

State of Indiana/Greater IN Clean Cities Alternative Fuels Implementation Plan

Patrick Flynn
Kellie Walsh

Indiana Office of Energy Development
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Project ID #
ARRAVT050

Overview

Timeline

- ▶ Project Began – December 31, 2009
- ▶ Project implementation – April 30, 2012
- ▶ Project Reporting – December 31, 2013
- ▶ Project To Date: 98% Percent complete – Contracts completed 100%, Vehicles ordered or retrofitted: 100% completed or delivered, 100% Stations completed

Barriers

- ▶ Education of Rules and Regulations associated with funding
- ▶ Economy – Planning for an unknown future
- ▶ Kit Approval – Timing and Models
- ▶ User education and use procedures
- ▶ Davis-Bacon Monitoring
- ▶ Creation of a New Vehicle Bid Spec.

Budget

- Total project funding - \$22,540,154
- DOE share - \$10,125,000
 - Contractor share - \$12,415,154
 - 55% Project Match

Partners

- ▶ Greater Indiana Clean Cities
- ▶ Citizens Energy
- ▶ City of Indianapolis
- ▶ City of Fort Wayne
- ▶ Indiana Department of Transportation
- ▶ KAKCO
- ▶ Lassus Brothers
- ▶ Renewable Dairy Fuels
- ▶ Sysco
- ▶ Tippecanoe School Corporation

Aiding Alternative Transportation

Relevance

- ▶ The goal of this project is to provide Clean Cities Partners with the ability to implement additional alternative fuels and technologies from across the Clean Cities Program portfolio: adding infrastructure to support vehicle deployment and allow for future partner development.
- ▶ The fleets involved span all of Indiana and includes both public and private sector fleets, from The Indiana Dept. of Transportation, to national partner, Sysco Distribution. This application incorporates 369 vehicles and 122 infrastructure sites.
- ▶ Over 200 jobs are expected to be created.
- ▶ The project will displace over 1.4M gallons of petroleum annually.
- ▶ Training, marketing and outreach events will be administered statewide.

Project Plan

Approach

- ▶ Greater Indiana Clean Cities Members were asked to submit their project plans for consideration in an overall application
- ▶ Submitted projects were scored based upon:
 - overall strength and relevance of the project
 - job creation and retention
 - Fuel displacement
 - Partner match
- ▶ This project is unique in that it represents the majority of alternative fuels and brings together government, private, and public institutions

Milestones

Approach

Month/Year	Planned Milestones
December, 2010	Finalize All Sub-recipient agreements/contracts
June 2010	All NEPA Esq. Submitted and Approved
September, 2010 January, 2011	Vehicle Ordering 50% complete Vehicle Ordering 100% complete
October, 2010 August, 2011	Fuel infrastructure development 50% complete Fuel infrastructure development 100% complete
November 2010 August 2011	Vehicle Deployment 50% complete Vehicle Deployment 100% complete
July 2011	Completion of training activities
August 2011	Completion of outreach/education activities

Project Partners

Collaborations/Partnerships

Partner	Project
Indiana Office of Energy Development	Lead Applicant
Greater Indiana Clean Cities	Project Manager
Citizens Energy	Upgrade of existing CNG station
City of Indianapolis	25 hybrids, 9 DPW LPG Truck Retrofits, and 11 Sherriff LPG Van Retrofits
City of Fort Wayne	7 Hybrids and 1 Hybrid Jet Truck
Indiana Department of Transportation	226 LPG Retrofits, 19 New CNG Dump Trucks, and 115 New Build LPG Stations.
KAKCO	Upgraded existing CNG station using used equipment
Lassus Brothers	2 Stations upgraded with E85 pumps, and 1 New Build Station with E85
Renewable Dairy Fuels	2 new build CNG stations – 1 Bio-methane
Sysco	32 Hybrid tractors and 22 Hybrid straight trucks
Tippecanoe School Corporation	5 78 Passenger Propane Bluebird School Buses

Project Partners

Technical Accomplishments and Progress

▶ **INDOT**

- All 226 Bi-fuel, light duty trucks and vans have been retrofitted to AutoGas, using two types of certified systems
- 19 CNG Dump Trucks have been deployed.
- All 115 fueling sites have been installed and are operational, all locations are accessible for other fleet use.
- Due to new infrastructure, have spent over \$2.5M of own funds to retrofit an additional 357 vehicles to propane. Were able to get new EPA Certifications for Ford Rangers

▶ **Sysco**

- 54 Hybrid tractors and straight trucks have been deployed in 9 states. 7 located in Ft. Wayne, IN

Project Partners

Technical Accomplishments and Progress

► City of Indianapolis

- 25 hybrid Ford Fusions are deployed
- Marion County Sheriff's 11 van propane retrofits and the 9 DPW dedicated new trucks have been deployed.

► Lassus Brothers Oil

- Two existing locations added E85 dispensers to their site; one new build included E85 in the overall project scope
- The City of Ft. Wayne's Police Fleet, of which over 50% are E85 compatible, worked with the fuel retailer to strategically site three public E85 stations so that their fleet can run exclusively on E85. This Partnership with Lassus Brothers Handy Dandy retails stores has allowed the fleet to drastically reduce its fueling costs while providing the public with more E85 locations in Ft. Wayne.

Project Partners

Technical Accomplishments and Progress

► **City of Ft. Wayne**

- Purchased 6 Ford Fusion Hybrids and 1 Ford Escape Hybrid.
- One Hybrid Jetter Truck. First of its kind hybrid application.

► **Tippecanoe School Corporation**

- 5 78 Passenger Propane Blue Bird School Buses
- First Propane school buses deployed in Indiana.
- Infrastructure already on site with donations from FerrellAutogas and MacAllister Power Systems

► **Citizens Energy**

- Upgrade of existing CNG station to allow for fueling of 19 INDOT ARRA CNG dump/plow trucks.
- Upgrade provides additional storage and compression capacity, allowing for faster fill-time and providing other area fleets opportunity.

Project Partners

Technical Accomplishments and Progress

▶ **KAKCO, Inc.**

- Upgraded existing CNG station to support fueling of AT&T vehicles and KAKCO's existing CNG Fleet
- Unique in that this station utilizes all used compressor, dispensers and storage units for a 1/3 of the cost of a new CNG fueling site.

▶ **Renewable Dairy Fuels**

- One new-build bio-methane natural gas station, and one pipeline station
- Both public access
- Primary fleet 47, Class 8 tractor trailers hauling milk from Fair Oaks Dairy in northern Indiana to southern Indiana and Northern Kentucky
- This project will be a roadmap for the dairy industry to use when implementing fueling to reduce their greenhouse gas footprint

Milestones to date

Technical Accomplishments and Progress

Date	Milestone
August 2009	Award Negotiations Announced
December 2009	Official Award
February 2010	Notified Partners of contract terms
March 2010	50% of NEPA – Vehicle and Infrastructure proposals submitted
March 2010	Project Partners Kick Off Meeting
April 2010	Finalized Scope Change and Contract Templates
July 2010	Infrastructure Projects Begin
September 2010	Vehicle Retrofits Begin
October 2010	Final Original Partners Determined. Due to de-obligated money one additional partner added in November 2011.
April 2011	Final Vehicles Ordered or out for Bid (additional partner vehicles ordered in December 2011) 75% Vehicles deployed
June 2011	50% of Stations Operational
September 2011	Station Retrofits and New Builds Completed
April 2012	All Vehicles Deployed (original Partners deployed by Nov. 2011)

Project Timeline

Future Work

Date	Future Promotion and Outreach
April 2012	Tippecanoe School Corporation Event highlighting first of its kind Propane School Buses in Indiana
May 2012	Lassus Brothers, Sysco, and City of Ft. Wayne Event
June 2012	City of Indianapolis, INDOT, Citizens Energy, and KAKCO Event
June 2012	Greater Indiana Clean Cities Greening Your Fleet Conference in French Lick.
June 2012	School Transportation Association Of Indiana Event with Project Partner Tippecanoe School Corporation
July 2012	Renewable Dairy Fuels event at Fair Oaks Farm. Local and National Partners event open to the public.
August 2012	Indiana State Fair Energy Day
August 2012	Indiana Renewable Energy Conference at Purdue University
Ongoing	Project Partner Vehicle Operation and Maintenance Training

The State of Indiana/GICC Alternative Fuels Implementation Plan

The Summary

- ▶ Due to the fact that projects span statewide and encompass numerous alternative fuels, communities will have greater access and awareness of alternative fuels
- ▶ The fuel savings within the state and city fleets will help budgets and therefore could help retain jobs with the resulting cost savings.
- ▶ The impact of the grant projects will displace over one million gallons of petroleum a year and provide a emission reduction benefit of over 15,000 tons.
- ▶ Job creation and retention will have a lasting impact on all communities within Indiana as well as SYSCO, and Daimler which are national companies.
- ▶ Creation of a CNG Corridor on I65, from Northern Indiana to Kentucky

The State of Indiana/GICC Alternative Fuels Implementation Plan

The Summary

- ▶ Total project - \$22,540,154
- ▶ Indiana's project will further the installation of propane, compressed natural gas, and E85 vehicle fuel stations as well as increase the use of hybrid vehicles.
- ▶ This project incorporates 369 vehicles, and allows for the addition of other propane vehicles as both light and medium duty vehicles are replaced with propane and CNG in the state fleet. 122 infrastructure sites support these vehicles. In addition to the vehicles in the grant, light duty propane vehicles have been deployed throughout the state by project partners.
- ▶ As of February 29, 2012 estimated 240,500 gallons of fuel displaced.
- ▶ As of December 31, 2012: 352,442 Gal E85, 520,888 GGE CNG, and 331,849 Gal of LPG dispensed from Alternative Fueling Stations.
- ▶ Over 1.4M gallons of petroleum will be displaced annually.

Contact Information

- ▶ Greater Indiana Clean Cities
 - Kellie Walsh
 - kellie@greaterindiana.com
- ▶ Indiana Office of Energy Development
 - Patrick Flynn
 - pflynn@oed.in.gov