

GREATER NEW HAVEN CLEAN CITIES ADVANCED TRANSIT VEHICLE IN FINAL DESIGN PHASE

The *Origen One* Advanced Transit Vehicle is nearing the end of the design phase. The hydrogen hybrid-electric power train is in the final phases of design development as part of Phase 1. The almost emission-free vehicle will be able to service the downtown New Haven area 14-16 hours a day, 7 days a week. Based on current funding sources, the first prototype vehicle should be on

the road next year. This is a new concept in transit vehicle design that includes a light weight structure, advanced electronics, American with Disabilities Act (ADA) improvements, and state-of-the-art maintenance practices along with a new design look.

- Lee Grannis, Coordinator
Greater New Haven Clean Cities



Coordinator's

O The first quarter of 2006 has been very productive for the Connecticut Clean Cities. As you can see from the projects described in this newsletter we are moving forward with our mission of Clean Air and Energy Independence with creativity and tenacity.

As you all know by now, the US Department of Energy (DOE) has been making changes in their operational structure. There are plans to reshape the State Energy Project (SEP) grants that include an emphasis on multiple partner projects, and E85. Also changed is the method used to apply and receive funding for SEP grants – the path for applications and funding will no longer go through a state energy office, or in the case of Connecticut, the Office of Management and Budget (OMB). John Ruckes, our contact at OMB, has been an outstanding contributor to our SEP applications and more than once has saved an application from certain failure. We will certainly miss his professional and constructive style in the future. A hearty thanks to John from all the Connecticut Clean Cities Coordinators!

Beginning in the next quarter, in every issue we will feature one Connecticut company that has been working in the field of Alternate Fuel Technology and give you in-depth coverage on their products and projects. We believe Connecticut AFV technologies will help carry us into a future that is friendlier to the environment and much less dependent on foreign oil.

- Peter Polubiatko

YELLOW CAB OF HARTFORD TAKES DELIVERY OF HONDA HYBRIDS

Yellow Cab Company, the largest taxi company in the greater Hartford area, recently took delivery of 20 Honda Civic Hybrids from Manchester Honda. "These vehicles can get up to 50 miles per gallon resulting in significant reductions in emissions", according to Craig Peters, Sales Manager for Manchester Honda. The Civic Hybrids complement the natural gas powered Civics and Ford Crown Victorias currently in the Yellow Cab fleet. "I try to do my part to help clean the air and at the same time reduce our dependency on foreign oil. The drivers love them and so do the customers," states Marco Henry, President of Yellow Cab. He adds "These cars run day and night and emissions while idling is a major problem. The Hondas shut off when stopped, reducing emissions and saving fuel." Both Manchester Honda and Yellow Cab are stakeholders in the Capital Region Clean Cities Coalition.



An Important Message From the Department of Energy's Northeast Regional Office

As we move into 2006, there are changes occurring with the Clean Cities Program. First of all, Shelley Launey, who has been Director of the Clean Cities Program in Washington, D.C. since 1999, has moved on to a new assignment in the Department of Energy. Shelley has been responsible for the many achievements the Clean Cities Program has made over the years. Everyone involved in the Program will miss her greatly. Dennis Smith, who has long been involved with the Program, will be taking over the Director position.

The next change will be the consolidation of the regional offices at the end of June. The staff and responsibilities of the Northeast Regional Office will be transferred to the National Energy Technology Laboratory (NETL) in Pittsburgh Pennsylvania. Although the office will no longer reside in the region, it is intended that Clean Cities coalitions and stakeholders will receive support from the staff located in the NETL similar to that provided in the past. Also, resources of DOE headquarters and the National

Renewable Energy Laboratory (NREL) will continue to be available and these offices will provide programmatic, technical and outreach support.

I also want to make note of the recent Clean Cities Project Review held in Washington, D.C. We had approximately 50 coordinators from across the country and even more industry and government associates. If you were not able to join us, you missed some superb industry presentations, however coordinators will be able to access them in the Coordinators Toolbox on the Clean Cities web site: (http://www.eere.energy.gov/cleancities/toolbox/current_cutting.html#coord_meeting).

Despite all the changes, there remain many alternative fuel projects active in this region and these will continue to contribute to our mission of lessening our dependence on foreign oil.

- Michael Scarpino
Northeast Regional Office, USDOE

CT ENERGY & TECHNOLOGY COMMITTEE VOTE TO BRING RAISED BILL 572 TO GENERAL ASSEMBLY

Ethanol received a favorable vote from Connecticut General Assembly Committee on Energy and Technology

On March 14, 2006 the Connecticut General Assembly Committee on Energy and Technology voted unanimously to bring Raised Bill No. 572 to the General Assembly for action. Included in the legislation are tax credits, loans and exemption from the motor vehicle fuels sales tax.

Also included is the provision that provides up to 10 percent (10%) price preference in the competitive bidding process for State purchases of clean alternative fuel vehicles. Qualifying is "the purchase of motor vehicles powered by a clean alternative fuel; or the purchase of motor vehicles powered by fuel other than a clean alternative fuel and conversion equipment to convert such motor vehicles allowing the vehicles to be powered by either the exclusive use of clean alternative fuel or dual use of a clean alternative fuel and a fuel other than a clean alternative fuel." As used in this subsection, "clean alternative fuel" shall mean natural gas [or] electricity when used as a motor vehicle fuel or a motor vehicle fuel blend of

eighty -five percent ethanol and fifteen percent gasoline."

As in previous legislation, any tax incentives are based upon the incremental cost of the vehicle, e.g. the difference between the AFV and a comparably equipped gasoline or diesel vehicle.

When will E85 be available in CT?

There are two E-85 stations in Connecticut, in Newington and Danbury, operated by the Department of Transportation. There is an increased effort to establish public access stations. Stay tuned.

Who can use E85?

Only vehicles rated as "Flexible Fuel Vehicles" FFV's can use E85, check your owners manual and look on your gas tank cap.

For more information and frequently asked questions about E85 see the National Ethanol Vehicle Coalition web site, search on NEVC or the Clean Cities web site.

ENERGY POLICY ACT PROVISIONS THAT MAY AFFECT YOU

This is the second article of a four part series that extracts certain sections of the Energy Policy Act of 2005 that may impact your operations, whether a large fleet or just a single vehicle. Most of the information is from the Clean Cities and U.S.

Alternative Fuels Data Center web site www.eere.gov/cleancities. For the full text of the Act, visit the [Thomas Register](#) on the Library of Congress Web site, and search by Bill Number for HR 6. The four part series will cover the following topics in succeeding newsletters:

1. Tax Credits (see prior issue)
2. Grant Programs and Specific Fuel sections of the Act (this issue)
3. Financing available for research and education programs
4. Vehicle replacement, upgrade and fuel economy programs

In this issue we will cover Grant Programs and Specific Fuel sections of the Act.

Sec. 706 – Joint Flexible Fuel/Hybrid Vehicle Commercialization Initiative – Establishes a research and grant program to advance the commercialization of hybrid/flex-fuel vehicles and plug in hybrid/flex fuel vehicles. Vehicles must achieve not less than 250 miles per gasoline gallon. \$3M authorized for 2006, \$7M in 2007, \$10M in 2008, and \$20M in 2009.

Sec 721-723 – Advanced Vehicles Pilot Demonstration Program – Competitive grant program to fund up to 30 geographically dispersed advanced vehicle demonstration projects administered by Clean Cities. The goal is to reduce emissions, displace fossil fuel, promote advanced technology vehicles and promote sustainable transportation options. Grant recipients will be limited to state and local government agencies and Metropolitan Transit Authoritys (MTAs). Applications must include a registered participant in the Clean Cities program. Participants can be public or private entities. Projects limited to \$15M with 50% cost share. Grant funds can pay for:

- AFVs (including neighborhood electric vehicles)
- HEVs (only MDV and HDV)
- Fuel cell vehicles
- Ultra low sulfur (ULS) diesel vehicles
- Acquisition and installation of fueling infrastructure

- Operation and maintenance of vehicles, infrastructure and equipment
- \$200M authorized until expended

Sec. 741 – Clean School Bus Program – EPA in consultation with DOE, provides funds to school districts and related organizations to replace, repower, or retrofit buses. EPA must “achieve an appropriate balance between replacement and retrofit.

For replacement buses, grantees receive 50% of the cost of the new bus if it meets:

- For MY 2005 & 2006, 1.8 grams oxides of nitrogen (NOx) plus nonmethane hydrocarbons (NMHC) and 0.01 particulate matter (PM) (which is the minimum standard for diesel engines)
- For MY 2007, 08, 09, “regulatory requirements” by EPA. This is assumed to mean the phase in requirement to 2010 which is 0.2 grams NOx plus NMHC and 0.01 PM
- Grantees receive 25% of the cost of the new bus if they meet less strict emissions standards:
- For MY 2005 and 2006, 2.5 grams NOx plus NMHC and 0.01 PM (minimum standard for diesel buses)
- For MY 2007, 2008, and 2009, regulatory requirements by EPA. Assumed to mean the phase-in requirement to 2010 which is 1.8 grams NOx plus NMHC and 0.01 PM
- Grantees can receive 100% of retrofit costs.
- No state can receive more than 10% of the monies made available each year. \$55M authorized for 2006, \$55M for 2007, and such sums as are necessary for 2008-2010.

Sec.742 – Diesel Truck Retrofit and Fleet Modernization Program – EPA, in consultation with DOE, administers a competitive grant program for fleet modernization and retrofit of diesel trucks. Grants go to state or local governments who will allocate funds with preference for ports and other major hauling operations. 50% cost share required. Replaced trucks must be 1998 or older.

- Authorization: 2006 - \$20M, 2007 - \$35M, 2008 - \$45M, 2009-2010 – such sums as are necessary.

Sec. 756. - Heavy Duty Vehicle Idle Reduction Analysis and Deployment Program –

- Requires EPA to conduct analysis on emissions, fuel savings, etc.

- Deployment Program: EPA, in consultation
see Act, continued on page 4

ACT, CONTINUED FROM PAGE 3

with DOT (not DOE) to:

- support deployment of idle reduction (IR) technologies
- promote improved air quality and reduced emissions
- authorization 2006 - \$19.5M, 2007 - \$30M, 2008 - \$45M
- Costing - 50% provided by non federal entities
- IR means truck stop electrification (TSE) and auxiliary power units that reduce idle and allow shut down of main drive engine or aux. refrigeration engine.
- Weight increase - allows trucks to increase weight by 400 pounds without penalty if associated

GROTON PUBLIC WORKS BECOMES A CLEAN CITIES STAKEHOLDER

On March 14, 2006 the Town of Groton Public Works Department (GPW) became a stakeholder in Norwich Clean Cities. The GPW had recently received a Congestion Mitigation Air Quality (CMAQ) grant for the incremental cost of three Ford Escape Hybrid SUVs. These vehicles will replace 1999 and 2000 Dodge Durangos and a 2001 Chevy

with added weight of IR technology.

Sec. 791-797: Diesel Emission Reductions

- Establishes a program to make grants and loans available to State and local government agencies and non-profit organizations for reducing emissions from diesel engines.
- The program focuses on replacing/retrofitting engines in non-attainment areas and would require that at least 50 percent of the federal program funds be used on public fleets.
- EPA or California Air Resource Board certified or verified technologies qualify. NGV repowers and replacements will be eligible.
- Legislation authorizes \$200 million per year for FY 2006 through 2010.

NORWICH CLEAN CITIES PARTICIPATES IN CHAMBER LEADERSHIP PROGRAM

The Chamber of Commerce of Eastern Connecticut conducts an annual Leadership Program on various subjects of interest for business, industry and municipal leaders from the region. This year's session on energy was held at Dominion Nuclear Connecticut's Millstone Plant in Waterford on February 9th. The Norwich Clean Cities Coalition was asked to present an overview of the Clean Cities Program and to demonstrate alternative fuel vehicles. Peter Polubiatko, Mike Tucchio and John Kennedy gave a presentation on air pollution, energy

dependency and national security issues driving the Clean Cities effort. An outline of the National Clean Cities Program and the role Connecticut Clean Cities play in implementing it in the region was described. The part these leaders could play as potential stakeholders in Clean Cities was emphasized. Following the classroom session, participants were invited to view several AFVs including a Ford Escape, Toyota Prius and Honda Civic hybrids and a CNG pickup from Norwich Public Utilities. Many good contacts were made at the conference and it is hoped that additional stakeholders will result from Clean Cities' participation in this Leadership Program.



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Transportation Fuel Choices
To Reduce Dependence on Imported Oil and Improve Air Quality

Peter Polubiatko, Clean Cities Coordinator,
John Kennedy
Michael Tucchio, PhD

Presented to the Eastern Connecticut Chamber of Commerce - Feb 9, 2006