## 2010 DOE Vehicle Technologies Program Review Presentation

# NJ COMPRESSED NATURAL GAS REFUSE TRUCKS, SHUTTLE BUSES AND INFRASTRUCTURE

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- o June 9, 2010

Project ID # ARRAVT051



#### **Overview**

#### **Timeline**

- Start date: Dec. 15, 2009
- Complete date: Dec. 14, 2013

#### **Budget**

- Federal Share:
  - \$14,997,240
- Non-federal share: \$38,767,561
- Total Project: \$53,764,801

#### **Partners**

- City of Newark
- Atlantic County
   Utilities Authority
- Waste Management of NJ
- Clean Energy
- Atlantic City Jitney
   Association
- Central Jersey Waste & Recycling

## **Objectives**

- Increase visibility of the DOE's role in support of alternative fuel deployment projects
- Reduce tailpipe emissions in heavy-duty fleet applications as natural gas refuse trucks and shuttle buses are deployed
- Reduce foreign oil dependency by having fueling stations that provide a domestically produced fuel;
- Stimulate the economy by creating and preserving green jobs

#### Objectives – con't

- Educate the public about the "mainstream availability" and other benefits of using a clean, domestically produced fuel as more vehicles are sold and owners operate their vehicles throughout the region.
- Estimated reduction of 896,722.4 pounds of identified criteria pollutants and greenhouse gas emissions annually.
- Estimated combined petroleum displacement for this project is 1,767,100 gallons per year

#### Milestones

Obtain NEPA approvals for stations and Vehicles	Q1 (CY2010)
Order major equipment for Waste Mgmt	Q1
Order major equipment for ACUA	Q1
Order major equipment for Central Jersey Waste	Q3
Order major equipment for Newark	Q3
Start site work at ACUA	Q2
Start site work at Waste Mgmt	Q2
Start site work at CJW	Q3
Start site work at Newark	Q3
Station operational at ACUA	Q3
Station operational at WM	Q4
Station operational at Newark	Q4
Station operational at CJW	Q5 (CY2011)

#### Approach

- The grant will offset the incremental costs of:
  - Deployment of 272 natural gas vehicles (NGVs) in refuse and shuttle bus applications operating in Newark, Camden, Trenton, Atlantic City and Egg Harbor Township, New Jersey.
  - Design and construction of 4 Compressed Natural Gas fueling stations at various locations across the state.
  - Provide opportunities for public outreach and education, and for significantly increased visibility of alternative fueled vehicles

#### Technical Accomplishments

- NEPA Categorical Exclusions have been approved for all 4 CNG Station sites as well as for vehicle purchases
- Design/construct/operate contracts have been awarded for 3 of the stations

## Deployment Accomplishments

4 CNG garbage trucks have been deployed to date.

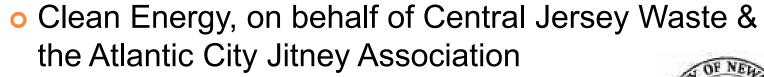


**Central Jersey Waste Compressed Natural Gas Refuse Hauler** 

#### Collaboration

The NJCCC has awarded sub-recipient agreements to:

- The City of Newark
- The Atlantic County Utilities Authority
- Waste Management of NJ











#### **Future Work**

- Order and deploy NG vehicles
- Start on-site construction activities for new stations
- Develop and schedule training for fueling and maintaining NGVs
- Develop and schedule public educational outreach and station marketing campaigns

#### Summary

- NJ Clean Cities Coalition is leading a public/private team to implement the first large-scale deployment of alternative fuel vehicles and infrastructure in NJ
- Highly visible vehicle fleets of 4 trash collection operators and 1 shuttle bus company to be converted to CNG
- Four CNG stations to be built which will ultimately be available to additional fleets and the public.