

New York State-wide Alternative Fuel Vehicle Program for Vehicles and Fueling Stations

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NYSERDA

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Project ID#
ARRAVT053

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Overview

Timeline

- Start: December 2009
- Finish: November 2013
- Currently 85% complete

Budget

- ARRA economic stimulus funding
- Total project funding
 - DOE: \$13,299,101 (36%)
 - Cost-Share: \$23,517,650 (64%)
- Funding received to date: \$11,137,443.12
- Funding anticipated for next 12 months: approx. \$1,800,000

Barriers/Risks Addressed

- Lack of alt fuels infrastructure
- Lack of experience with AFVs

Target deployment schedule

	Vehicles	Infrastructure
2010	100	4
2011	265	94
2012	17	8

Partners

- 42 New York State public and private fleets
- 5 Clean Cities Coalitions

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Relevance

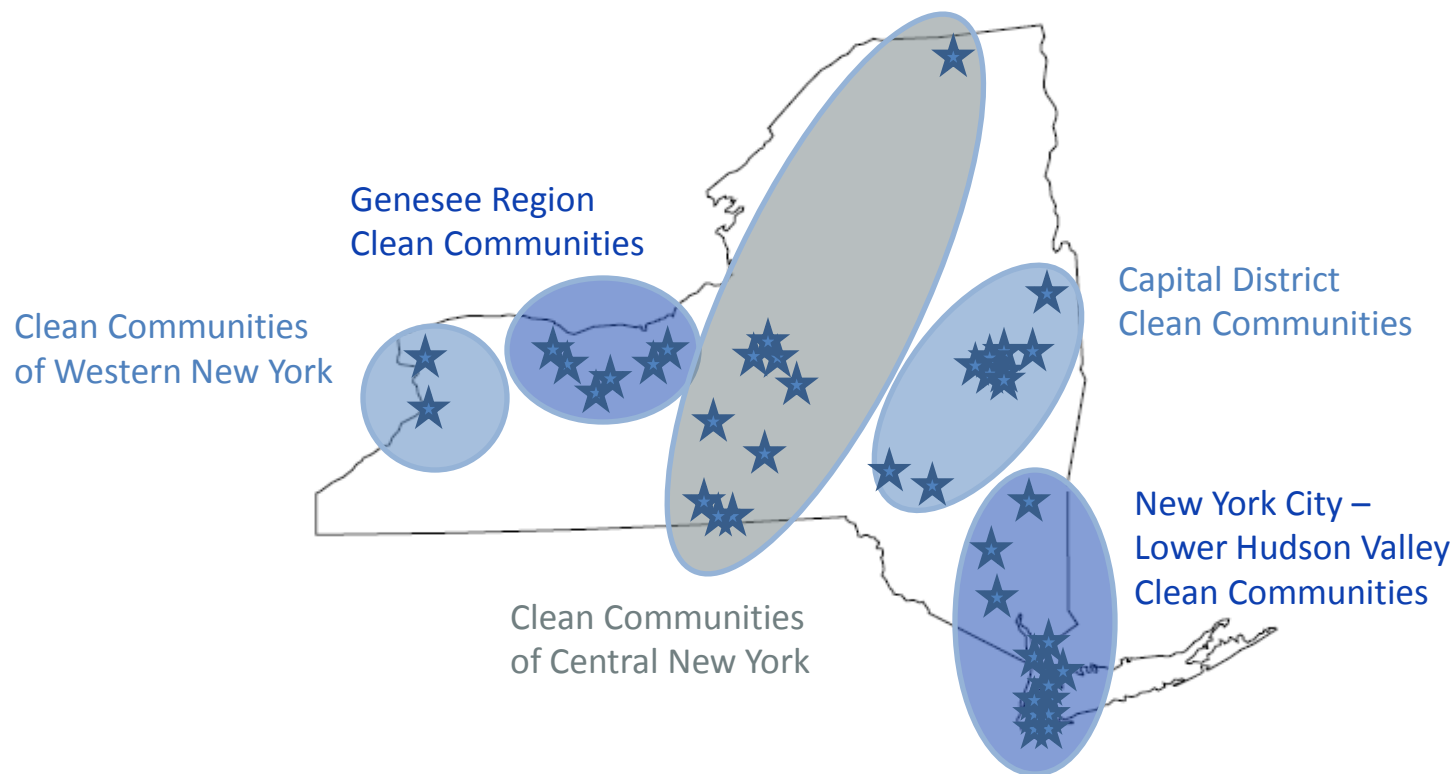
Project Objectives

- Spur economic growth and create jobs in New York State through shovel-ready stimulus spending as part of ARRA
- Demonstrate that fleets of all types can implement and benefit from alternative fuel vehicle and infrastructure projects
- Increase experience with AFVs among NY's public and private fleets, influencing future purchasing decisions
- Create infrastructure to support future AFV deployment in NY
- Reduce petroleum use and GHG emissions in the state's transportation fleet, to help fulfill the State Energy Plan and Climate Action Plan
- Develop innovative programs to train firefighters to work with new alternative fuels and AFVs

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Project Sites in New York State



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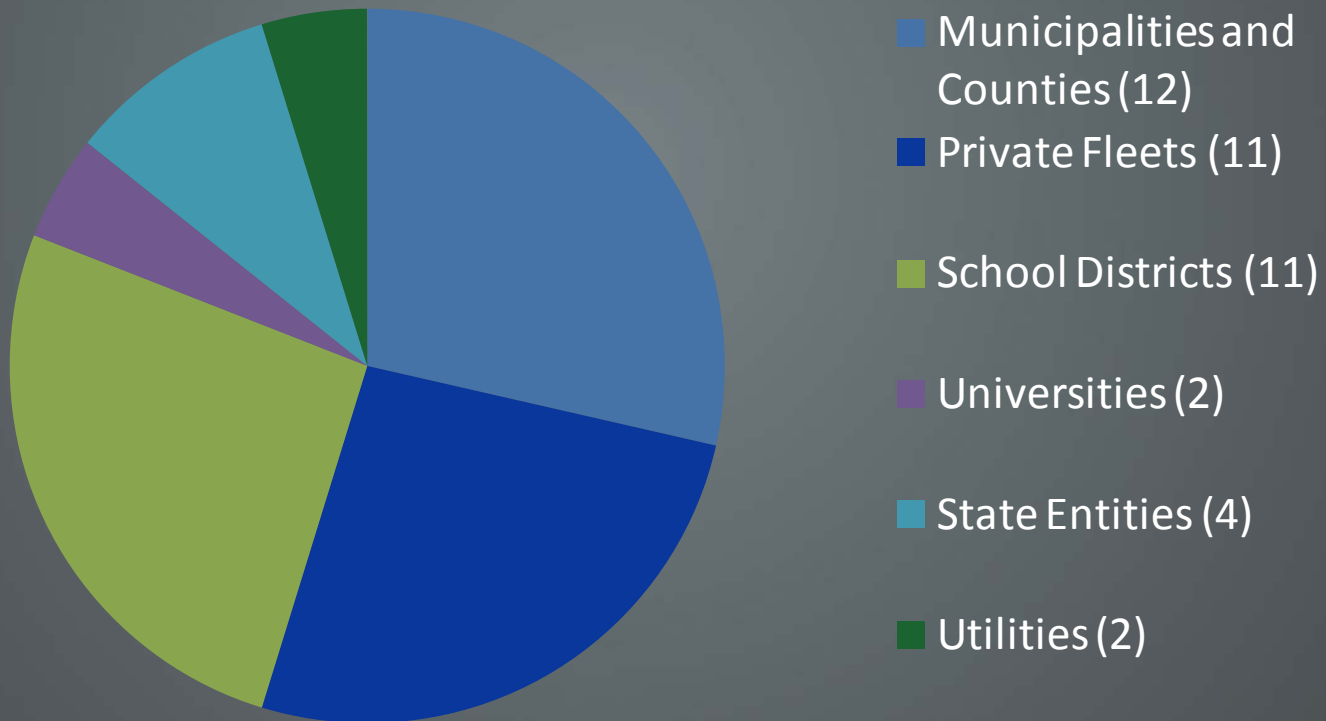
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Relevance

Types of Program Participants

Program Participants (42)



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Tasks for Project Completion

Task 1: Project Management and Planning

- Conduct a project kick-off meeting
- Finalize sub-recipient agreements
- Revise and update Project Management Plan

Task 2: Vehicle Deployment

- Complete vehicle NEPA process
- Purchase and take delivery of vehicles and/or convert vehicles
- Apply appropriate signage to vehicles stating that they are part of a US DOE Clean Cities Award
- Deploy vehicles

Task 3: Infrastructure Development

- Complete Infrastructure NEPA process and obtain necessary permits
- Complete actions necessary to begin construction and/or upgrades
- Install fueling Infrastructure
- Apply appropriate signage to fueling infrastructure stating that it is part of a US DOE Clean Cities Award
- Make infrastructure operational

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Tasks for Project Completion

Task 4: Training Development & Delivery

- Identify specific training needs of those operating and maintaining vehicle and refueling infrastructure
- Develop training to address needs of those mentioned above
- Provide training to appropriate audiences
- Perform on-going identification of additional training needs and hold follow-up training

Task 5: Outreach/Marketing

- Provide a plan for project marketing/outreach that informs the public about this project
- Execute project marketing/outreach plan
- Document all marketing/outreach conducted

Task 6: Documentation & Reporting

- Monitor performance of vehicles and infrastructure for a period of 24 months after deployment
- Document all training and marketing/outreach conducted and Clean Cities involvement in project
- Provide quarterly and annual reporting of fleet data to DOE and local Clean Cities coalitions
- Provide project updates/lessons learned at merit reviews to ensure that the information and knowledge gained by project participants is shared

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Original Schedule/Milestones

2010

- Finalize all sub-recipient contracts
- Receive approval for all NEPA EQs
- Vehicle orders 70% complete
- Vehicle deployment 30% complete
- Infrastructure development 30% complete
- Trainings and outreach/marketing activities started
- Ongoing reporting

2011

- Vehicle deployment 100% complete
- Infrastructure development 100% complete
- Training and outreach/marketing activities complete
- Ongoing reporting

2012-13

- Complete reporting and data collection
- Ongoing training through programs established with ARRA funds

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Technical Accomplishments

Key Accomplishments to Date

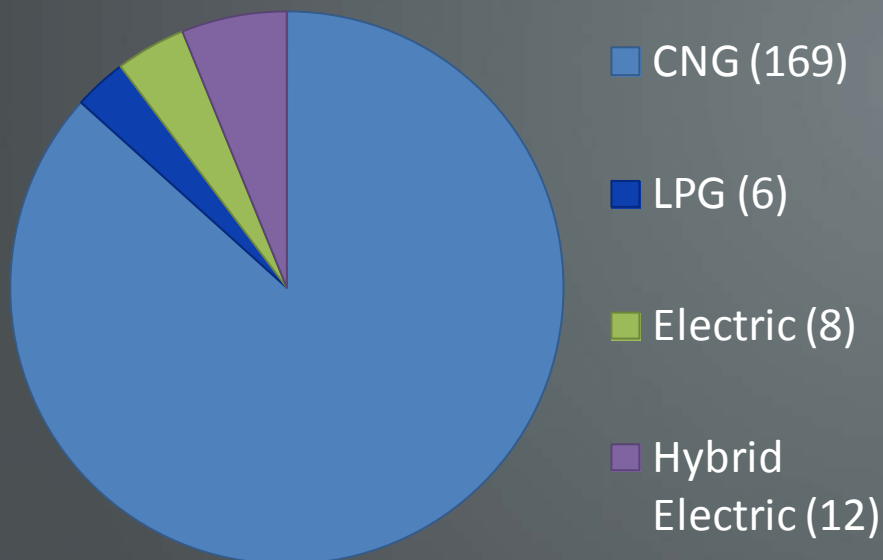
- Kick-off meetings and subsequent quarterly meetings held with all sub-recipients
- Reporting protocols implemented for sub-recipients
- 100% of contracts with sub-recipients signed
- 100% of NEPA EQs submitted and approved
- 97% of vehicles deployed thru 3/12 (372 out of 382)
- Site work complete for 93% of infrastructure projects thru 3/12 (99 out of 106)
- 110 trainings conducted by sub-recipients, with over 1,800 attendees
- 296 marketing and outreach events held
- Through March 2012, deployed vehicles have driven over 3 million miles using alternative fuels and advanced technologies

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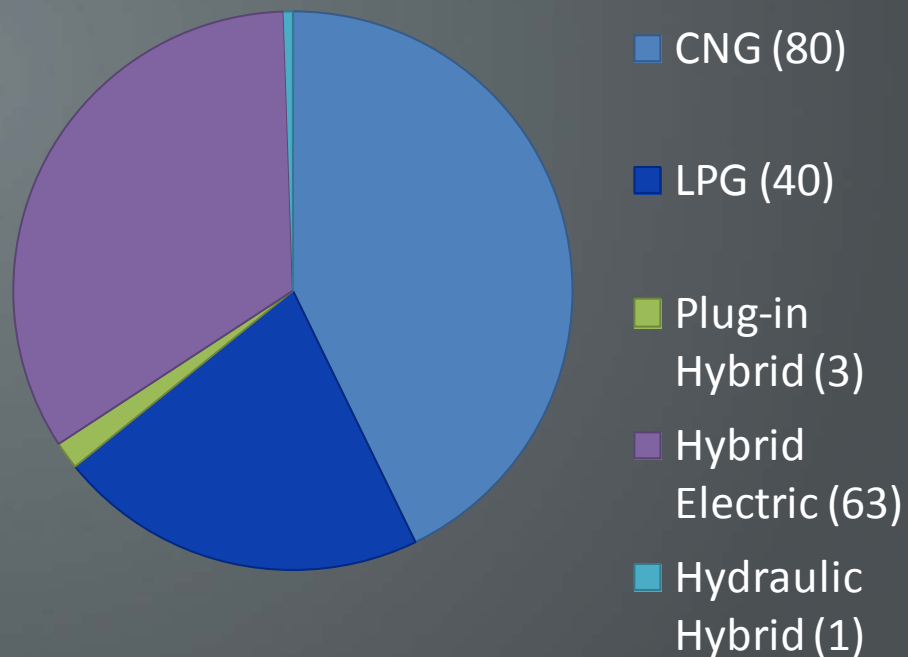
Technical Accomplishments

Types of Vehicles Deployed

Light-Duty
(195 vehicles)



Medium- and Heavy-Duty
(187 vehicles)

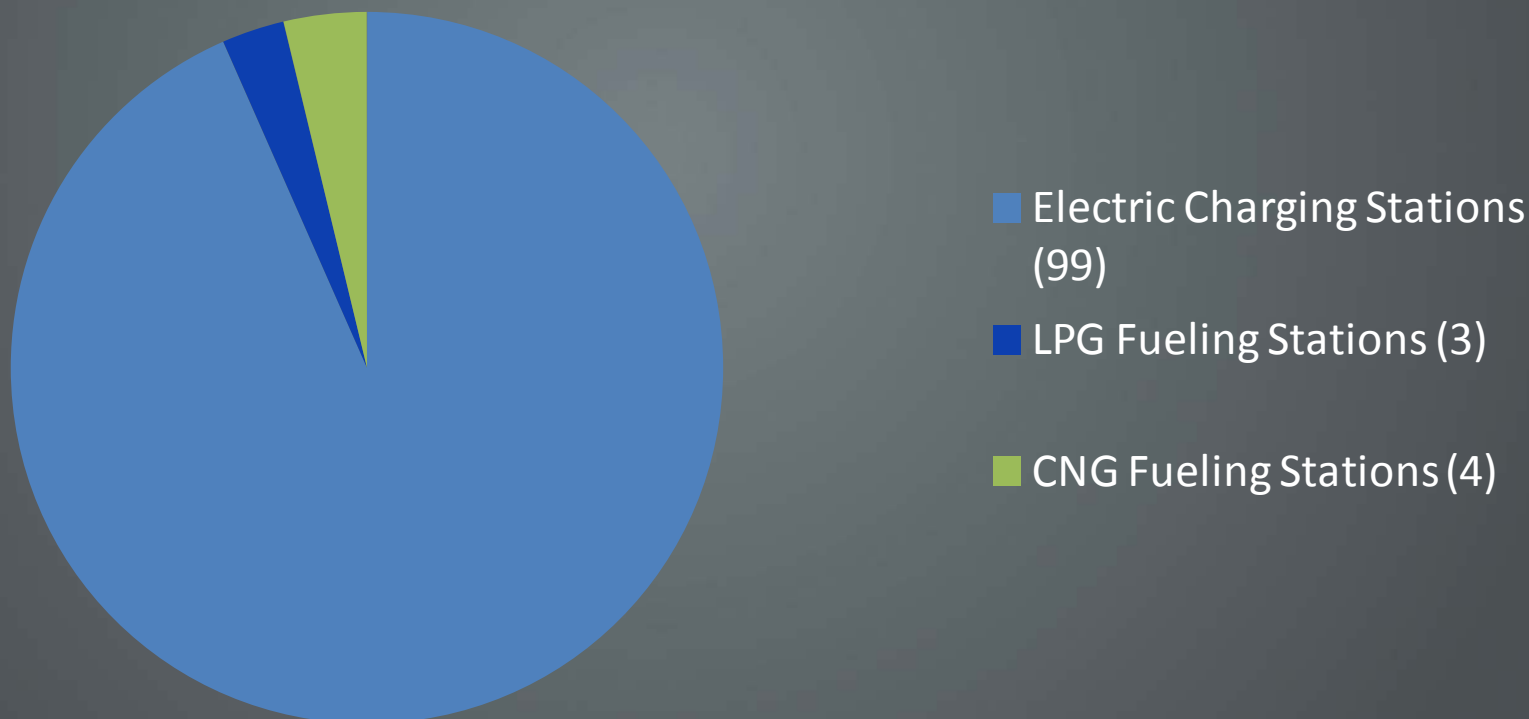


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Technical Accomplishments

Types of Infrastructure Deployed

Infrastructure Installations (106 stations)



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Technical Accomplishments

Progress vs. Barriers, Milestones

- Fleets around the state have better understanding of and positive experiences with AFVs
- Partners have spread knowledge to other potential AFV adopters
- AFV infrastructure expanded in major cities
- All early milestones accomplished
- A few projects still to be completed because of delays with suppliers, siting and will be completed by summer 2012
- Reporting underway and on track to continue through 2013
- Extensive data comparing AFV cost of ownership to standard vehicle cost of ownership

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Collaborations

List of Sub-recipients

- AAA of Western New York
- Albany International Airport
- Ballston Spa Central School District
- Bard College
- BOCES of Rockland County
- Casella Waste Systems, Inc.
- Cayuga County
- Central Hudson Gas & Electric
- Charlotte Valley Central School District
- City of Albany
- City of Rochester
- City of Syracuse
- City of White Plains
- Coca-Cola Enterprises
- Demon Logistics, LLC
- East Greenbush Central School District
- Fairport Central School District
- Ferrario Ford, Inc.
- Gilboa-Conesville Central School District
- Harbec, Inc.
- Hoosic Valley Central School District
- Malone Central School District
- Manhattan Beer Distributors, Inc.
- Modern Disposal, Inc.
- Monroe County
- National Grid
- New York Power Authority
- NYS Department of Environmental Conservation
- NYS Division of Homeland Security and Emergency Services
- Palmyra-Macedon Central School District
- Roosevelt Island Operating Corp.
- Synapse Sustainability Trust
- University at Albany
- Tompkins County
- Town of Dobbs Ferry
- Town of Mamaroneck
- Town of Warwick
- Trumansburg Central School District
- Verizon Communications
- Village of Minoa
- Wayne Central School District
- Westchester Ambulette, Inc.
- Capital District Clean Communities
- Clean Communities of Central New York
- Clean Communities of Western New York
- Genesee Region Clean Communities
- New York City Lower Hudson Valley Clean Communities

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Proposed Future Work

Work Scheduled for Remainder of 2012/13

- Deployment of remainder of vehicles and infrastructure
- Additional trainings and marketing/outreach
- Possible media events around deployments in New York City, Rochester, and Albany
- Firefighter trainings around NYS on fighting liquid biofuel fires
- Reporting on jobs creation and expenditures
- Reporting on fuel usage, fuel dispensed, vehicle miles traveled, and emissions from vehicles

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Summary

- NYSERDA's Clean Cities project will create jobs and spur economic growth through the purchase and deployment of nearly 400 AFVs and over 100 alternative fueling stations
- Our project is bringing together all types of fleets across New York State to build interest in and experience with alternative fuels and alternative fuel vehicles
- New York is initiating innovative training programs to prepare stakeholders like firefighters to work with AFVs
- The vehicles and infrastructure deployed will show significant petroleum and GHG emission reductions, in support of New York State's energy and climate plans

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