



Puget Sound Clean Cities Petroleum Reduction Project (DE-EE0002020)

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May 4, 2010

Project I.D. #: ARRAVT042

Overview

Timeline

- Start date: Dec 3, 2009
- End date: Dec 2, 2011
- Percent complete: 10%

Barriers/Risks

- Accelerated time line
- Municipal budget cuts
- Administrative burden

Budget

- DOE share: \$15 M
- Recipient share: \$22 M
- Total Project: \$37 M

Partners

- Lead: Puget Sound Clean Air Agency
- Partners: 14 municipalities, 3 universities, 7 private businesses

Relevance

Puget Sound Clean Cities Coalition Petroleum Reduction Project DE-EE0002020

Project Objectives:

- Reduce petroleum use in the Seattle-Puget Sound region through a targeted deployment of alternative fuel vehicles and infrastructure.
- Create a regional sustainable market for renewable alternative fuels with low lifecycle emissions.
- Preserve and create at least 350 jobs nation-wide, and enhance our local economy.
- Elevate public awareness of the Clean Cities program through an innovative outreach campaign designed to reach an audience of 30 million people per year.

Approach

Vehicle Deployment:

- 230 alternative fuel and advanced technology vehicles deployed in local government fleets.
- 225 compressed natural gas vehicle conversions for taxi & shuttle fleets.
- 540 pieces of battery electric ground support equipment at Seattle-Tacoma (Sea-Tac) International Airport.



Infrastructure Deployment:

- Biogas fueling facility at dairy farm digester in Lynden, WA.
- Two biodiesel and one ethanol fueling station in Everett, WA.
- At least 100 regional electric vehicle charging stations.

Marketing, Outreach & Education:

- Video-loop about DOE Clean Cities to play on baggage claim terminal screens at Sea-Tac Airport.
- Green driver training, EV guidebooks, biogas workshops.

Milestones

Planned Completion	Milestone
May 2010	100% of Cost-Share Agreements Signed
June 2010	100% of Sub-Recipient Agreements Signed
January 2010	100% of NEPA Documentation for Fueling Infrastructure Approved
March 2010	100% of NEPA Documentation for Vehicle Purchases Approved
June 2010	100% of NEPA Documentation for Vehicle Conversions Approved
August 2010	100% of NEPA Documentation for Electric Charging Infrastructure Approved
September 2010	50% of Vehicle Orders Complete
September 2011	100% of Vehicle Orders Complete
June 2011	100% of Electric Airport Ground Support Equipment Orders Complete
May 2011	100% of Fueling Infrastructure projects complete
September 2011	100% of Charging Infrastructure projects complete
December 2010	50% of Vehicles Deployed
December 2011	100% of Vehicles Deployed
December 2011	100% of electric airport ground support equipment deployed
May 2011	50% of outreach/marketing initiatives complete
December 2011	100% of outreach/marketing initiatives complete
April 2011	50% of Training/workshop activities complete
December 2011	100% of Training/workshop activities complete

Technical Accomplishments

Contractual Agreements:

- Sub-Recipient Agreements signed with 4 out of 6 partners.
- Vehicle Purchase Cost-Share Partner Agreements signed with 11 out of 13 partners.

NEPA Review Completion:

- NEPA documentation approved for 100% of vehicle and GSE purchases and 100% of CNG vehicle conversions.
- NEPA documentation approved for 100% of fueling infrastructure.

Vehicle Orders Placed:

- Orders placed for 67 CNG vehicle conversions.
- Orders placed for 69 light duty and 51 medium/heavy duty alt fuel vehicles.

Fueling Site Preparation:

- Testing complete on WSU biogas scrubber/refinery at WWU biogas facility.
- Design underway for WWU biogas fueling facility.
- Site planning 100% complete for biodiesel and ethanol fueling stations.

Project Partners



Sub-Recipients:

- City of Seattle
- Port of Seattle
- World CNG
- Western Washington University
- Snohomish County
- Washington State University

Vehicle Purchase Cost-Share Partners:

- Cities of Bellevue, Everett, Issaquah, Kirkland, Mercer Island, Olympia, Renton, Sammamish, Seattle, Tacoma
- University of Washington
- King County and Snohomish County
- Bellair Airporter Shuttle. BYG-Yellow Cab. MasterPark.

Future Work

- Complete all partner agreements - June 30, 2010.
- Complete remaining NEPA actions for electric vehicle infrastructure - August 31, 2010.
- Complete vehicle purchases and conversions – 50% by December 2010, 100% by December 2011
- Open fueling stations - May 2011
- Complete installation of electric vehicle charging stations -
- Launch marketing and outreach campaign - March 2011
- Conduct workshops and distribute curriculum and materials – January to December 2011.

Events:

- Biogas Station Grand Opening and fueling of converted Bellair Coach bus – May 2011
- Electric GSE deployment and Ribbon Cutting Ceremony at Seattle Tacoma International Airport – October 2011

Summary

- The project encourages adoption of alternative fuel and advanced vehicle technologies in the Puget Sound region through the purchase/conversion of more than 1000 pieces of equipment.
- We have accomplished the tasks and spending targets for the first phase of the project.
- This project has created direct jobs such as CNG conversion mechanics, and will create more 'green' jobs as it continues.
- The project gives unprecedented public exposure to the DOE Clean Cities program through targeted marketing at baggage claim terminals, taxi stands, and viewing areas at Sea-Tac International Airport.
- We are well positioned for planned future work