



Stakeholders Update

A Bi-Monthly Newsletter

January and February 2008

Coalition Project Breakdown by District

A breakdown of Virginia Clean Cities projects by Congressional District.

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WMATA Orders 952 Diesel Electric Hybrids

Continuing the trend of alternative fuel purchases, WMATA will add almost 1,000 new diesel electric hybrids over the next 4 years. WMATA currently operates 439 CNG transit buses.

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E85 Infrastructure Project Update

Mid-Atlantic Petroleum is leading our E85 efforts by pledging to add 6 more public E85 stations.

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43 Coordinators from 23 States Assemble in Washington for "Energy Independence Days" on March 2-5

Virginia Clean Cities will be in DC next week to learn about national issues that affect our work, and visit our Senators and Representatives.

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Biofuels and GHG Brouhaha

Are you worried about biodiesel doing more harm than good because of the recent press coverage of 2 Science Magazine reports? This story presents some alternative views as well as the official DOE response to the articles.

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Program Gives Gas, Goodies to Carpoolers

Aside from the simple fact of saving money, carpoolers can now earn gift certificates for carpooling to work.

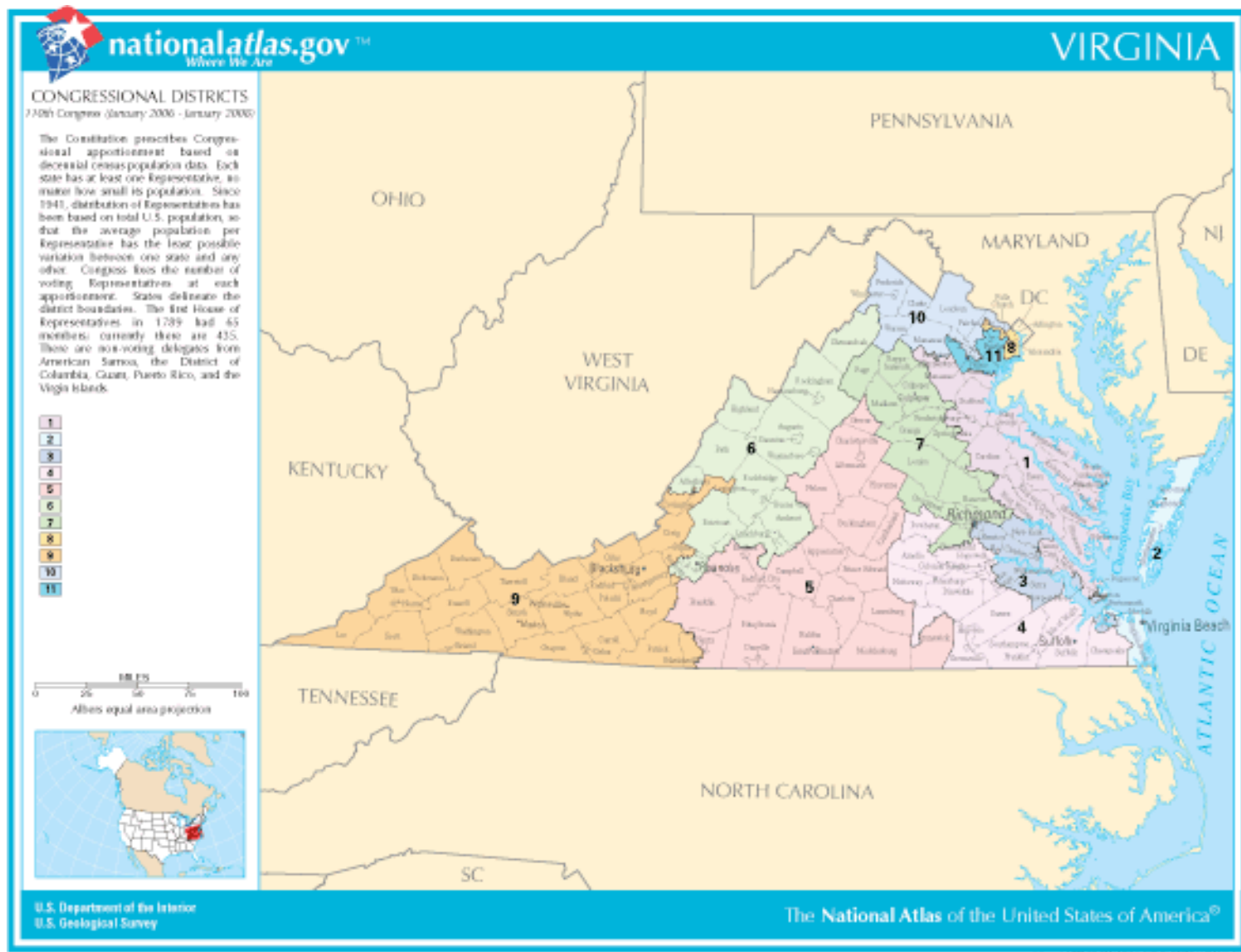
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Virginia Clean Cities Program Helps Virginia Displace 4.5 Million Gallons of Petroleum in 2007!

Coalition members of the Virginia Clean Cities program reported displacing 4.5 million gallons of petroleum in 2007 through the use of alternative fuels such as biodiesel, ethanol, and compressed natural gas and the deployment of advanced technology vehicles such as hybrid electric vehicles. Petroleum displacement in 2007 represents a 56.3 percent increase from the 2006 petroleum displacement of 2.9 million gallons - much of which is imported from hostile areas of the world.

Summary of major achievements in 2007 which assisted the Commonwealth in reaching the displacement levels reported:

- Virginia Clean Cities and the Hampton Roads Clean Cities Coalition performed at least 48 outreach activities in 2007, some of which include:
 - Biodiesel fuel quality seminars in Fairfax County, Roanoke, Chesterfield County, and Poquoson.
 - Presenting to the Joint Subcommittee on Fuel Efficient Vehicles and Transportation Funding on ways that the Virginia General Assembly can promote greater use of alternative fuels and vehicles. Written and oral submissions can be downloaded on our website: www.hrccc.org/publicationsresources.html
 - Partnering with the National Energy Education Development Project and the State Energy Office to conduct 4 hydrogen teacher training workshops at the Science Museum of Virginia, Nauticus, and two energy education conferences in Williamsburg and Virginia Beach.
- Presented to Dragon Run Watershed School Boards on the Dragon Run Biodiesel Project. Four school districts signed the partnership agreement and action plan, passed a resolution encouraging biodiesel use, and agreed to participate in the EPA Clean School Bus program. The Dragon Run Biodiesel Project materials can be found at www.hrccc.org/biodiesel/dragonrunbiodiesel.html
- E85 outreach meetings to educate potential partners on the VA-MD-DC E85 Corridor Project, www.hrccc.org/ethanol/e85infrastructure.html
- VaCC stakeholders added 683 alternative fuel and advanced technology vehicles to their fleets in 2007.
- VaCC stakeholders added 6 new E85, biodiesel, and CNG stations in 2007.
- VaCC secured \$498,854 in grant funds for outreach, alternative fuel vehicles and infrastructure projects, and \$406,147 in matching contributions by grant partners.



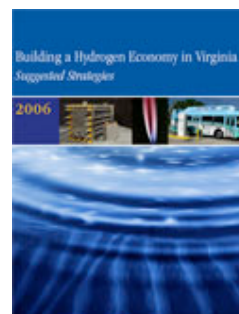
COALITION PROJECT BREAKDOWN BY CONGRESSIONAL DISTRICT

Virginia Clean Cities works throughout the Commonwealth to fuel alternatives that lead to rural economic development, greater energy security, and a cleaner environment. Here's a breakdown of Coalition projects by Congressional District for fiscal year Oct. 1, 2006 to Sept. 30, 2007:

- VA All Districts: \$73,560 to support various petroleum displacement initiatives and assist fleets to convert to petroleum alternatives throughout Virginia.
- VA All Districts: \$43,363 for biodiesel small-scale production and fuel quality workshops.
- VA All Districts: \$33,839 for E85 retail refueling infrastructure in VA-MD-DC.
- VA All Districts: \$10,000 to analyze state biofuels incentives and recommend action to the Virginia General Assembly.
- VA 1-2-3-7: \$23,922 to subsidize publicly accessible biodiesel blend pumps in Hampton Roads and Richmond.
- VA 1-2-3-7: \$14,642 to implement recommendations in the Virginia Hydrogen Economy Strategy, including teacher workshops in Richmond, Norfolk, Williamsburg, and Virginia Beach.
- VA 2-3-4: \$4,666 to collect data on the efficacy of DOC retrofits of school bus fleets in Norfolk, Virginia Beach, and Henrico County.
- VA 1st: \$38,780 to prepare feasibility study, promote biodiesel and retrofit school buses with DOCs in five counties in Virginia's Middle Peninsula.

- VA 5th: \$81,952 for Charlottesville Public School CNG buses and refueling infrastructure.
- VA 8th: \$196,404 for Arlington County Public School CNG buses
- VA 11th: \$10,536 for National Airport CNG shuttle buses.

Projects Total 2006-2007: \$535,664
(excluding cash and in-kind contributions)



Virginia Clean Cities manages the Virginia Hydrogen Economy Roundtable which was tasked by the Virginia General Assembly to create the vision and roadmap for building a hydrogen economy in Virginia.
hrcc.org/hydrogen.html

ENERGY INDEPENDENCE AND SECURITY ACT SUMMARIES

The title alone is a mouthful: "An Act to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes." Also known as the Energy Bill of 2007, Public Law 110-140, H.R. 6, is an omnibus energy policy law that consists mainly of provisions designed to increase energy efficiency and the availability of renewable energy.

Here is a link to the Library of Congress-Thomas, where you can view or download summaries, related bills, history and the full text:

- [http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.00006:](http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.00006)

Here is a Congressional Research Service summary of EISA, a look by CRS at the environmental impacts of growing the feedstock from biofuels, and a PowerPoint by the U.S. Department of Energy Biomass Program that distills the key provisions of EISA and the energy provisions of the Farm Bill:

- assets.opencrs.com/rpts/RL34294_20071221.pdf
- assets.opencrs.com/rpts/RL34265_20071203.pdf
- www.hrgcc.org/publicationsresources/resources.html

All of the pdf documents referred to as links above are also posted to our website in the resources section if you have trouble opening them using the links provided.

E85 Project Moving Full Steam Ahead Thanks to Mid- Atlantic Petroleum

Mid-Atlantic Petroleum Properties LLC has taken the alternative fuel ball and is running full speed ahead. MAPP was the first to receive a grant under the VA-MD-DC federal corridor infrastructure program for installing Washington's first public E85 dispenser at its Chevron-branded station in Georgetown last June. The Maryland-based fuel distributor also has reserved federal infrastructure grant funds for six more E85 dispensers at various properties along the Capital Beltway, one in DC and five in Maryland.

Now MAPP has won grant awards for some of those stations from the Maryland Energy Administration's Terminal Infrastructure Grant and Biofuels Grant Program. MEA offers the grants on its website in a competitive RFP process. MAPP (www.mappllc.com) was awarded grants to add E85 dispensers to:

- Congressional Sunoco, 1469 Rockville Pike, Rockville, MD 20852
- Fredericktowne Mall Chevron, 1395 West Patrick Street, Frederick, MD 21702
- Takoma Park Texaco, 6400 new Hampshire Ave, Takoma Park, MD 20912
- Town Center Chevron, 12301 Middle Brook Road, Germantown, MD 20874

GM Expands Markets for Hybrid Diesel Buses and Wins WMATA Order

WMATA will buy 952 GM-Allison diesel electric hybrid buses to be used in Washington, D.C. The hybrid buses GM will deliver weigh about 960 pounds more than a typical bus, have two 100-kilowatt motors and a 600-volt nickel metal hydride battery that captures energy when the bus brakes. A 2006 DOE study said hybrid buses annual efficiency gains were 34 percent as compared to conventional diesel, but cost \$200,000 more.

Phillip Wallace, General Superintendent of Bus Maintenance at WMATA, said 452 of the hybrids will allow WMATA to meet its replacement needs through FY2012 and up to 500 buses will be used to expand service. Twenty-five of the buses will be assigned to Virginia routes.

As many of you may know, WMATA operates one of the largest CNG fleets in the country with 439 CNG buses operating in the VA-MD-DC areas. We asked if the hybrid order means a phasing out of CNG, but Mr. Wallace assured us that they will also be increasing the CNG fleet with the addition of 22 NABI articulated CNG buses by the end of June 2008. Further expansion of the CNG fleet is predicated on funding availability.

Hybrid article featured in USA Today:
usatoday.com/news/nation/2008-01-21-masstransithybrids_N.htm

Virginia Clean Cities Joins 42 Other Coalitions from 23 states for Annual "Energy Independence Days" Event in Washington, D.C.

"Energy Independence Days" is a partnership between coalitions and industry supporters of the Clean Cities program. Sponsor funds from industry make it possible for dozens of Clean Cities Coordinators to travel to Washington, DC to receive briefings, exchange ideas, and meet with Congressional members and staff.

Virginia Clean Cities served on the planning committee this year to help plan the event. On Monday, March 3rd, Coordinators and other attendees will hear industry briefings from our industry partners on how we can work more effectively with them, legislative briefings on the energy and transportation bills, climate change policy discussions on situations, prospects, opportunities and impacts on our work, and funding/policy table talks by various federal agencies.

On Tuesday, March 3rd, Coordinators will visits as many Senators and Representatives as possible to educate them on what Clean Cities is, the important work we perform on a daily basis with our committed stakeholders, and how essential it is to support the only coordinated federal deployment effort dedicated to petroleum displacement.

Thank you to our 2008 sponsors: General Motors, Clean Energy, NGV America, National Biodiesel Board, Transportation Energy Partnership, American Honda, EPIC, Dixie Chopper, Electric Drive Transportation Association, PERC



Image Credit: www.calstart.org



Image Credit: www.wpclipart.com



Image Credit: www.msnbcmedia3.msn.com

Biofuels and Green House Gas Brouhaha

Two papers on how biofuels impact carbon dioxide pollution caused quite a commotion when news organizations published stories about the reports, which first appeared Feb. 7 in Science Express, an early on-line version of Science Magazine. Can it be true that clearing land to grow corn and soybeans can release so much carbon dioxide that it would take up to 420 years to pay back the carbon debt, using the relatively small annual air quality benefits that result from using the biofuels instead of petroleum? Or did the authors of the attention-getting papers use obsolete data and unscientific methods to reach far-fetched and speculative conclusions?

We are too smart to answer those questions with a simple yes or no, and not nearly clever enough to boil down the very complicated truth to a sound bite. Instead, we have assembled the following reading materials for those of you who really want to know. This includes the recently released DOE's Office of Biomass formal response to the reports.

We bought the papers from Science Magazine for \$10 each, but had to promise not to distribute or post them to a website. You can buy them yourself here: www.sciencemag.org/cgi/gca?gca=1151861v1&gca=1152747v1&sendit.x=32&sendit.y=10

Or read the free news reports and responses linked below. The pdf's are also posted to our homepage and the resources section.

- DOE Office of Biomass Response: http://www1.eere.energy.gov/biomass/pdfs/obp_science_response_web.pdf
- New York Times: <http://www.nytimes.com/2008/02/08/science/earth/08wbiofuels.html>
- Washington Post: <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/07/AR2008020704230.html>
- Dr. Michael Wang of Argonne National Labs response: <http://www.transportation.anl.gov/>

media_center/news_stories/20080214_response.html

- Dr. Bruce Dale of Michigan State University response: <http://www.ncga.com/ethanol/pdfs/2008/DaleResponseSciencexpressArticles.pdf>
- Dr. David Morris, Institute for Local Self-Reliance response: <http://www.ncga.com/ethanol/pdfs/2008/MorrisResponseSciencexpressArticles.pdf>

Report Finds Weak Correlation between High Corn Prices and Consumer Food Price Inflation

Source: http://www.informaecon.com/Renew_Fuels_Study_Dec_2007.pdf

Some of you probably hear the question as often as us in Clean Cities get asked about whether ethanol is driving up the cost of food, especially beef, bread and milk. Usually, this "correlation" is not presented as a question at all, but as a fact, which then is supported by some flimsy third-hand anecdotal "evidence."

Here is one of the more recent answers to the question, and one of the few we've seen that appears to actually analyze hard data in search of the truth. The full report is 55 pages, and there is a two-page executive summary. We found this item (too late to get it into the Nov-Dec Stakeholders update) in a January newsletter produced by the Environmental and Energy Study Institute (www.eesi.org):

Informa Economics released a report that showed a "weak correlation" between corn prices and overall consumer food prices. The study, commissioned by the Renewable Fuels Foundation, found that only four percent of change in the food consumer price index is due to fluctuations in the price of corn. The majority of retail food costs are for non-commodity items such as labor, packaging, transportation, energy, advertising, rent, and taxes, collectively known as the marketing bill. The growing ethanol

industry was found not to be the only driver of rising corn prices; a decreasing harvest between 2004 and 2006 combined with increasing demand overseas also contributed.

"This analysis puts to bed the argument that a growing domestic ethanol industry is solely responsible for rising consumer food prices," said Informa Chairman and CEO Bruce Scherr. "The statistical analysis plainly details that energy-intensive activities such as processing, packaging, and transporting, as well as the cost of labor, have a far greater impact on consumer food bills than the price of grain."

Program Gives Gas Cards, Goodies to Carpoolers

Source: hamptonroads.com/2008/01/program-gives-gas-cards-goodies-those-who-carpool

Hampton Roads Transit formed a partnership about a year ago with NuRide Inc., an incentive-based ride-sharing company that awards drivers who pry themselves away from the convenience of single-occupancy vehicle (SOV) driving. The company rewards people with restaurant gift cards, discounts from retailers or chances to win more valuable prizes for sharing a ride to work or around town instead of driving along.

To participate, commuters register at www.nuride.com by answering basic questions such as location, smoking preference and age range. Participants plan trips by telling the system where they work, what time they start, whether they will drive, share, or either. Other NuRide customers can log on to see who lives nearby and is willing to share. NuRide doesn't coordinate but rather helps willing carpoolers to find each other. After each trip, each rider confirms if they drove or carpooled, and points are then awarded accordingly.

According to the Pilot story, the region's travelers have logged 8,542 trips, equal to a reduction of 252,756 miles not traveled.



Image Credit: www.epa.gov

New EPA Calculator Puts GHG Savings in Everyday Terms

The new EPA calculator converts greenhouse gas-related savings estimates, typically presented in “million metric tons of carbon dioxide equivalents,” into familiar terms such as the greenhouse gas emissions that would result from driving a particular number of cars a year, using a particular amount of gasoline or barrels of oil, providing energy to a particular number of homes for a year, growing trees across a particular number of acres for a year, etc.

Users can enter savings in emissions, electricity consumption, gallons of gasoline, or number of vehicles into the calculator and determine up to 13 different ways to express the magnitude of the savings.

Access the calculator: www.epa.gov/cleanenergy/energy-resources/calculator.html

Ever Wonder What Cellulosic Ethanol Is or the Process Used to Make It?

Source: www.energy.gov/news/5903.htm

DOE announced it will invest \$114 million in four small-scale biorefinery projects over four years. A range of feedstocks will be used to test conversion technologies for the production of cellulosic ethanol.

Pacific Ethanol, Inc., one of the award winners, plans to use BioGasol's process combining fermentation with an anaerobic digester. For a description of BioGasol's process, follow this link: <http://www.biogasol.dk/2me2.htm>.



Image Credit: www.cleanmpg.com

Tools Now Available to Calculate Cost of Idling Reduction Equipment

Among the tools available to workplace and truck fleet managers and owner-operators are calculators to help determine the cost and benefits of installing and paying for idling reduction equipment. Included also is a site from Canada that quantifies the costs of workplace idling. Here are a few sites that might be of benefit to you.

- Argonne National Laboratory: www.transportation.anl.gov/pdfs/TA/361.pdf
- Cummins: www.cumminscomfortguard.com/offer
- EPA: www.epa.gov/otaq/smartway/calculator/loancalc.htm
- Espar: www.espar.com/html/service/calculator/calculator.html
- Kenworth: www.kenworth.com
- Kohler Power Systems: www.kohlerpower.com/mobile/solutions/apucalculator.htm?sectionNumber=13361&nodeNumber=1&contentNumber=102
- Teleflex APU's: www.teleflexpower.com/tb_idle_calculator_usapu.php
- Teleflex auxiliary heaters: www.teleflexpower.com/tb_idle_calculator_usheater.php
- Thermo King: www.thermoking.com/tripac

State Idle Reduction Regulations Summary

State and municipality idle reduction regulations are updated regularly, and are available at this website: www.atri-online.org/research/idling/truck_idling_regulations.htm.

Both articles above are from the December edition of the National Idling Reduction Network News, published monthly and available at www.eere.energy.gov/vehiclesandfuels/resources/fcvt_national_idling.html. This is an excellent newsletter which also features related funding announcements and events.



University of Maryland 2007 Solar Decathlon Home

Image Credit: www.solardecathlon.org

VT Chosen to Compete in Solar Decathlon

Source: www.energy.gov/news/5888.htm

DOE selected 20 university teams that will participate in the 2009 Solar Decathlon. Each team is giving \$100,000 from DOE to design, build, and operate energy efficient, solar-powered homes.

In addition to producing enough electricity and hot water to perform all the functions of a home, from powering lights and electronics to cooking, washing clothes and dishes, each home must produce surplus energy sufficient to power an electric car.

Bio Blend Calculator

Duff Science created a calculator intended to be a guide in choosing the correct blend of biodiesel with a winterizing agent. Users can input a percent biodiesel blend and the calculator will show the minimum temperatures the blend will flow using a variety of scenarios from home heating oil, winterized petroleum, and kerosene. Users can also input the minimum temperature they expect to operate in, and the calculator will show the percent blend that should withstand the input temperature. The calculator can be found at: www.duffscience.com/bd_calculators.htm

Two New AFVi Webinars Posted for FREE Rebroadcast

The Alternative Fuels and Vehicles Institute hosts monthly webinars that are always excellent. The February 26th webinar had over 700 participants! Here's a list of the most recent webinars and a link to view them.

- All Charged Up: The Promise of Plug-in Hybrid Electric Vehicles
- The Funding Connection: Federal Incentives for Alternative Fuels & Vehicles
- Fleet Solutions: Light-Duty Small Volume Manufacturer Conversions Product Preview

To view these webinars, and more, visit www.afvi.org/webinars.html

Virginia Clean Cities and the Hampton Roads Clean Cities Coalition

Clean Cities is a government-industry partnership designed to reduce petroleum consumption in the transportation sector by advancing the use of alternative fuels and vehicles, idle reduction technologies, hybrid electric vehicles, fuel blends, and fuel economy. Virginia Clean Cities is one of almost 90 coalitions across the U.S. that help meet the objectives of improving air quality, developing regional economic opportunities, and reducing the use of imported petroleum.



Calendar of Upcoming Events

Alternative Fuel and Advanced Technology Vehicle Related Events

Ethanol Retailer Magazine unveiled by the Ethanol Promotion and Information Council (EPIC)

February 26, 2008

<http://epicinfo.org/>



IT'S THE LAW
What the new energy independence
act means for your business

e85
ethanol 15%
blend

Energy Independence Days

March 3-4, 2008

Washington, DC

Focused on the policy level of promoting alternative energy use.

Contact us for more info.

www.trianglecleancities.org/eid/info2008.shtml

The Carbon Trading/Green Building Connection sponsored by the Virginia Sustainable Building Network

March 6, 2008

Fairfax, VA

www.vsbnet.org

Diesel Hybrids Webcast sponsored by the Diesel Technology Forum

March 13, 2008

Speakers will discuss the technology and performance behind these engines and offer a cost-benefit analysis

Register at <https://dieselforum.webex.com/>

Renewable Purchasing Network (RPN) Webcast: Light-Duty Tires and Wheel Weights

March 18, 2008, 2pm EST

www.responsiblepurchasing.org/events/#tires

Joint Meeting of the Tidewater Area Fleet Managers Association and Old Dominion Chapter of National Association of Fleet Managers

March 19, 2008

Location Nick's Riverwalk Restaurant, Yorktown, VA

Focus: Idle-reduction

Email Chelsea for more details about the meeting at cjenkins@hrccc.org



NHA Annual Hydrogen Conference and Expo

March 30-April 4, 2008

Sacramento, CA

www.hydrogenconference.org

Environment Virginia 2008 Commonwealth: Accelerating Solutions in a Rapidly Changing Virginia

April 1-3, 2008

Lexington, VA

www.environmentva.org

Get Money for Using Natural Gas Webcast

April 3, 2008, 1-2pm EST

email Chelsea at

cjenkins@hrccc.org for flyer with call-in info

RPN Webcast: Green Power, Renewable Electricity

April 8, 2008, 2PM EST

www.responsiblepurchasing.org/events/#Renewnrg

Alternative Fuels & Vehicles National Conference & Expo

May 11-14, 2008

Las Vegas, Nevada

www.afvi.org/nationalconference2008

24th Annual International Fuel Ethanol Workshop & Expo

June 16-19, 2008

Nashville, TN

www.fuelethanolworkshop.com

2008 Commonwealth of Virginia Energy and Sustainability (COVES) Conference

September 17-19, 2008

Greater Richmond Convention Center

The Virginia Sustainable Building Network is taking the lead in organizing the conference as part of the Virginia Sustainable Future Forum.

If you would like to be involved in the planning committee, email Annette Osso at osso@vsbn.org.

Visit their website for updates on the conference www.vsbnet.org

If there is an event our readers may enjoy, please send an email to Chelsea at cjenkins@hrccc.org so we can add the event to our calendar and our website.