Vehicle Technologies Program
Merit Review
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This presentation does not contain any proprietary, confidential, or otherwise restricted information
Clean Cities Tools and Resources

FuelEconomy.gov
AFDC and Clean Cities Websites

Outline

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# Project Overview

## Timeline
- AFDC and FuelEconomy.gov have been supporting Clean Cities stakeholders and the public since 1991 and 1999 respectively

## Barriers
- Resources to address implementation challenges for consumers and fleets
- Lack of understandable, unbiased information to facilitate decision making

## Funding
- AFDC and Clean Cities $1.9M annually
- Fueleconomy.gov $3.0M annually

## Partners
- NREL/ORNL
- ANL/NETL
- EPA
- Clean Cities coordinators
- Industry stakeholders/trade groups
- Maryland Public Television, PBS
Relevance

Make an impact on petroleum use

Provide credible information

Provide tools that are understandable and relevant

Meet DOE’s statutory requirements to provide information to the public

Use as a launching point for broader deployment activities

www.afdc.energy.gov
www.fueleconomy.gov
www.cleancities.energy.gov
Key Milestones for FY 11

**fueleconomy.gov**
- New look and functionality
- Personal MPG estimates

**cleancities.energy.gov**
- Redesign for impact
- Prioritize user needs

**afdc.energy.gov**
- Widgets
- Expand data sharing
- EV “clearinghouse”
Relevant, latest technology, government websites

Clean Cities

Energy Efficiency & Renewable Energy

Alternative Fuels & Advanced Vehicles Data Center

Clean Cities

Petroleum Reduction Projects
Impacts

80K total visits to Clean Cities in FY2010

800K total visits to AFDC in FY2010

19M total visits to FuelEconomy.gov in FY2010

CC Petroleum Displacement
446M GGE in 2009

- Alternative Fuels: 49%
- Fuel Economy: 31%
- Blends: 12%
- HEV: 4%
- IR: 3%
- VMT: 1%
Estimated fuel savings of more than 700 million gallons of petroleum in 2011 attributed to FuelEconomy.gov

*2011 estimates are projected based on year-to-date (Oct 2010-Feb 2011) data
Accomplishments: Automotive Technical Support

Update Driver Tips
- Established panel of auto experts to provide peer review and guidance
- Conducted clogged air filter experiment in 2009 – corrected out-of-date advice from early 1970s for gasoline vehicles
  - Follow-on test of gasoline vehicle with turbocharged, direct-injected engine and two diesel vehicles (2010)
    - Results and report in 2011
- Speed and fuel economy
  - Combination of data mining, experiments, and modeling under way. Will update ~15-year-old data to inform consumers about effects of speed on fuel economy
- Developing driver tips for new technology vehicles (EV, HEV, and PHEV)

Clean Cities Vehicle and Engine Registration
- Developing application form, panel, and process to register alternative fuel conversions (EV, PHEV, FFV, CNG, etc.)
Accomplishments: FE Sticker tool

Used car fuel economy sticker tool helps buyers find efficient vehicles
Accomplishments: Usability Updates

- Based upon usability sessions
  - L&I, Cost Calc, PREP
- Testers represented tool users and novices
- Redesigned L&I featured on CNN, GM
- Identified and defined key audiences
Accomplishments: Data Sharing

- Fueling stations database, others planned
- 922 users downloaded the station data 2,471 times since 9/2011
- Data used for developing tools, markets, curricula, point of interest (POI) for GPS devices, analyses and fleet optimization
- Builds relationships, especially with new media targets

Example users: Nissan, Chrysler, AT&T, Honda, EPRI, Best Buy, Toyota, Hertz, Hyundai, DuPont, ORNL, PNL, USDA, GSA, Air Force, DOT, EPA, IRS, Navy, USC, Berkley, Cornell, University of Texas, University of Illinois, Dartmouth, University of Colorado, RFA, BP, Honeywell
Accomplishments: EV Updates

- GeoEVSE initiative launched
- New EV Cost Calculator
- EV links, content updated
- Updated EVSE in station locator
- EV Case Studies
Accomplishments: EV Case Studies

First-of-its-kind collection
Highlights early leaders in home-charging implementation
Accomplishments: Mobile Applications

Mobile station locator and fueleconomy.gov featured on USA.gov app store

Alternative Fuel Locator
Department of Energy - Clean Cities

http://www.afdc.energy.gov/stations/m

Find it. Fuel it. Go.

Find fueling stations for your alternative fuel vehicle with the Alternative Fueling Station Locator. The locator works best for drivers to find the five closest biodiesel, electricity, hydrogen or other alternative fueling sites. It uses familiar, easy-to-navigate Google maps for location information and business hours, and provides detailed fueling station information.

Tags: cars, energy, environment, fuel, mobile-friendly
Accomplishments: Video Success Stories

- Searchable by region or technology
- Format similar to other video websites
- Showcases Clean Cities accomplishments
- Used by coordinators and stakeholders for multiple purposes
Accomplishments: Coordinator Bios

Rick Wallace
Columbia-Willamette Clean Cities

Rick Wallace is a Senior Program Manager at the Office of Energy in the Energy Efficiency and Renewable Energy (EERE) office. As an expert on alternative fuels and transportation, Rick has led efforts at Columbia Willamette Clean Cities to develop partnerships, promote the use of domestically produced fuels, and improve vehicle fuel efficiency. Rick has a long history of successful partnerships in the region, developing, marketing and promoting alternative fuels and renewable fuel programs. He has worked 14 years in the alternative fuels industry.

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Lisa Thurstin
Twin Cities Clean Cities

Lisa Thurstin has been the coordinator of the Twin Cities Clean Cities coalition since 2006. She is also the manager of Clean Fuel and Vehicle Technologies for the American Lung Association in Minnesota (ALAMN). For nine years, her duties have included management of ALAMN’s biofuels activities through a Clean Air Choice consumer education program. Her responsibilities include coordinating the Clean Air Choice program and assisting with ALAMN’s other activities.

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Chelsea Jenkins
Virginia Clean Cities

Chelsea Jenkins is the executive director of Virginia Clean Cities, which supports alternative fuel and vehicle deployment activities throughout the commonwealth of Virginia.

Prior to becoming the coordinator of Virginia Clean Cities in 2005, Jenkins helped establish Valley AIRnow, the air quality outreach program for Winchester and Frederick counties. Before a biodiesel project in Malta started her career in alternative fuels, she worked in several nondestructive evaluation laboratories, including NASA’s Langley Research Center, where she used thermography to explore the environmental impacts of carbon monoxide presence in the atmosphere, compared the thermal signatures of a diesel engine to methanol fuel cells, and examined the Space Shuttle Columbia’s wing leading edge for defects.

Jenkins is a graduate of James Madison University’s Integrated Science and Technology Program with a concentration in energy, environment, and transportation.

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• Bios added to coordinator contacts page
• Highlight areas of expertise
• Facilitate partnerships
Future Activities

• Improved consumer information on EVs and PHEVs
  – Our consumer-friendly PHEV calculator will help car buyers understand the costs of driving a plug-in hybrid

• Personalized MPG estimates

• Market research/usability testing of FuelEconomy.gov

• Development of mobile app to allow input of user MPG data

• Redesigned Clean Cities website to launch this summer – AFDC to follow

• Widgets and apps

• National Clean Fleets Partners pages and CRM
Summary

• The AFDC, FuelEconomy.gov, and Clean Cities websites are widely used, recognized, and respected as sources of advanced vehicle expertise and information

• Projects are targeted to respond to the public, industry, and stakeholder needs

• Partnerships with key organizations ensure accurate and quality information

• Program is making tangible contributions today

www.afdc.energy.gov

www.fueleconomy.gov

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