

# **U.S. Department of Housing and Urban Development Fleet Alternative Fuel Vehicle Acquisition Report**

Compliance with EPO Act and E.O. 13423 in Fiscal Year 2008

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## **Introduction**

This report summarizes the Department of Housing and Urban Development (HUD) Fiscal Year (FY) 2008 performance requirements of Executive Order (E.O.) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management” (January 2007), and the Energy Policy Act of 1992 (EPO Act; 42 U.S.C. 13211-13219), as amended by the Energy Conservation Reauthorization Act of 1998 (ECRA Public Law 105-388) and the EPO Act of 2005 (Public Law 109-58).

## **Legislative and Executive Order Requirements**

Section 303 of the EPO Act (42 U.S.C. 13212) requires that 75 percent of all covered light-duty vehicles (LDVs) acquired by federal fleets in FY 1999, and each year thereafter, must be Alternative Fuel Vehicles (AFVs). The EPO Act requirements apply to agency fleets of 20 or more LDVs (vehicles less than or equal to 8,500 pounds gross vehicle weight rating) that are “centrally fueled or capable of being centrally fueled,” and are primarily operated in Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs) that have populations of more than 250,000, according to 1980 census data. Certain emergency, law enforcement, and national defense vehicles are exempt from these requirements.

The Energy Conservation Reauthorization Act of 1998 amended the EPO Act to allow one AFV acquisition credit for every 450 gallons of pure biodiesel fuel (B100), and/or 2,250 gallons of B-20, a blend of 20 percent biodiesel with 80 percent petroleum diesel, that is consumed in vehicles over 8,500 pounds gross vehicle weight rating. These “biodiesel credits” may fill up to 50 percent of a federal fleet’s EPO Act acquisition requirements, but do not carry over into subsequent years and they cannot be traded among fleets.

Section 310(b) of the EPO Act requires the head of each federal agency to prepare and submit an annual report to Congress outlining the agency’s AFV acquisitions and its plans for future acquisition. Federal agencies are to submit compliance data using the General Services Administration’s (GSA) web-based Federal Automotive Statistical Tool (FAST).

E.O. 13423 requires each federal agency that operates 20 or more vehicles within the United States to reduce petroleum consumption in fleet vehicles by 2 percent annually through 2015, increase purchase of nonpetroleum-based fuel by 10 percent annually, and use plug-in hybrid (PIH) vehicles when commercially available at a life-cycle cost reasonably comparable to non-PIH vehicles. Fleets may achieve the petroleum consumption reductions through a combination of increased use of nonpetroleum-based fuel in AFVs, improved efficiency of non-AFV acquisitions, reductions in fleet sizes and vehicle miles traveled, and/or improvements in overall fleet operating efficiencies.

**Table 1. HUD Compliance with the EPAct and E.O. 13423**

Authority/ Mandate	Performance Measure	Goal/Requirement	HUD's Performance In FY 2008
EPAct	Alternative fuel vehicle (AFV) acquisitions	75 percent of the 12 EPAct-covered light-duty vehicles (LDV) that HUD acquired in FY 2008 must be AFVs	11 percent of the 105 EPAct-covered acquisitions (12 vehicles) were AFVs
E.O. 13423	<p>Petroleum consumption</p> <p>Alternative fuel use in AFVs</p> <p>Plug-in hybrid vehicles (PIH)</p>	<p>Relative to the agency's baseline for FY 2005, reduce the fleet's total petroleum consumption in covered light duty vehicles by 2 percent annually through FY 2015</p> <p>Increase the total fuel consumption that is nonpetroleum based by 10 percent annually through the end of FY 2015</p> <p>Use PIH vehicles when vehicles are commercially available at a cost reasonably comparable, on the basis of lifecycle cost, to non-PIH vehicles.</p>	<p>Petroleum consumption increased by 7 percent from 203,553 Gasoline Gallon Equivalents (GGEs) in FY 2007 to 261,585 GGE in FY 2008.</p> <p>Nonpetroleum based fuel was increased by 1,283 percent from 1,176 GGEs in FY 2007 to 16,258 GGEs in FY 2008.</p> <p>No PIH vehicles were available.</p>

**HUD's Approach to Compliance with the EPAct and E.O. 13423**

To meet the requirements of the EPAct and E.O. 13423, the Department's *Compliance Strategy* specifies that HUD will comply with the EPAct by requiring that a minimum of 75 percent of its new LDV vehicle acquisitions be AFVs. The FY 2003 *Strategy* has been updated to include the E.O. 13423 requirement and HUD's FY 2008 field realignment.

To meet the requirements of the EPAct and E.O. 13423, the Department has centralized the fleet management policy oversight at Headquarters and instituted a new and rigorous policy of education and monitoring. This will enable the Department to increase its level of compliance and proactively address issues that would decrease the progress of achieving compliance.

**HUD AFV Acquisitions in FY 2008**

Table 2 shows the number and types of HUD's LDV acquisitions in FY 2008. Of the 105 LDVs HUD acquired, 105 were EPAct-covered vehicles and 12 were AFVs. HUD's achieved an 11% AFV acquisition rate.

**Table 2. HUD Fiscal Year 2008 Acquisitions**

<b>Actual Department of Housing and Urban Development FY 2008 Vehicle Acquisitions</b>					
<b>Actual FY 2008 Light-Duty Vehicle Acquisitions</b>				<b>Total Vehicle Inventory</b>	
	<b>Leased</b>	<b>Purchased</b>	<b>Total</b>		
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		105	0	105	434
Exemptions	Fleet Size	0	0	0	0
	Geographic	0	0	0	0
	Law Enforcement	0	0	0	0
	Non-MSA Operation (fleet)	0	0	0	0
	Non-MSA Operation (vehicles)	0	0	0	(n/a)
<b>EPACT Covered Acquisitions</b>		<b>105</b>	<b>0</b>	<b>105</b>	<b>434</b>
<b>Actual FY 2008 AFV Acquisitions</b>				<b>Total Vehicle Inventory</b>	
<b>Vehicle</b>	<b>Leased</b>	<b>Purchased</b>	<b>Total</b>		
Sedan	E-85 Flex-Fuel Compact	1	0	1	21
Sedan	E-85 Flex-Fuel Midsize	3	0	3	38
Sedan	E-85 Flex-Fuel Large	5	0	5	1
Van 4x2 (Passenger)	E-85 Flex-Fuel	3	0	3	12
Van MD (Passenger)	E-85 Flex-Fuel	0	0	0	1
<b>Total Number of AFV Acquisitions</b>		<b>12</b>	<b>0</b>	<b>12</b>	<b>73</b>
Zero Emission Vehicle Credits		0	0	0	
Dedicated Light-Duty AFV Credits		0	0	0	
Dedicated Medium-Duty AFV Credits		0	0	0	
Dedicated Heavy-Duty AFV Credits		0	0	0	
Biodiesel Fuel Usage Credits - Actual				0	
<b>Total AFV Acquisitions with Credits</b>		<b>12</b>	<b>0</b>	<b>12</b>	
<b>AFV Percentage of Covered Light-Duty Vehicle Acquisition</b>				<b>11 %</b>	

Table 3 is the fuel usage for the HUD fleets in FY 2008. Most vehicles acquired by HUD are leased from GSA, with all maintenance and fuel costs for the vehicle included in the lease. HUD uses the GSA SmartPay credit card to pay for fuel.

**Table 3: HUD Fiscal Year 2008 Fuel Usage**

Fuel Type	Cost	Natural Units				GGE				Conversion Ratio
		GSA- Leased	Comm. Leased	Owned	Units	GSA- Leased	Comm. Leased	Owned	Total	
A	b	c	d	e	f	g	h	i	j	k
E-85	\$ 75,657	22,592	0	0	gallons	16,258	0	0	16,258	72% (gal x 0.72 = GGE)
Gasoline	\$ 726,216	257,332	3,450	803	gallons	257,332	3,450	803	261,585	No conversion needed
Gasoline - Law Enforcement Vehicles	\$ 35,672	13,925	0	0	gallons	13,925	0	0	13,925	No conversion needed

### **AFV Acquisition and Other Use Issues**

Although HUD substantially increased FY 2008 alternative fuel (AF) usage over last year, the lack of an AFV fueling infrastructure to support HUD AFVs continues to be a major obstacle. When AFVs are leased, difficulties remain in locating fuel sites in close proximity to a large population of HUD vehicle users. Until the number of AF fueling sites is increased, the goal of using alternative fuel in AFVs remains extremely difficult and in some areas impossible. To counteract the lack of available alternative fuel stations, HUD continues to work in concert with other federal agencies to establish alternative fuel infrastructure. Development is a process and will require continued negotiation with private industry. Further, new issues arise as HUD collectively continues the dialogue with potential providers. HUD, however, will continue to engage in this kind of dialogue until a feasible solution can be devised to increase the availability of alternative fuel. In addition, the use of fuel cards remains an issue, with dialogue continuing on an interagency level.

### **Summary**

HUD centralized its fleet policy oversight at Headquarters during FY 2008. All departmental vehicle acquisitions are now approved at the headquarters level to ensure compliance with statutory requirements and the overall fleet strategy. The focus is the placement of AFVs, through replacement/acquisition, in locations that can support AF usage. HUD is investigating the possibility of redistributing existing AFVs in areas without AF resources to areas that can support AF use. All alternative fuel vehicles are required to maximize AF, where available and field personnel have been educated on the locations of AF stations. HUD is working with its field offices to identify and address critical issues that inhibit the use of AFs. Field locations will be assessed to determine where the highest needs for AF refueling stations exist. HUD is developing strategies to reduce petroleum intake. Not only will this have a tremendous effect on the bottom-line and be beneficial for the environment, it will ensure compliance with the mandates.

## Appendix A

Acronym	Phrase
AFV	Alternative Fuel Vehicle
B100	Biodiesel (100 percent, neat)
B20	Biodiesel (20 percent biodiesel, 80 percent petroleum diesel)
CNG	Compressed Natural Gas
HUD	U.S. Department of Housing and Urban Development
E-85	Ethanol (85 percent ethanol, 15 percent petroleum)
E.O.	Executive Order
EPAAct	Energy Policy Act
FFV	Flexible Fuel Vehicle
FAST	Federal Automotive Statistical Tool
FR	Federal Register
FY	Fiscal Year
GGE	Gasoline Gallon Equivalent
GVWR	Gross Vehicle Weight Rating
HD	Heavy-Duty
INL	Idaho National Laboratory
LD	Light-Duty
LDV	Light-Duty Vehicle
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas (Propane)
MD	Medium-Duty
MPG	Miles Per Gallon
MSA/CMSA	Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area
SUV	Sport Utility Vehicle