Virginia Clean Cities
Hampton Roads Clean Cities Coalition
Monthly Status Report – March & April 2007

VIRGINIA CLEAN CITIES 1 OF 9 TO RECEIVE NATIONAL BIODIESEL FOUNDATION AND MARYLAND ENERGY ADMINISTRATION GRANT FOR BIODIESEL FUEL QUALITY EDUCATION

Out of 27 applicants, 9 Clean Cities Coalitions were awarded $10,000 each to focus on biodiesel fuel quality education. Because biodiesel fleets in Virginia experienced problems this winter, Virginia has three biodiesel production facilities, and Virginia has embarked on a multi-faceted and rapidly expanding program to encourage development of its biofuels industry and stimulate a greater market for locally produced renewable fuels, Virginia was a good match for one of the grants.

The General Assembly also passed a resolution in March 2006 encouraging state agency fleets to use biodiesel and commissioned a survey completed in January 2007 to discover how to encourage greater use of biodiesel in state vehicles. The report (House Document No. 18) to the Secretary of Administration, Governor and General Assemble on biodiesel fuel usage in the Commonwealth found that little biodiesel is used by state agencies that responded. Only two – James Madison University and the Virginia Department of Transportation – reported using biodiesel. All of more than 100 agency respondents, however, requested education on the potential benefits of biodiesel.

The Energy Division of the Virginia Department of Mines, Minerals and Energy (DMME) has agreed to fund a series of forums to help educate state fleet managers and other employees about the advantages of biofuels and best fuel management practices to ensure a seamless and trouble-free conversion from petroleum-based fuels to biofuels.

As a result of the National Biodiesel Foundation and Energy Divisions grants, Virginia Clean Cities will be able to reach petroleum marketers, fleet managers (state, local, public, private), and fuel regulators. Content for the workshops will focus on the following content (subject to change as workshop planning advances):

- Biodiesel Preparedness
  - Preparing for a transition to biodiesel
  - Sourcing high quality biodiesel
  - Fuel sampling techniques
  - Storing fuel
  - Identifying engine shutdown and tank issues
  - ULSD warning
- Fuel Management and Housekeeping
  - Basic properties and blending considerations
  - Blending techniques
  - Cold weather considerations and proper blending practices
  - Storing biodiesel blends
- ASTM & BQ9000
  - Quality specifications
  - NBB BQ-9000 quality management program

Press release located at the end of this report.

Items of interest this month:

May 11, 2007

For immediate release
Contact: Chelsea Jenkins, (757) 256-8528 or (757)-233-8982

Clean Cities program helps Virginia displace 2.9 million gallons of petroleum

The high price of gas at the pump didn't faze some of the forward- thinking fleets and individuals in Virginia last year. Coalition members of Virginia Clean Cities program reported displacing 2.9 million gallons of petroleum with alternative fuels, such as biodiesel, ethanol, compressed natural gas, hybrid electric vehicles, and propane in 2006.

"The growing use of alternative fuels decreases our nation's dependency on foreign oil," said Al Christopher, Virginia Clean Cities Director. "The statewide number is moving in the right direction, and it shows Virginia's commitment to a better quality of life for generations to come."

The Coalition, which consists of public and private entities, such as James City County, Griffin Oil & Propane, PAPCO Energy, The Virginia Soybean Association, Bauer Compressors, Virginia Natural Gas, Northrup Grumman, Domestic Fuels & Lubes, American Honda, James River Petroleum, Phillips Oil & Propane, CRT/tanaka, and many school districts, who are using and promoting alternative fuels and participating in events focused on transitioning our society away from fossil fuels and toward renewable alternatives.

In a statement released this week by the National Renewable Energy Lab "data review is ongoing and data is still coming in, preliminary estimates have the total displacement in the area of 300 million GGEs (gasoline gallon equivalent), exceeding the 2006 national program goal of 292 million GGEs. "It is important to educate our community as to our contributions to this national effort," Christopher said. "We are proud to see the amount of alternative fuels and vehicles in Virginia both growing and making a difference nationwide."

Virginia 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. Virginia Clean Cities was incorporated in November 2001 as a 501 (c) (3) non-profit corporation. Please visit www.hrccc.org for more information.

NEW MEMBER!

PHILLIPS ENERGY, INC
KEEPING YOU COMFORTABLE IS OUR BUSINESS!

Virginia Clean Cities welcomes a new member of our Coalition – Phillips Energy, Inc. We thank you for your valued support of the Clean Cities mission!

VIRGINIA HYDROGEN ECONOMY ROUNDTABLE HOSTS FIRST VIRGINIA HYDROGEN TEACHER TRAINING WORKSHOP

The teacher training workshop is the first in a series of one-day workshops designed to support Virginia Science Standards of Learning and provide educators with tools to return to their classrooms to integrate energy into their classroom plans and integrate hydrogen into their curriculum. Participating schools receive the H2 Educate curriculum and hands-on kits created by the NEED Project.

John Warren, Director of DMME's Energy Divison, sports his VT hat on the day of mourning declared by Governor Kaine. John greeted the group of teachers by noting that although it was an emotion day for many, a significant milestone took place as the teachers participated in the first hydrogen focused training workshop in Virginia. *Photo Credit: Dick Krol*

Virginia's Vision and Strategy for the Hydrogen Economy developed by the Virginia Hydrogen Economy Roundtable recommends actions to foster the development of a hydrogen economy in Virginia. Five actions are recommended as priorities to help focus Virginia's continuing efforts to build a hydrogen economy:

- Educate Virginia's future workforce, focusing on K-12 education
- Leverage the research and development (R&D) potential of Virginia's academic institutions
- Invest in hydrogen demonstration projects with high visibility
- Foster partnership building
- Coordinate policies and incentives to drive the building of a hydrogen economy in Virginia

GM provided a HydroGen3 fuel cell vehicle for teachers to drive. Liquid hydrogen powers the HydroGen3's fuel cell stack, which supplies electricity to a battery. All of the HydroGen3's steering, acceleration, braking and transmission controls have been modified to work in a vehicle that uses an electric propulsion system. The conventional internal combustion engine has been replaced with fuel cell stacks and other electrical components such as a cooling system. The end product is a traditional driving experience in a vehicle that emits only pure water. *Photo Credit: Dick Krol*

Educating Virginia's future workforce and focusing on K-12 education was considered a priority item because student education is a key component to broadcasting the hydrogen message and developing a knowledgeable, involved hydrogen support network. In order to avoid our past from continuing to define our future, a targeted technology and applications level education program for students and teachers was developed inspired by the hydrogen curriculum already developed and pilot tested by the National Energy Education Development Project (under a grant from DOE). NEED training programs are endorsed by the Science Museum of Virginia as well as the Virginia Department of Education and fall within the Green Box initiative guidelines that already correlate with Virginia Sol's.

The first teacher training workshop took place in Richmond on April 20, 2007. The one-day workshops are designed to support state Science Standards of Learning and provide educators with tools to return to their classrooms to integrate energy into their classroom plans and to make hydrogen a part of their curriculum. Teachers learned the basics of hydrogen, sources and uses of hydrogen, and hydrogen storage and stations.

Teachers cheering their H-racer's on during the hydrogen model car race. The H-racer is a hydrogen model car that demonstrates how solar energy can extract hydrogen from water. Since no combustion occurs inside a fuel cell, the only exhaust resulting from hydrogen fuel cell car is pure water. Each teacher was provided with an H-racer to use as an education tool in the classroom. *Photo Credit: Dick Krol*

VIRGINIA CLEAN CITIES RECIPIENT OF GENERAL MOTORS CLEAN CITIES REWARD

General Motors, through its Clean Cities Rewards Program, provides financial assistance to those Clean Cities Coalitions that are truly "moving the needle" towards Alternative Fuel Vehicle sales. GM rewarded coalitions for promoting E85 and CNG vehicle sales, helping to increase E85, CNG and Hydrogen refueling sites, participation in fleet functions, and involvement with a GM Certified AFV Dealer. This year, Virginia Clean Cities was the recipient of a $2,000 GM reward!

A BIG thank you to GM for the recognition, and for continuing to support Clean Cities coalitions all over the country.

See the rest of the recipients using this link:
http://www.gm.com/automotive/innovations/altfuel/infoEvents/Rewards.pdf

IRS ISSUES GUIDANCE FOR AFV REFUELING PROPERTY CREDITS

During the first week of May, the IRS released notice 2007-43, "Credit for Alternative Fuel Vehicle Refueling Property." The notice serves as guidance until the IRS issues regulations. Below is a thoughtful summary taken from the NGVAmerica Newsletter (Volume 12 Edition 17).

The tax credits, which were enacted as part of EPAct 2005, include a maximum credit of up to $30,000 for refueling infrastructure used in a trade or business, and $1,000 for a home refueling units or equipment. The credits are limited to property placed in service after December 31, 2005 and before January 1, 2010. In order to qualify for a credit, the person or company claiming the credit must be the first user of the refueling equipment, and, in the case of businesses the property, must be subject to depreciation. The credits cover the cost of acquiring equipment that is used to store and dispense qualified alternative fuels. The cost of buildings and their structural components is generally not allowed.

The guidance covers some interesting issues that are not obvious from simply reviewing the statutory provisions in EPAct 2005. For example, the IRS has clarified that acquiring retrofitted or rebuilt equipment *does not* qualify for the tax credit if the equipment was previously used to store or dispense alternative fuels. However, the guidance clarifies that retrofitting or rebuilding equipment that was previously used for purposes other than storing or dispensing alternative fuels *does* qualify for the credit. It is unclear from this guidance whether a taxpayer may claim a credit for retrofitting or rebuilding existing CNG or LNG equipment for which it previously has not claimed a tax credit. The IRS regulations referenced in the guidance would appear to allow a credit in such situations even though they clearly do not allow a credit if a taxpayer acquires rebuilt or retrofitted equipment.

The IRS also has clarified what happens with so-called dual-use property. This situation arises, for example, with respect to natural gas in the context of LNG tanker facilities. The IRS has clarified that storage facility equipment generally does not qualify for the tax credit if the equipment is located away from where fuel is actually dispensed into motor vehicles. If the facility serves as a tanker facility and a retail fueling site, the additional cost of any equipment associated with the dispensing fuel into motor vehicles (not tankers) may be taken into account when claiming the tax credit. This guidance would appear to extend to situations in which fueling equipment is used to refuel motor vehicles and non-road vehicles such as fork-lifts, meaning that only the cost associated with storing and dispensing fuel for the motor vehicles could be claimed as a credit.

The guidance also clarifies when fueling infrastructure is considered to be "placed into service." According to IRS regulations, the relevant date is the earlier of when the property first is depreciated or is in a state of readiness and availability for use even if it is not actually used.

Notice 2007-43 is available here – http://www.irs.gov/pub/irs-drop/n-07-43.pdf.

CRUISE CAR

Cruise Car, Inc. is a solar vehicle company that manufactures and sells solar golf and leisure vehicles. Check out their website: http://www.cruisecarinc.com/index.htm

To learn more about Cruise Car, contact Ken Chester:

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NORTH AMERICAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION CONFERENCE

The North American Association for Environmental Education's annual conference will take place November 14-17, 2007 in Virginia Beach, VA. Over 1,000 of North America's top environmental educators will attend, coming from universities, nonprofits, parks, museums, nature centers, K-12 classrooms, and a variety of other areas. Not only are these folks looking to purchase "green" products, they are looking for a variety of resources and related items to use in their educational efforts in both formal and non-formal EE settings.

NAAEE is looking for exhibitors, sponsors, and participants. Visit http://www.naaee.org/conference/exhibitors-and-advertisers for more information. Click on "2007 Exhibitor and Advertiser Prospectus."

UPCOMING AFVI WEBINAR ON FEDERAL FUNDING AND INCENTIVES FOR ALTERNATIVE FUELS AND VEHICLES PAST WEBINARS AVAILABLE ONLINE FOR REPLAY

AFVi periodically hosts live webinars on a variety of alternative fuel related topics. The next webinar is titled "The Funding Connection: Federal Funding and Incentives for Alternative Fuels and Vehicles" and will take place on June 26, 2007 at 1:30 pm Eastern. There is a maximum capacity for these webinars, and are filled on a first come, first served basis. To sign up, visit: http://www.afvi.org/webinars.html. Past webinars are also available for replay.

SMALL SCALE BIOREFINERIES FUNDING OPPORTUNITY

May 1, 2007

DOE Announces up to $200 Million in Funding for Biorefineries *Small- and full-scale projects total up to $585 million to advance President Bush's Twenty in Ten Initiative*

WASHINGTON, DC – U.S. Department of Energy (DOE) Secretary Samuel W. Bodman today announced that DOE will provide up to $200 million, over five years (FY'07-'11) to support the development of small-scale cellulosic biorefineries in the United States. This Funding Opportunity Announcement (FOA) seeks projects to develop biorefineries at ten percent of commercial scale that produce liquid transportation fuels such as ethanol, as well as bio-based chemicals and bioproducts used in industrial applications. This research aims to advance President Bush's goal of making cellulosic ethanol cost-competitive with gasoline by 2012, and assist

in reducing America's gasoline consumption by 20 percent in ten years by expanding the availability of alternative and renewable transportation fuels.

"This research will provide the next necessary step toward developing cellulosic biorefineries that can transform our transportation sector in a clean and cost-effective manner," Secretary Bodman said. "As world demand for energy continues to grow, so too must our supply of clean, domestic sources of energy – and cellulosic biofuels provide a promising way to meet President Bush's goal of displacing twenty percent of gasoline usage within the decade."

Today's announcement advances DOE's long-term strategy to reduce dependence on imported oil by encouraging development of clean, domestic and renewable sources of energy, including biofuels. This strategy includes small-scale research projects to inform long-term development of full-scale facilities.

Small-scale projects will use novel approaches and a variety of cellulosic feedstocks to test new refining processes. These projects complement DOE's announcement earlier this year, which makes available up to $385 million over four years for the development of six full-scale biorefineries. The full-scale biorefineries focus on near-term commercial processes, while the small-scale facilities will experiment with new feedstocks and processing technologies. Combined, these small- and full-scale projects will receive up to $585 million in federal investment.

The FOA will support demonstration projects that test key refining processes and provide operational data needed to lower the technical hurdles sometimes associated with financing a full-size commercial plant. These projects are expected to be operational within three to four years and will speed the adoption of new technologies to produce ethanol and other biofuels from cellulosic feedstocks. Commercial-scale demonstrations would follow thereafter.

DOE requests applicants to design, construct and operate an integrated biorefinery demonstration facility, employing lignocellulosic feedstocks for the production of some combination of liquid transportation fuel(s), biobased chemicals, and substitutes for petroleum-based feedstocks and products. DOE seeks projects that can rapidly move to commercial-scale, supported by a sound business strategy and; encourages applications that demonstrate breakthrough technologies and collaboration between industry, universities, and DOE's national laboratories.

Up to $15 million is expected to be available in FY'07, with the remaining $185 million expected to be available in FY'08-'11, subject to appropriation from Congress. DOE anticipates selecting 5-10 awards under this announcement. These projects require a minimum of 50 percent cost share from applicants.

Applications for this FOA are due August 14, 2007. For more information on the FOA, "Demonstration of Integrated Biorefinery Operations for Producing Biofuels and Chemical/Materials Products" - DE-PS36-07GO97003, visit: DOE's E-Center OR Grants.gov.

DOE Hydrogen Program Request for Information

The DOE Office of Hydrogen, Fuel Cells, & Infrastructure Technologies Program issued a Request for Information: "Hydrogen and Fuel Cell Early Markets" on April 26, 2007. This formal request is part of the program's overall market transformation effort to promote the use of hydrogen and fuel cells today. Specifically, the request for information (RFI) seeks public comment and input on three topics: early market financial assistance, fuel cell performance testing, and community partnerships.

The purpose of the RFI is to solicit responses from the public before issuing a Hydrogen and Fuel Cell Early Markets Funding Opportunity Announcement (FOA) in FY2008. Although not guaranteed, a funding opportunity announcement is anticipated. This RFI is an opportunity for you and your stakeholders to provide input that may be incorporated into a pending FOA.

Input from coordinators and stakeholders, as well as the general public, is requested. Promoting these technologies will help Clean Cities and the nation to achieve our petroleum displacement goals. Clean Cities Coordinators are the experts at building new markets and facilitating community partnerships; your input will be of great value to this effort. I encourage you to take the time to review the RFI and provide comments. I also ask that you forward this information to stakeholders and other interested parties. Adding the information and the link below to your coalition's website is another approach to reaching a larger group.

Comments regarding this RFI must be received no later than June 30, 2007, 11:59 p.m. Eastern Time at H2EarlyMkts@go.doe.gov. Go to https://e-center.doe.gov/iips/faopor.nsf/8373d2fc6d83b666852564520079 63f5/60bee4bacaa2e83a852572c9005653f0?OpenDocument for a complete copy of the RFI.

PROPANE FLEET OPERATING COST CALCULATOR

The Propane Research and Education Council (PERC) provides a worksheet online which allows for the cost of propane powered vehicles to the cost of gasoline or diesel vehicles to be compared. Follow the seven steps to calculate your fuel costs. When your results are calculated, the results can be sent to you by e-mail or to someone else. You may also simply print the results for review.
http://www.propanecouncil.org/fleetcalculator/

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News

FOR IMMEDIATE RELEASE

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Clean Cities
U.S. Department of Energy

May 2, 2007

Grants Assist Clean Cities Coordinators Boost Biodiesel Quality Awareness

JEFFERSON CITY, Mo. − In partnership with the U.S. Department of Energy's Clean Cities Program, the National Biodiesel Foundation (NBF) and the Maryland Energy Administration are pleased to announce the winners of a recent joint grant competition. Nine Clean Cities Coalitions selected will be awarded $10,000 each to advance education on biodiesel quality issues.

Grant money will be used to develop workshops to educate petroleum marketers, fleet managers and other officials about biodiesel fuel quality and ideal management practices. Federal and State fuel quality enforcement professionals will also be included in these events.

Out of 27 applicants, the nine award winners are:

- Triangle Clean Cities Coalition, North Carolina
- Greater Philadelphia Clean Cities (Mid-Atlantic Region), Pennsylvania
- Clean Fuels Ohio, Ohio
- Columbia Willamette Coalition, Oregon
- Puget Sound Clean Cities Coalition, Washington
- Denver Metro Clean Cities Coalition, Colorado
- Palmetto State Clean Fuels Coalition, South Carolina

- Land of Enchantment Clean Cities Coalition, New Mexico
- Virginia Clean Cities, Virginia

While always an important issue, fuel quality has become paramount for the rapidly expanding biodiesel industry. Assuring that stringent quality control standards are met throughout the supply chain is essential for the industry to enjoy further growth for this valuable product.

"We are excited to work with the Clean Cities programs to address fuel quality concerns," said Tom Verry, executive director of the NBF. "The future growth of the industry depends on the achievement of high quality control from the beginning to the end of the supply chain."

The workshops will be conducted by October 31, 2007.

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Calendar

September 18-20	Commonwealth Energy & Sustainability Conference, Lexington, VA
November 14-17	NAAEE Conference