

# 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 40% complete

## Budget

- ARRA economic stimulus funding
- Total project funding
  - DOE: \$13,299,101 (36%)
  - Cost-Share: \$23,517,650 (64%)
- Funding received to date: \$5,253,511.18
- Funding anticipated for next 12 months: approx. \$7,500,000

## Barriers Addressed

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

## Target deployment schedule

	Vehicles	Infrastructure
2010 (Actual)	100	4
2011	323	41

## Partners

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

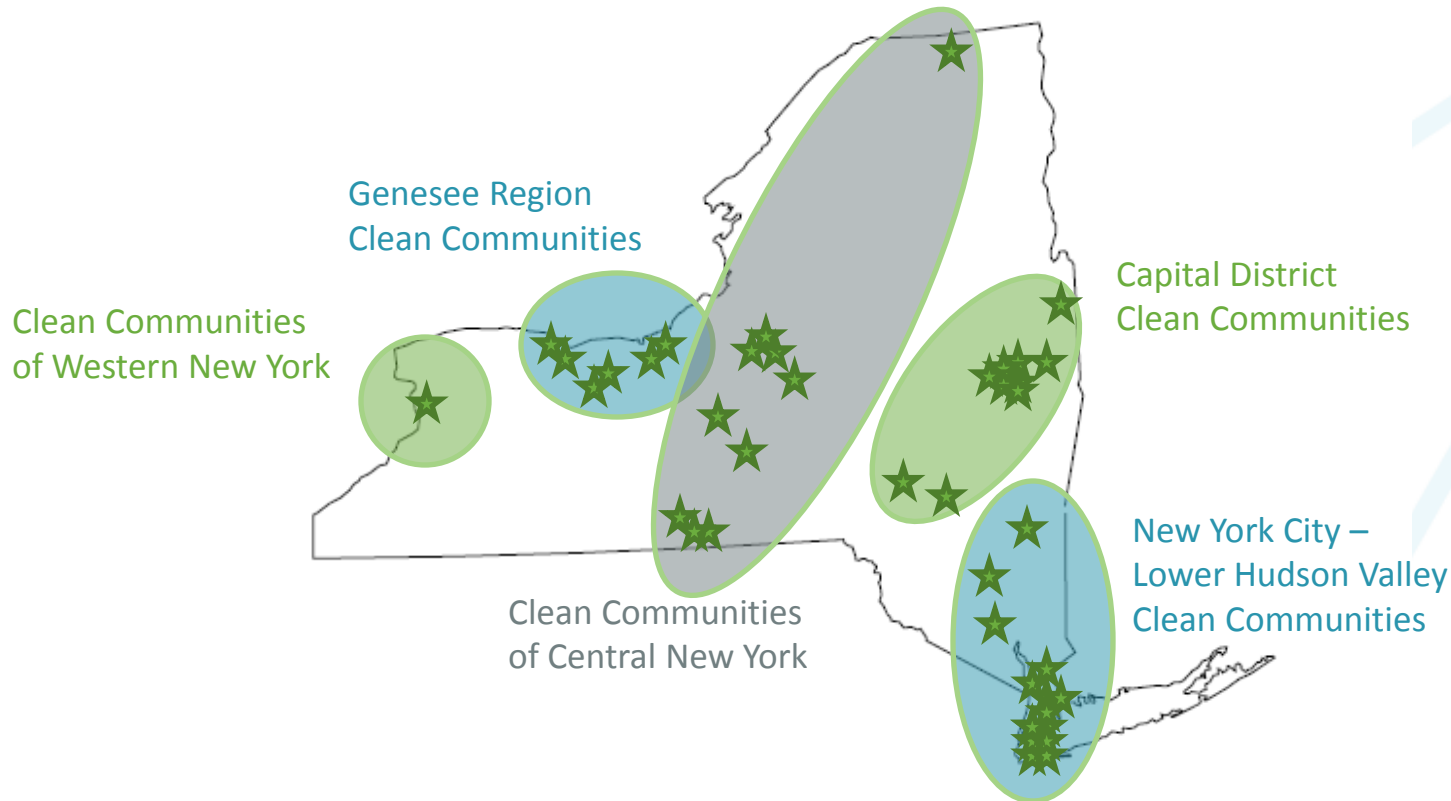
# Relevance

## 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

# Relevance

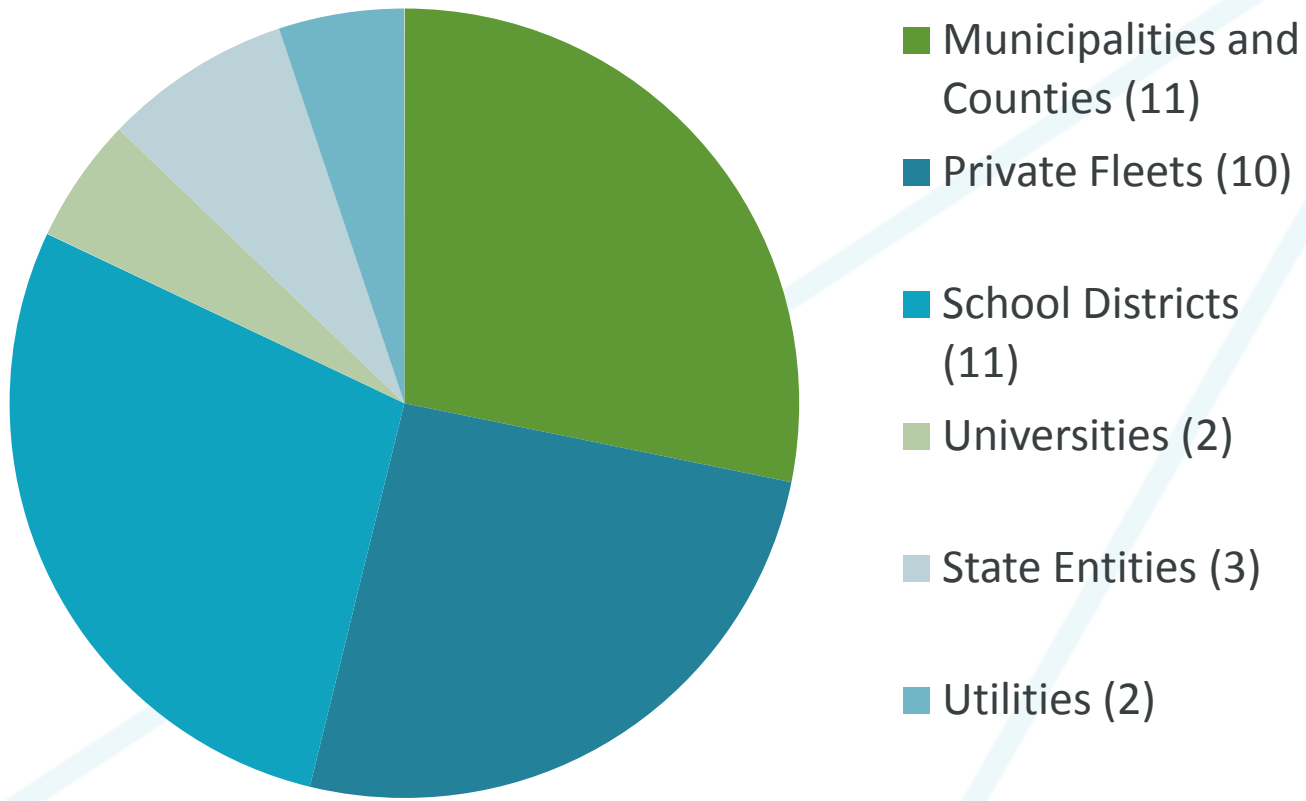
## Project Sites in New York State



# Relevance

## Types of Program Participants

### Program Participants (39)



# 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

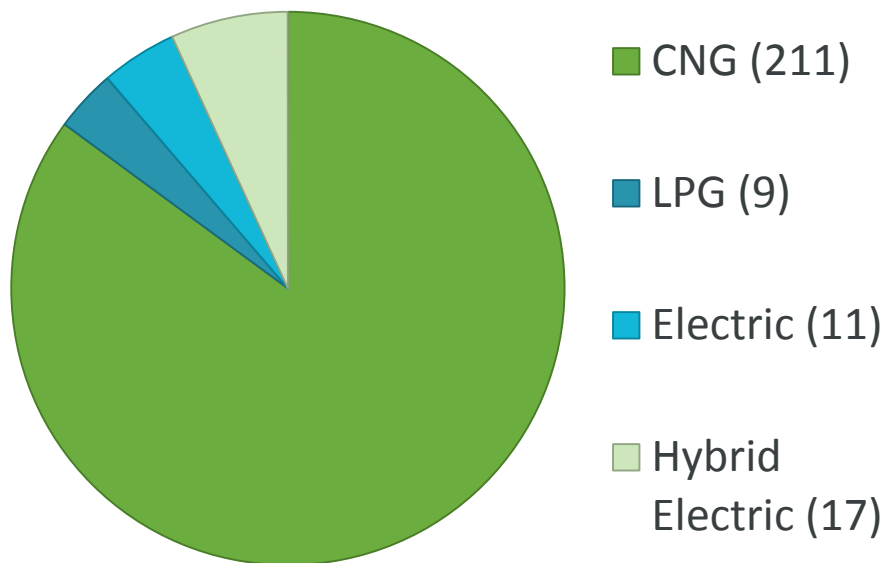
- Kick-off meetings held with all sub-recipients
- Reporting protocols implemented for sub-recipients
- 86% of contracts with sub-recipients signed (38 out of 44)
- 93% of NEPA EQs submitted and approved (41 out of 44)
- 62% of vehicles ordered (263 out of 423)
- Site preparation under way for 78% of infrastructure projects (7 out of 9)

# Technical Accomplishments

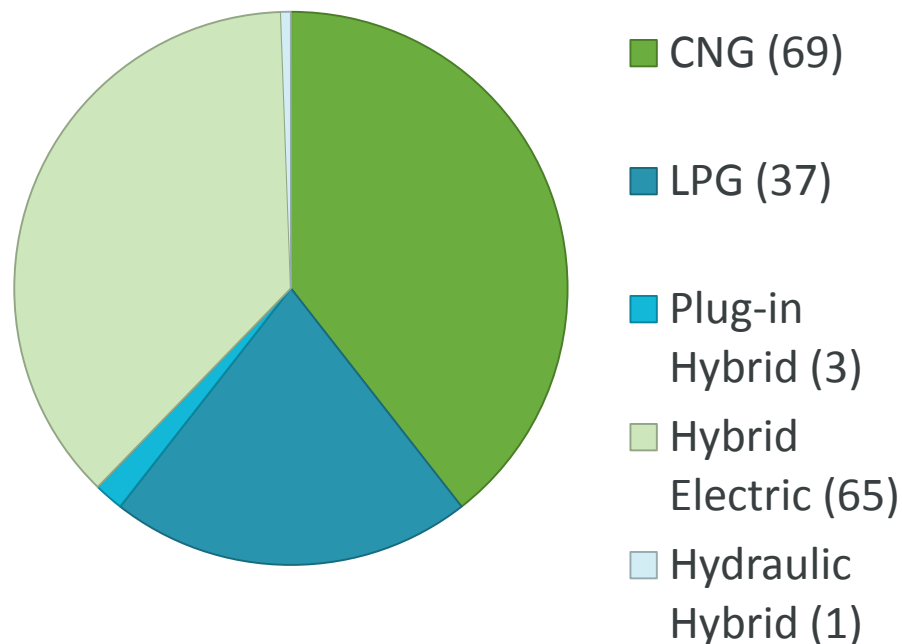
## Types of vehicles to be deployed

### Types of Vehicles to Be Deployed

#### Light-Duty (248 vehicles)



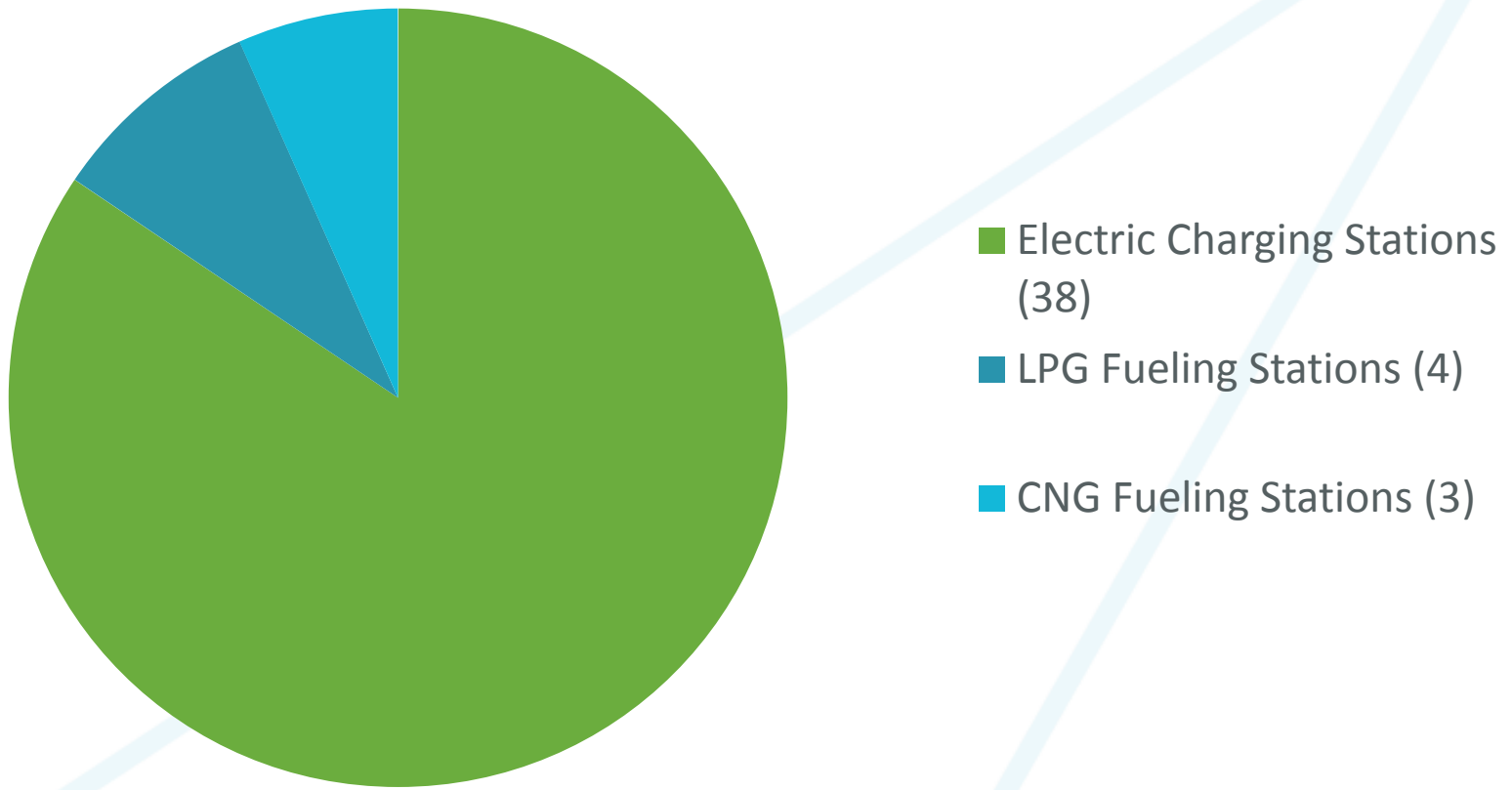
#### Medium- and Heavy-Duty (175 vehicles)



# Technical Accomplishments

## Types of infrastructure to be deployed

### Types of Infrastructure to Be Deployed (45 stations)



# Collaborations

## List of Sub-recipients

- Albany International Airport
- Ballston Spa Central School District
- Bard College
- BOCES of Rockland County
- 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
- CuseCar, Inc.
- Demon Logistics, LLC
- East Greenbush Central School District
- Fairport Central School District
- Ferrario Ford, Inc.
- Frey Electric Construction, Inc.
- Gilboa-Conesville Central School District
- Harbec, Inc.
- Hoosic Valley Central School District
- Malone Central School District
- Manhattan Beer Distributors, 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
- Praxair Distribution, Inc.
- Roosevelt Island Operating Corp.
- 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

# Proposed Future Work

## Work Scheduled for Remainder of 2011

- Deployment of remainder of vehicles and infrastructure
- Additional trainings and marketing/outreach
- Possible media events around deployments in New York City, Syracuse, and Albany in late summer/fall
- 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

# Summary

- NYSERDA's Clean Cities project will create jobs and spur economic growth through the purchase and deployment of over 400 AFVs and over 40 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