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

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Project ID# ARRAVT053



Overview

Timeline

Start: December 2009

Finish: November 2013

Currently 5% complete

Budget

- ARRA economic stimulus funding
- Total project funding

- DOE: \$13,299,101 (39%)

Cost-Share: \$20,662,882 (61%)

Funding received to date: \$0

• Funding anticipated for next 12 months: approx. \$9,000,000

Barriers Addressed

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

Target deployment schedule

	Vehicles	Infrastructure
2010	123	13
2011	253	90

Partners

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



Relevance

Project Objectives

- Demonstrate that <u>fleets of all types</u> can implement and benefit from alternative fuel vehicle and infrastructure projects
- <u>Increase experience with AFVs</u> among NY's public and private fleets, influencing future purchasing decisions
- Develop innovative programs to <u>train mechanics and firefighters</u> to work with new alternative fuels and AFVs
- Create infrastructure to <u>support future AFV deployment</u> 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
- Spur economic growth and create jobs in New York State through shovel-ready stimulus spending as part of ARRA



Relevance

Project Sites in New York State

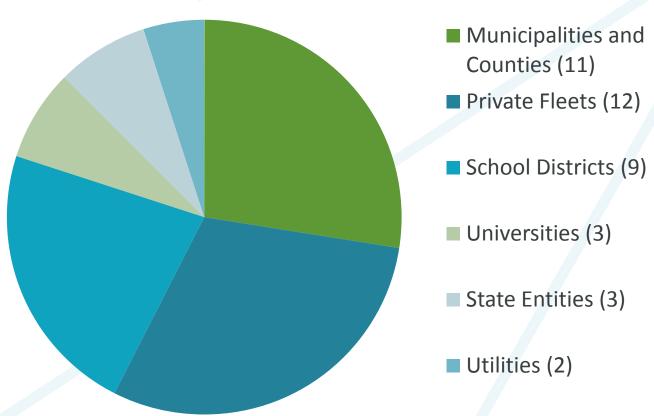




Relevance

Types of Program Participants

Program Participants (40)





Approach

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



Approach

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



Approach

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



Technical Accomplishments

12/1/2009 to Present

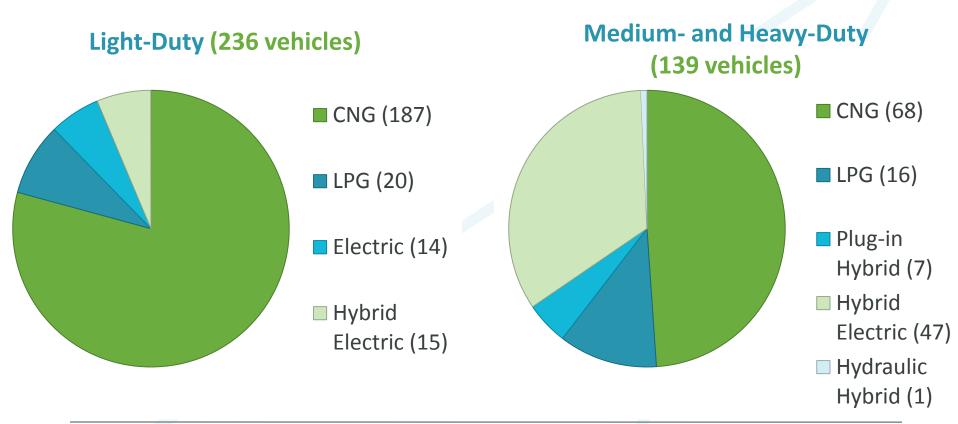
- Kick-off meetings held with all sub-recipients
- Reporting protocols implemented for sub-recipients
- 40% of contracts with sub-recipients signed (18 out of 45)
- 93% of NEPA EQs submitted and approved (42 out of 45)
- 10% of vehicles ordered (38 out of 376)
- Site preparation under way for 50% of infrastructure projects (4 out of 8)



Technical Accomplishments

Types of vehicles to be deployed

Types of Vehicles to Be Deployed

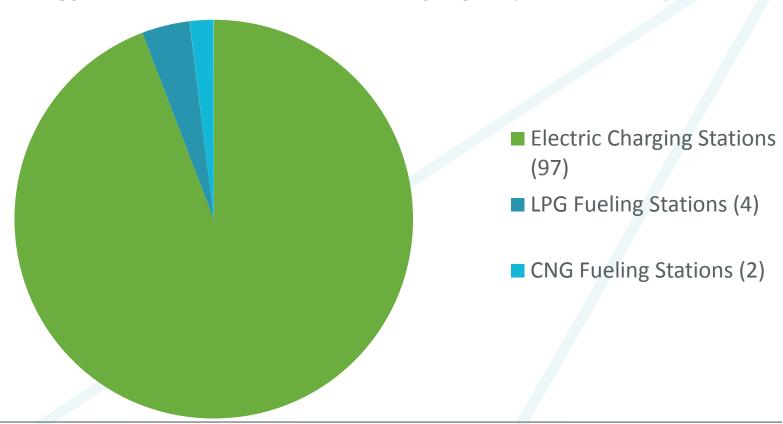




Technical Accomplishments

Types of infrastructure to be deployed

Types of Infrastructure to Be Deployed (103 stations)





Collaborations

List of Sub-recipients

- Bard College
- Central Hudson Gas & Electric
- Charlotte Valley Central School **District**
- Chemung County
- City of Albany
- City of Rochester
- City of Syracuse
- City of White Plains
- Coca-Cola Enterprises
- CuseCar, Inc.
- Demon Logistics, LLC
- East Greenbush Central School District
- Fairport Central School District
 Praxair Distribution, Inc.
- Ferrario Ford, Inc.
- Gilboa-Conesville Central School. **District**

- Green Power Technology
- Harbec, Inc.
- Hoosic Valley Central School District
 Town of Mamaroneck
- Hudson Valley Community College
- Malone Central School District
- Manhattan Beer Distributors, Inc.
- Monroe County
- National Grid
- New York Power Authority
- NYS Department of Environmental Conservation
- NYS Department of State
- Palmyra-Macedon Central School District
- Republic Service Inc.
 - Southern Tier News Company
- University at Albany

- Tompkins County
- Town of Dobbs Ferry
- 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



Proposed Future Work

Work Scheduled for Remainder of 2010

- Complete contracts with sub-recipients, NEPA EQ approvals
- Deployment of <u>additional vehicles</u>, accompanied by trainings and marketing events
- Completion of <u>2 LPG</u> fueling stations and at least <u>12 electric</u> charging stations
- Possible <u>media events</u> around deployments in New York City,
 Syracuse, and Albany in late summer/fall
- Inception of <u>AFV maintenance training program</u> at Hudson Valley Community College
- Reporting on jobs creation and expenditures



Proposed Future Work

Work Scheduled for 2011

- Deployment of <u>remainder of vehicles and infrastructure</u>
- Additional <u>trainings and marketing/outreach</u>
- <u>Firefighter trainings</u> 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



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 <u>bringing together all types of fleets across New</u>
 <u>York State</u> to build interest in and experience with alternative fuels and alternative fuel vehicles
- New York is initiating <u>innovative training programs</u> to prepare stakeholders like mechanics and firefighters to work with alternative fuel vehicles
- The vehicles and infrastructure deployed will show significant petroleum and GHG emission reductions, in support of New York State's energy and climate plans

