelines, model permits, building codes, and ordinances for infrastructure tailored to the region
 - Undertaking education and outreach activities
- Contract with Georgetown Climate Center
- NASEO will assist with information sharing to other states

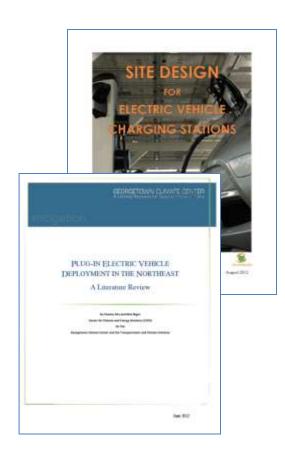




DOE EV Planning Grant

Progress to Date

- Held stakeholder meetings in December, February, and June with auto and EVSE manufacturers, utilities, municipalities, and others
- Completed literature review of market barriers, electrical grid impacts, plans for EV rollouts, and other issues specific to the Northeast
- Drafted siting and design guidelines with input from people with first-hand knowledge in the region
- Working with stakeholders on plans for model permitting rules, zoning & parking regulations, and building/electrical code amendments





TCI Resources

TCI Website under development. All materials will be posted there:

TransportationandClimate.org

NASEO will help disseminate the information in the future.



Thank you!

Contact NYSERDA for More Information

www.nyserda.ny.gov

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