





Larson Design Group*

CNG Focus Group April 6, 2011

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Cities









U.S. Department of Energy Energy Efficiency and Renewable Energy

The - <u>Who</u> is Clean Cities?

Coalitions are made up of local and national stakeholders.



- 87 active coalitions in 45 states
- Over 4,000 local stakeholders
- 49% private stakeholders
- National and local stakeholders
 = over 6,500 total



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The- What is Clean Cities?

- •A Public/Private Partnership for Clean Fuel Vehicles and Fuel Efficient Technologies
- •Sponsored by the DOE's Office of Energy Efficiency and Renewable Energy's Vehicle Technologies program (EERE)
- •Provides a framework for businesses and governments to work together as a coalition to enhance markets
- •Coordinate activities, identify mutual interests, develop regional economic opportunities, and improve air quality





U.S. Department of Energy Energy Efficiency and Renewable Energy

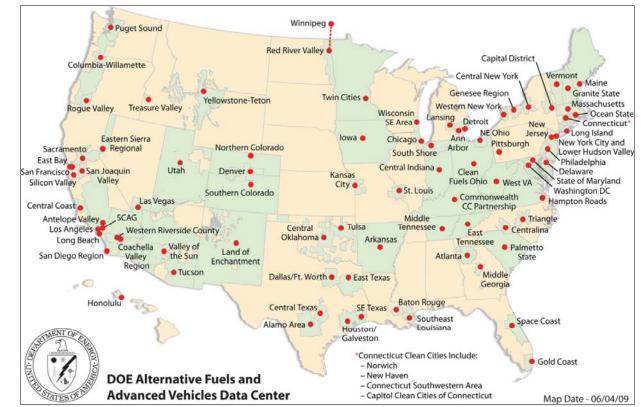
The <u>Where</u>, The <u>When</u> of Clean Cities?

•87 active coalitions in 45 states

•Formed in 1993 in response to the Energy Policy Act of 1992

•GPCCP was one of the 1st Coalitions the US- established in 1993 and incorporated in 1997

•Pittsburgh Coalition only other Coalition in PA.



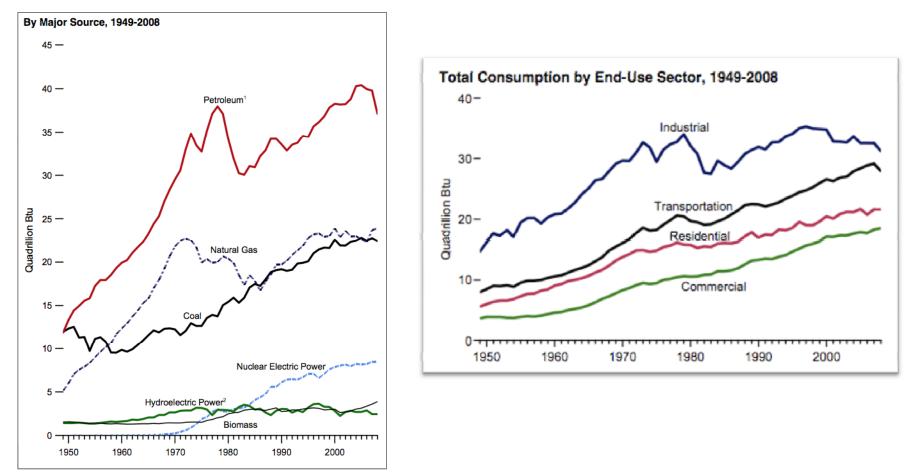


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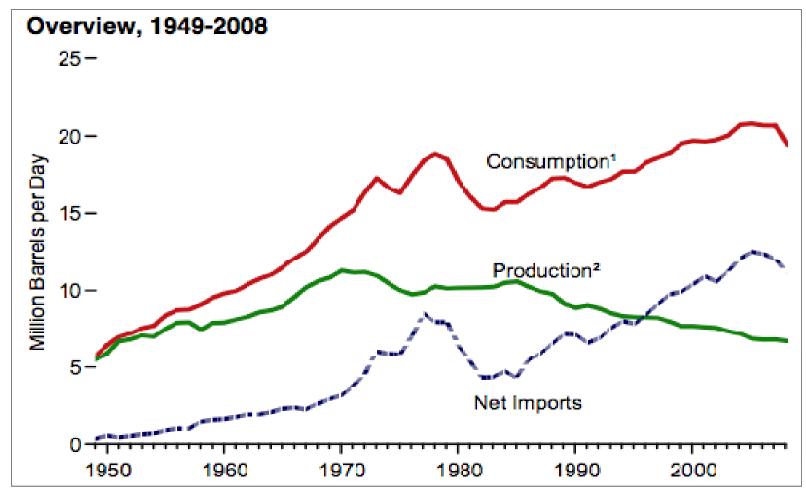
U.S. Energy Consumption



Source: <u>Annual Energy Outlook 2009</u>. Energy Information Administration.



US Petroleum Trends

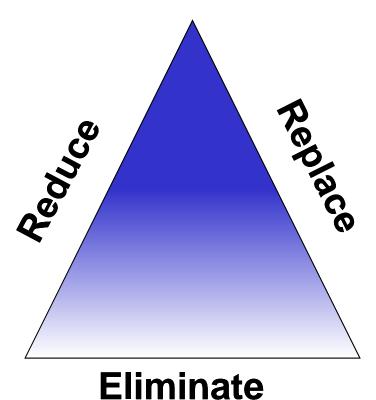


Source: <u>Annual Energy Outlook 2009</u>. Energy Information Administration.

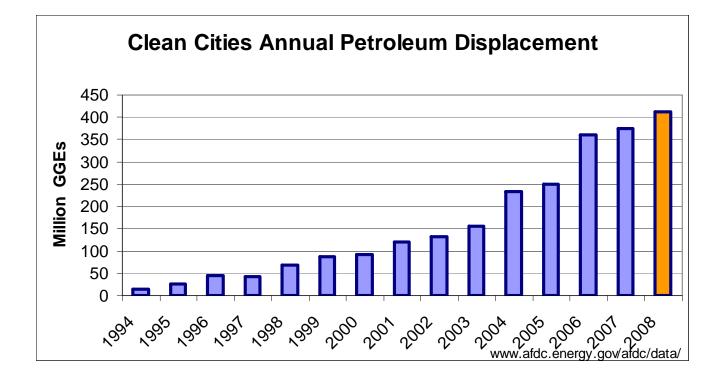
Petroleum Displacement Methods



- Replace petroleum with alternative fuels and low-level blends.
- Reduce by promoting energy efficiency in vehicles through advanced technologies and more fuel efficient vehicles.
- Eliminate by promoting idle reduction, greater use of mass transit, trip elimination, and other congestion mitigation approaches.







Clean Cities have reduced petroleum consumption by **3** BILLION Gallons since inception.

Who in the world is: GPCCP?



The Greater Philadelphia Clean Cities Program

- •Non-profit 501 (c) (3) organization
- •Celebrated its 18^h year Anniversary
- •Comprised of Public and Private Companies
- •Tiered Levels of Stakeholder Membership
- •Minimum of one Stakeholder meeting per quarter
- •Assist with grants/writing
- •Education and Outreach
- •Awarded 2006 DOE and PA (AFIG) grant- E85 Corridor
- •Awarded 2010 Biodiesel Board Grant
- •Awarded 2011 Electric Vehicle Infrastructure Grants







An Exelon Company







Portfolio of Technologies



Alternative Fuels and Vehicles

Ethanol (E85) Biodiesel (B100) Electricity **Natural Gas- CNG LNG** Propane (Autogas) Hydrogen

Fuel Blends

Biodiesel/diesel blends (B2, B5, B20) Ethanol/gasoline blends (E10) Hydrogen/natural gas blends (HCNG) **Fuel Economy**

Fuel efficiency Behavioral changes Vehicle maintenance initiatives Vehicle miles traveled (VMT)

Hybrids Light- and Heavy-duty HEVs PHEVs (Plug- ins)

Idle Reduction

Heavy-duty trucks School buses Truck stop electrification

Overview of PA Statewide Funding & Incentives





Alternative Fuel Incentive Grant (AFIG)

• Alternative Fuel Incentive Grant projects will promote and build markets for advanced or renewable energy technologies. The intent is to provide a stimulus for opportunities that better manage our fuel resources in a way that also improves our environment, supports economic development and enhances our quality of life.

Where does the Money Come From?

• The AFIG fund receives about \$5 to 6 million annually from the General Fund. The amount received is equal to 0.25 mills of the utilities gross receipts tax collected during each fiscal year.

Overview of PA Statewide Funding & Incentives





Who is Eligible for Funding

• School districts, municipal authorities, political subdivisions, incorporated nonprofit entities, corporations, limited liability companies or partnerships incorporated in The Commonwealth.

What types of Fuels are supported by AFIG?

• Transportation projects that use mixtures of 85 percent ethanol 15 percent gasoline (E85); liquid or compressed natural gas, (CNG) liquid propane, hydrogen, coal - derived liquid fuel; electricity and biodiesel/diesel blends as well as other potential R& D fuels.

Overview of PA Statewide Funding & Incentives





AFIG-cont.

Last Year, 2010

- Out of 18 projects funded, 8 of them were CNG related.
- Almost \$3.5 million awarded

http://www.portal.state.pa.us/portal/server.pt/community/alternative_fuels_incentive_grant/10492









<u>Clean Cities</u>

- Grant typically come once per year
- Must be a stakeholder in one of the coalitions to receive any funding (PA= Pittsburgh or Philadelphia)
- Competitive throughout 87 coalitions nation wide.
- Fuel Neutral
- No specified or set amount, based on DOE budget

http://www.afdc.energy.gov/cleancities/progs/solicitations.php





Congestion Mitigation and Air Quality Improvement Program (CMAQ)

- Usually given to Metropolitan Planning Organizations (MPO's)
- CNG Projects qualify
- Pays incremental cost difference between alt. fuel vehicle and diesel
- can be used for alt. fuel refueling projects
- Must be a non-profit, tribal or State Dept of Transportation or MPO.

http://www.epa.gov/oms/stateresources/grants.htm





Alternative Fuel Excise Tax Credit

Expires: 12/31/2011

A tax incentive is available for alternative fuel that is sold for use or used as a fuel to operate a motor vehicle. A tax credit in the amount of \$0.50 per gallon is available for the following alternative fuels: compressed natural gas (based on 121 cubic feet), liquefied natural gas, liquefied petroleum gas, P-Series fuel, liquid fuel derived from coal through the Fischer-Tropsch process, and compressed or liquefied gas derived from biomass



🔊 IRS.gov

Incentives

Alternative Fuel Infrastructure Tax Credit

A tax credit is available for the cost of alternative fueling equipment placed into service after December 31, 2005. Qualified alternative fuels are natural gas, liquefied petroleum gas, hydrogen, electricity, E85, or diesel fuel blends containing a minimum of 20% biodiesel. The credit amount is up to 30% of the cost, not to exceed \$30,000 for equipment placed into service in 2011. Equipment placed into service in 2009 and 2010 may receive a credit in the amount of 50% of eligible costs not to exceed \$50,000. Fueling station owners who install qualified equipment at multiple sites are allowed to use the credit towards each location. Consumers who purchase qualified residential fueling equipment may receive a tax credit of up to\$1,000.

http://www.irs.gov/



Web Resources

http://www.afdc.energy.gov/afdc/laws/ http://www.ngvamerica.org/index.html http://www1.eere.energy.gov/cleancities/ http://www.phillycleancities.org/Pages/Default.aspx

http://www.depweb.state.pa.us/portal/server.pt/community/dep_home/5968





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