

Clean Cities Overview

City of Sacramento Green Fleet Update

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Renewable Fuels Opportunities

- City of Sacramento refuse fleet consumes ~1 million gallons LNG annually
- City fleet consumes ~1/2 million gallons diesel annually
- The city seeks to serve as an anchor customer to encourage local production and/or distribution of renewable fuels.

City of Sacramento

GREEN FLEET EFFORTS



E85 Police Interceptors

- In 2011:
 - Displaced nearly 24,000 gallons of gasoline
 - Displaced 45.5 tons of GHG emissions
- E85 Commitment
 - City operates numerous flex-fuel vehicles
 - E85 use primarily in police interceptors
 - City operates E85 station; price: \$2.5410/gallon (Oct. 2)
- Future of E85 use in cheaper, more sustainable sources of E85 (e.g. cellulosic)



Hybrid, Plug-In, and Electric Fleet

- Partnership with US Department of Energy (DOE) and Chrysler to test plug-in hybrid pickup trucks
- Chevrolet Volt sedans (98 MPGe)
 - Purchase from SMUD
 - Affordable lease
- Toyota Prius, Ford Escape Hybrid, etc.



LNG & Hybrid Refuse Trucks

- 113 Liquefied Natural Gas (LNG) refuse trucks
- 2 Hydraulic Hybrid refuse trucks
- In 2011 displaced 826.4 tons greenhouse gas (GHG) emissions



Greater Sacramento Clean Cities

- Part of US DOE Clean Cities program
 - Serves Greater Sacramento region
- Mission: To advance the energy, economic, and environmental security of the US by supporting local decisions to reduce petroleum use in transportation





Clean Cities: Industry Connections

- Clean Cities helps you make industry connections
 - Stakeholders composed of fleets, fuel providers, vehicle manufacturers/vendors, etc.
 - Webinars, events, targeted meetings, etc.
 - Connections are key to understanding opportunities
 - Provide letters of support and other grant assistance

Clean Cities

Clean Cities Mission

To advance the energy, economic, and environmental security of the U.S. by supporting local decisions to reduce petroleum use in transportation.

- Energy Policy Act of 1992 (EPAct)
- Provides a framework for businesses and government agencies to work together
- Goal: Reduce U.S. petroleum use by 2.5 billion gallons per year

Clean Cities Coalitions

- Nearly 100 coalitions in 45 states
- 775,000 AFVs using alternative fuels
- 6,600 fueling stations

Clean Cities Coalitions



Clean Cities Stakeholders

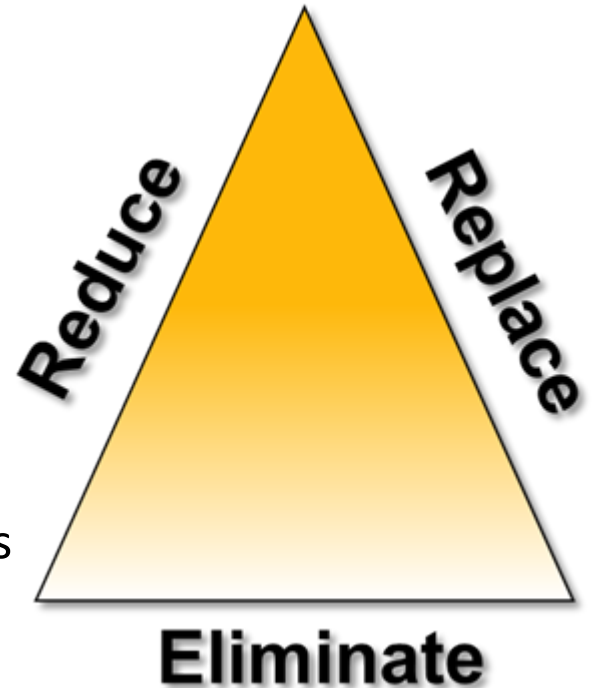
Coalitions are made up of local and national stakeholders.

- 8,400 stakeholders nationwide
- 49% private-sector stakeholders
- 51% public-sector stakeholders



Clean Cities Strategies

- **Replace** petroleum with alternative and renewable fuels
- **Reduce** petroleum use through fuel efficiency measures, smarter driving practices, and idle reduction
- **Eliminate** petroleum use by promoting mass transit, trip elimination, and congestion mitigation



Clean Cities has saved nearly 3 billion gallons of petroleum since 1993.

Clean Cities Portfolio of Technologies

Alternative and Renewable Fuels

- Biodiesel
- Electricity
- Ethanol (E85)
- Hydrogen
- Natural gas
- Propane

Fuel Economy

- Fuel efficient vehicles
- Driving habits
- Vehicle maintenance

Idle Reduction

- Technologies
- Behavioral changes

Trip Elimination

- Telecommuting
- Ridesharing



Clean Cities Strengthens Markets

- Connecting fleets with fuel providers and industry partners
- Training and information
- Technical assistance
- Funding
- Education and outreach to decision makers, fleets, and the public



Alternative Fuels & Advanced Vehicles Data Center

U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency & Renewable Energy

Alternative Fuels & Advanced Vehicles Data Center

About the AFDC | Fuels | Vehicles | Fleets | Incentives & Laws | Data, Analysis & Trends | Information Resources

Celebrating 20 Years
of Alternative Fuel Information

The Alternative Fuels and Advanced Vehicles Data Center (AFDC) provides information, data, and tools to help fleets and other transportation decision makers find ways to reduce petroleum consumption through the use of alternative and renewable fuels, advanced vehicles, and other fuel-saving measures.

State Information: Select a State

Tools

- [Alternative Fueling Station Locator](#)
- [Incentives & Laws Search](#)
- [Light-Duty Vehicle Search](#)
- [Heavy-Duty Vehicle Search](#)
- [Publications](#)

[More Tools](#)

Fuels

- [Hydrogen](#)
- [Natural Gas](#)
- [Propane](#)
- [Biodiesel](#)
- [Electricity](#)
- [Ethanol](#)

[More About Fuels](#)

Vehicles

- [Conversions](#)
- [Electric Drive](#)
- [Flex Fuel](#)
- [Emissions](#)
- [Fuel Economy](#)
- [Idle Reduction](#)

[More About Vehicles](#)

Data

Our [Data, Analysis, and Trends](#) section provides industry trends and facts based on data analysis.

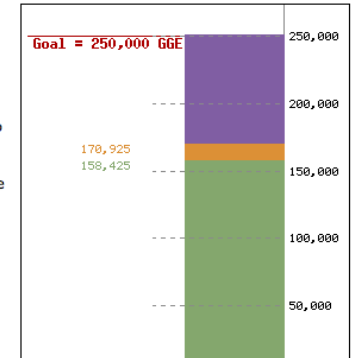
 This site is an initiative of the U.S. Department of Energy's [Clean Cities](#) program.

Petroleum Reduction Plan

Scenario Name: Test2
Annual Petroleum Reduction
Goal: 250000 GGE

Based on your inputs, this is your petroleum reduction goal and associated plan. You may print the information on this page and use it to help you reach your goal. If you are a registered user, this scenario is saved in the you may make changes at a future

plan, return to [Step 2](#).



Alternative Fuels

AFV Fuel	Number of AFVs	Average VMT	Fuel Economy (mpg)	Fraction of Fuel Use	GGE Reduced
LPG	50	10000	20	1	25000
E85	100	15000	25	1	47400
CNG	25	15000	5	1	86025
TOTAL GGE					158425

Electric Vehicles (HEVs)

Number of Vehicles	Average VMT	Fuel Economy of new HEVs	Fuel Economy of Old Vehicles	GGE Reduced
75	15000	45	30	12500
TOTAL GGE				12500

Blends

Blend Type	Number of Vehicles	Average VMT	Fraction of Fuel Use	Fuel Economy	GGE Reduced
B50	50	15000	1	5	80777
TOTAL GGE					80777

FuelEconomy.gov

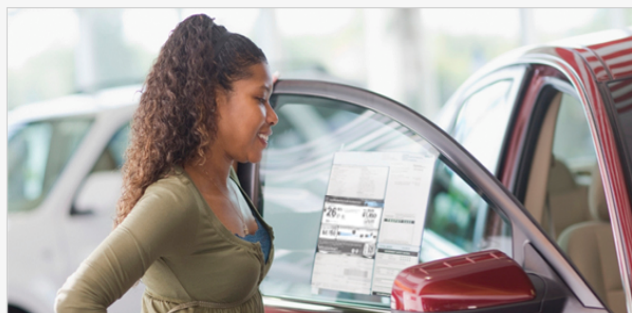
U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

www.fueleconomy.gov
the official U.S. government source for fuel economy information

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A New Fuel Economy Label for a New Generation of Cars

Beginning model year 2013: compare cars, save money at the pump, reduce air pollution



Find and Compare Cars



MPG ratings for new and used cars and trucks

Compare Side-by-Side
Power Search

Your MPG



Calculate or Share Your MPG
Estimates from Drivers Like You
Enter your MPG at the pump

Save Money



Gas Mileage Tips
Fuel Cost Calculator
Find the Cheapest Gas

Hybrids and Electrics



Hybrids
Plug-in Hybrids
Electric Vehicles

conomy.gov

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[Print the Fuel Economy Guide](#) | [U.S. Environmental Protection Agency](#)

Your MPG

Help

MPG!

MPG! to help you calculate and track compare it with EPA test ratings. You G with other users.

able to save your MPG information e later. You will also be able to hers. Fueleconomy.gov retains no e used to identify any individual with ord.

est, you still have access to all MPG ve your data or share your MPG.



Person refueling car

New User

[I want to register!](#)
[I want to enter as a guest.](#)

Registered User Login*

User Name:
Password:

Login

[I forgot my password](#)

*User name and password are case sensitive.

Real World MPG Estimates from Drivers Like You

Real World MPG Estimates from Drivers Like You

NEW

Now you can enter "Your MPG" data at the pump from your mobile device! Just visit fueleconomy.gov/m.



Online Information Resources

Clean Cities

www.cleancities.energy.gov

Alternative Fuels & Advanced Vehicles Data Center

www.afdc.energy.gov

FuelEconomy.gov

www.fueleconomy.gov

Clean Cities Coordinators and Coalitions

www.afdc.energy.gov/cleancities/coalitions/coalition_locations.php

October 18, 2012 Sacramento Clean Cities
3rd Annual Clean Technologies Forum and
Odyssey Day





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