## State & Alternative Fuel Provider Fleets

EPAct Alternative Fuel Transportation Program

Energy Efficiency &

Renewable Energy

U.S. DEPARTMENT OF



# Fleet Compliance Results for MY 2012/FY 2013

The U.S. Department of Energy (DOE) regulates covered state government and alternative fuel provider (SFP) fleets under the Energy Policy Act of 1992 (EPAct), as amended. For model year (MY) 2012, the compliance rate for the 287<sup>1</sup> covered SFP fleets was 100%. Fleets used either Standard Compliance or Alternative Compliance. The 274 fleets that used Standard Compliance exceeded their aggregate MY 2012 acquisition requirements by 58%. The 13 covered fleets that complied using Alternative Compliance exceeded their aggregate MY 2012 petroleum-use reduction requirements by 35%. Overall, DOE saw a decrease from MY 2011 in total biodiesel fuel use reported, but an increase in the number of biodiesel fuel use credits earned and the greatest amount of biodiesel use reported since MY 2008. There was also a 46% increase in the number of light-duty alternative fuel vehicles (AFVs)<sup>2</sup> acquired over MY 2011. Compared to recent model years, these rates suggest a marked shift from what was a modest downward trend in vehicle acquisitions and biodiesel use.



**Standard Compliance Methods** 

\*Purchased credits can be banked for future use.

## **Standard Compliance**

Covered SFP fleets operating under Standard Compliance (10 CFR Part 490, Subpart C or D) achieve compliance by acquiring alternative fuel vehicles, purchasing biodiesel for use in mediumor heavy-duty vehicles, and/or applying banked credits earned previously or acquired from other covered fleets. In MY 2012, the 274 fleets that used Standard Compliance:

- Acquired 18,009 light-duty AFVs
- Earned 1,798 biodiesel fuel use credits through the purchase of more than 6.1 million gallons of pure biodiesel (B100)<sup>3</sup>
- Applied 2,110 banked credits.

In addition, these SFP fleets banked for future use a total of 7,710 AFV credits.

As a whole, the fleets operating under Standard Compliance went beyond compliance, exceeding their AFV-acquisition requirements by approximately 58%.

- <sup>1</sup> Some reporting entities represent one agency or business; others represent the fleet operations of multiple entities (e.g., a state or company that reports on behalf of all covered state agencies or subsidiaries).
- <sup>2</sup> AFVs include any dedicated or dual fueled vehicle (i.e., any vehicle that operates solely on or is capable of operating on at least one alternative fuel). The following fuels are defined or designated as alternative fuels: methanol, denatured ethanol, and other alcohols; blends of 85% or more of alcohol with gasoline; natural gas and liquid fuels domestically produced from natural gas; liquefied petroleum gas (propane); coal-derived liquid fuels; hydrogen; electricity; fuels (other than alcohol) derived from biological materials (including pure biodiesel (B100)); and three P-series fuels.
- <sup>3</sup> The credits awarded for biodiesel purchase and use do not necessarily reflect the total amount of biodiesel purchased because each fleet may apply its biodiesel fuel use credits to meet no more than 50% of its annual AFV-acquisition requirements.

## Vehicle Acquisitions

Acquiring AFVs is typically how covered fleets comply. Under Standard Compliance, 75% of the non-excluded LDVs that state fleets acquire must be AFVs, while 90% of the nonexcluded LDVs that alternative fuel provider fleets acquire must be AFVs. AFV-acquisition requirements are determined by multiplying a fleet's number of newly acquired, non-excluded LDVs by the applicable percentages. In MY 2012, the number of light-duty AFV acquisitions by covered fleets was 18,009, a significant jump over MY 2011 (12,354), and the second highest annual total over the life of the program. Flexible-fuel vehicles accounted for more than 95% of these acquired light-duty AFVs.



### **Credit Use and Acquisition**

Covered fleets earn bankable credits by acquiring more AFVs than are required in a given model year. Fleets may then use these credits to address future AFV-acquisition requirements, or they may sell the credits to fleets that have acquired an insufficient number of AFVs in a particular model year. In MY 2012, fleets exceeded their AFVacquisition requirements and earned 7,710 credits for future use. Fleets also used 2,110 previously banked credits to comply with EPAct—a slight increase over MY 2011, when fleets used 1,908 banked credits. There were 23 transactions between covered fleets involving the transfer of 849 banked credits. The number of credits exchanged in MY 2011 was 467, fewer than in MY 2012, while the number of transactions actually decreased by several in MY 2012 (23) compared to MY 2011 (27).



#### Annual Credits Earned and Used

### **Biodiesel Fuel Use**

Covered SFP fleets may earn one biodiesel fuel use credit for each 450 gallons of pure biodiesel (B100) or one biodiesel fuel use credit for every 2,250 gallons of 20% biodiesel blends (B20)<sup>4</sup> they purchase for use in medium- or heavy-duty vehicles (10 CFR sections 490.701-702). In MY 2012, covered fleets reported using more than 6.1 million gallons of B100 in B20 or higher blends, thus allowing these fleets to earn a total of 1,798 biodiesel fuel use credits. The credits awarded likely do not reflect the total amount of biodiesel purchased because each fleet may apply biodiesel fuel use credits to meet no more than

50% of its annual AFV-acquisition requirements. It is likely some fleets are reporting only the amount of biodiesel that will earn them credits rather than reporting all of their biodiesel use.



### Annual Biodiesel (B100) Use and Biodiesel Credits Earned

#### Exemptions

Overall, granted exemptions<sup>5</sup> represented less than 1.5% (total number of exemptions granted/total AFV-acquisition requirements) of covered fleets' compliance credit activity in MY 2012. SFP fleets received 215 vehicle exemptions—the highest number over the prior three years, but the third lowest total recorded for the program. In MY 2012, only 7 fleets sought exemptions, fewer than in MY 2011 when 11 fleets sought exemptions and a continued decrease from MY 2008 when 33 fleets sought exemptions from DOE. While MY 2012 had more total exemption requests (261 vehicles) from these 7 fleets than for the 11 fleets that sought exemptions in the preceding two model years, this total number of requested vehicle exemptions is still significantly lower than in other program model years. The general trend for exemptions remains downward—in MY 2010, the number of vehicle exemptions requested (221) declined from the number requested in MY 2009 (368) and MY 2008 (1,424). The number of vehicle exemptions requested for MY 2012 was the program's third lowest since 2000, making the program average 1,054 at the conclusion of MY 2012.



#### Annual Exemptions Requested and Granted Compared to Total AFV-Acquisition Requirement

<sup>4</sup> Learn more about calculating biodiesel fuel use credits at *eere.energy.gov/vehiclesandfuels/epact/biodiesel.html*.

<sup>&</sup>lt;sup>5</sup> Exemptions are detailed on the EPAct website at eere.energy.gov/vehiclesandfuels/epact/exemptions.html.

## **Alternative Compliance**

MY 2012 marked the fifth year that covered SFP fleets could opt to participate in DOE's Alternative Compliance option in lieu of complying with EPAct via Standard Compliance. EPAct 2005 established Alternative Compliance, and the option was put in place by DOE's final rulemaking in March 2007 for initial application in MY 2008. Under Alternative Compliance, fleets employ petroleum-reduction measures in lieu of acquiring AFVs under Standard Compliance. Examples of these petroleum-reduction measures are included in the chart below. Fleets must obtain a waiver from DOE for the upcoming model year. To receive a waiver, fleets first must submit to DOE an intent to apply for a waiver, and then they must follow up that intent by filing a complete waiver application that includes a plan showing how they intend to reduce their fleet's petroleum consumption.

#### Plans and Achievements in MY 2012

DOE approved waiver applications for 14 fleets to participate in Alternative Compliance for MY 2012. Of these fleets, 13 were able to meet their required

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petroleum fuel use reductions for MY 2012.<sup>6</sup> The 13 fleets' total required petroleum-use reduction for MY 2012 was 1,948,300 gasoline gallon equivalents (GGE). Their total planned petroleum-consumption reduction was 2,401,559 GGE, and in the aggregate, the 13 fleets exceeded the requirement, reducing their petroleum consumption as a group by 2,629,119 GGE. The 13 fleets achieved this amount of reduction and met their petroleum-consumption reduction goals by:

- Using alternative fuels (24% petroleum reduction achieved)
- Using biodiesel blends (70% petroleum reduction achieved)
- Acquiring and using hybrid electric vehicles (2.4% petroleum reduction achieved)
- Employing fuel economy measures in conventional vehicles (2% petroleum reduction achieved)
- Limiting engine idling time (1.8% petroleum reduction achieved).

## **Notices of Intent**

During MY 2012, DOE received 26 notices of intent to apply for a waiver from Standard Compliance for MY 2013. This is 2 fewer notices of intent than were received in MY 2011 for MY 2012 compliance.

### Conclusion

In MY 2012, covered fleets successfully met their Standard Compliance requirements. Their efforts included acquiring 18,009 AFVs and consuming more than 6.1 million gallons of pure biodiesel (B100). The 13 fleets that operated under Alternative Compliance reduced their petroleum consumption by more than 2.6 million GGE. All covered SFP fleets filed annual reports for MY 2012, and all fleets were in compliance for that model year.

## What Is EPAct?

Congress passed the Energy Policy Act of 1992 (EPAct) to reduce the nation's dependence on imported petroleum. Provisions of EPAct require certain fleets to purchase AFVs. DOE administers these requirements through its Alternative Fuel Transportation Program, Federal Fleet Requirements, and Alternative Fuel Designation Authority.



Petroleum Reductions Achieved by Alternative Compliance Strategy

<sup>6</sup> The one fleet that failed to achieve its petroleum reduction requirement was returned to Standard Compliance.

#### Front page photo by Pat Corkery, NREL 18094

For more information, visit **eere.energy.gov/vehiclesandfuels/epact** or contact the Regulatory Information Line at 202-586-9171 or **regulatory.info@nrel.gov**.

DOE/GO-102014-4423 • June 2014

