

## New York State Finds Avenues to Alternative Fuel Success

Faster than a New York minute. That's how New York State's (NYS) alternative fuel vehicle (AFV) fleet has grown since 2002, when we last published a success story on the state's Clean Fueled Vehicles Program.\*

For the seventh straight year, NYS surpassed its Energy Policy Act (EPAAct) AFV acquisition requirements. In 2004, it bought more than 80% of its light-duty vehicles as AFVs (its EPAAct requirement is 75%).

This effort is also facilitating compliance with New York's Executive Order (E.O.) 111, which directs all state entities to acquire 50% of qualifying new light-duty vehicles as AFVs by 2005 and 100% by 2010. E.O. 111 also requires medium- and heavy-duty vehicle fleets to reduce petroleum consumption and emissions by using alternative fuels and improving fuel efficiency.

New York is achieving its EPAAct and E.O. 111 goals through diverse AFV acquisitions, expanded alternative fuel infrastructure, innovative public-private partnerships, and enthusiastic support from the Governor's Office.

### Natural Gas Vehicles

Vehicles powered by compressed natural gas (CNG) make up more than half of the NYS AFV fleet. The New York Office of General Services (OGS) estimates that CNG use at state sites in 2004 totaled 500,000 gasoline gallon equivalents (gge) and that 1.6 million gallons of gasoline have been displaced by CNG in the past four years. NYS is experimenting with medium- and heavy-duty CNG applications. In 2003, the New York Department of Transportation unveiled the first of a pilot fleet of snowplow/dump trucks retrofitted to operate on 80% CNG and 20% diesel.

New York has expanded its CNG infrastructure. The state had 30 low-volume and 19 high-volume CNG stations in 2002. It now has 31 high-volume and 21 low-volume CNG stations, which are supplemented by 50 commercial CNG stations statewide.

To bring CNG to a wider audience, NYS developed a partnership with fuel provider Clean Energy Fuels. Under New York law, state-owned facilities can only sell fuel for state vehicles. In December 2003, NYS awarded Clean Energy a contract to assume operations of eight state-owned CNG stations and to build another station. This makes the CNG stations available to local

**New York State Fleet Profile** (as of December 9, 2004)

Vehicles	Count	Change from 2001*
Total Light-Duty Vehicles	13,043	+2%
Total Light-Duty AFVs	4,325	+127%
CNG	2,217	+74%
Flex Fuel (ethanol)	924	+214%
Hybrid Electric**	162	+575%
Propane	148	+72%
Electric	101	-35%
Methanol	12	-83%
Neighborhood Electric**	760	***
Hydrogen Fuel Cell	1	***

\* Compared with data reported as of December 31, 2001.

\*\* Do not count toward EPAAct compliance.

\*\*\* No vehicles reported December 31, 2001.

Governor Pataki speaks at a June 2004 event transferring operations of a state CNG station to Clean Energy Fuels



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\* "New York State Overcomes Barriers to Comply with Aggressive State Legislation" ([www.eere.energy.gov/vehiclesandfuels/epact/pdfs/nys1.pdf](http://www.eere.energy.gov/vehiclesandfuels/epact/pdfs/nys1.pdf))



governments and the public, as well as the state. Clean Energy is likely to assume operation of more CNG stations in the future.

## Ethanol, Propane, and Biodiesel

New York has taken steps to increase the availability of ethanol, propane, and biodiesel. The New York OGS, Office of Mental Health, State Energy Research and Development Authority, and Thruway Authority are working to establish E85 (85% ethanol, 15% gasoline) fueling infrastructure. The Thruway Authority operates one E85 station, and three additional E85 stations are slated to open in 2005. NYS also includes propane vehicles in its fleet. The Department of Correctional Services currently operates propane stations at six of its facilities.

Biodiesel is helping New York's medium- and heavy-duty vehicle fleets meet E.O. 111 alternative fuel and EPAAct requirements. Under EPAAct, NYS can earn one credit for every 450 gallons of pure biodiesel (B100) used in biodiesel blends. The OGS estimates that 1.7 million gallons of B20 (or 340,000 gallons of B100) were used by state fleets from September 2003 to August 2004.

The Department of Transportation is a major B20 user. It has been testing winter operability of the fuel in four upstate counties since fall 2003 and plans to expand B20 use into several additional locations in 2005.

## Fuel Cell Vehicles

In November 2004, New York Governor George Pataki announced an agreement to lease two Honda FCX hydrogen fuel cell vehicles for two years. New York is the first northeastern state to use fuel cell vehicles. The cars will be assigned to the OGS and circulated among various agencies

## State Parks Initiatives

Alternative fuels are part of Governor Pataki's initiative to improve the environment of New York's Niagara Falls area. In 2002, the Office of Parks, Recreation, and Historic Preservation (OPRHP) opened one of the east coast's largest publicly owned CNG stations in Niagara Reservation State Park. OPRHP also replaced the park's gasoline-powered vehicles with AFVs, including bi-fuel CNG trolleys (pictured). At the other end of the state, OPRHP opened a new CNG station in Long Island's Jones Beach State Park in 2002.



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to ensure high-profile use in everyday state operations. The program will help Honda assess the operation of its fuel cell vehicles in cold weather. It will also give state agencies first-hand knowledge of this new technology.

## Making It Happen

New York continues to implement strategies for alternative fuel success. The Clean Fueled Vehicles Program began AFV training for state drivers and mechanics in 2001. As of 2004, almost 500 drivers and mechanics have been trained. Training is also provided for CNG station maintenance personnel.

Another key to success is ensuring availability of AFVs. New York's statewide AFV purchase contract gives agencies the option of purchasing CNG, flexible fuel (ethanol), and hybrid electric vehicles. Other statewide contracts provide for purchase of neighborhood electric vehicles and leasing of AFVs.\* The Clean Fueled Vehicles Program Web site ([www.ogs.state.ny.us/cleanfuels](http://www.ogs.state.ny.us/cleanfuels)) keeps agencies apprised of important AFV information. To learn more, contact Eileen Redmond at the New York OGS, [eileen.redmond@ogs.state.ny.us](mailto:eileen.redmond@ogs.state.ny.us).

\* As of Feb. 2005, hybrid and neighborhood electric vehicles are not considered AFVs under EPAAct. They are considered AFVs under New York's E.O. 111.

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DOE/GO-102005-2049 • February 2005

Prepared by the National Renewable Energy Laboratory (NREL)  
NREL is a U.S. Department of Energy National Laboratory  
Operated by Midwest Research Institute • Battelle

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