

## EPAct Alternative Fuel Transportation Program

### State and Alternative Fuel Provider Fleet Compliance Annual Report



## Fleet Compliance Results for MY 2011/FY 2012

The U.S. Department of Energy (DOE) regulates covered state and alternative fuel provider (SFP) fleets under the Energy Policy Act of 1992 (EPAct), as amended. For model year (MY) 2011, the compliance rate for the 293<sup>1</sup> covered SFP fleets was 100%. Fleets used either Standard Compliance or Alternative Compliance. The 280 fleets that used Standard Compliance exceeded their aggregate MY 2011 acquisition requirements by 63%. Covered fleets that complied using Alternative Compliance exceeded their aggregate MY 2011 petroleum-use-reduction requirements by 80%. Overall, DOE saw modest decreases from MY 2010 in biodiesel fuel use credits earned but a significant 62% increase from MY 2010 in the amount of biodiesel purchased for use. There was also a 21% increase in the number of light-duty alternative fuel vehicles (AFVs)<sup>2</sup> acquired. Compared to recent model years, these rates suggest a shift from what was a modest downward trend in vehicle acquisitions and biodiesel use.

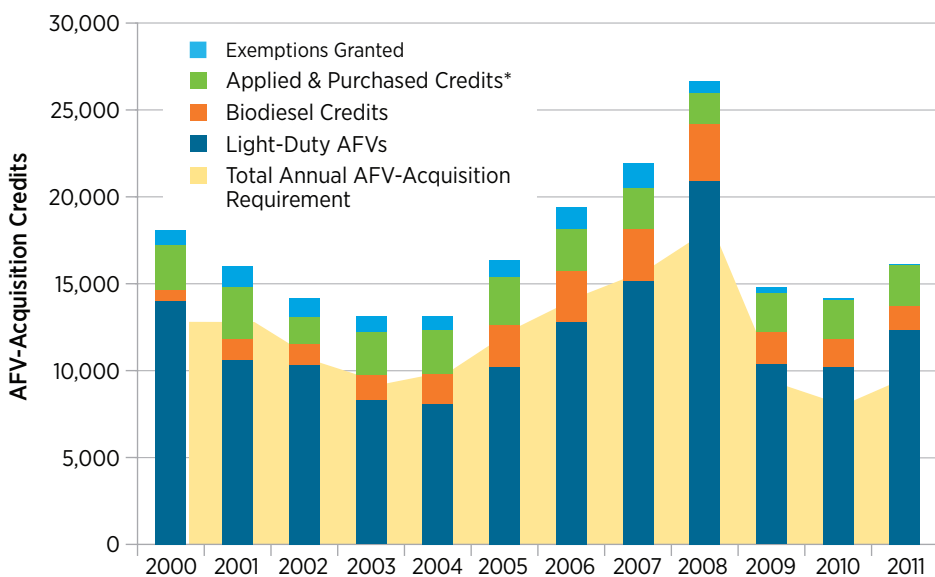
### Standard Compliance

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 medium- or heavy-duty vehicles, and/or applying banked credits earned previously or acquired from other covered fleets. In MY 2011, covered SFP fleets earned a total of 8,011 AFV-acquisition banked credits.<sup>3</sup> These 280 fleets:

- Acquired 12,353 light-duty AFVs
- Earned 1,343 biodiesel fuel use credits through the purchase of over 9 million gallons of pure biodiesel (B100)<sup>4</sup>
- Applied 1,877 banked credits.

As a whole, the fleets operating under Standard Compliance went beyond compliance, exceeding their requirements by approximately 63%.

Standard Compliance Methods



\*Purchased credits can be banked for future use.

<sup>1</sup> Some reporting entities represent one agency or business; others constitute fleet operations for an entire company or state.

<sup>2</sup> AFVs include any dedicated, flexible fuel, or dual-fuel vehicle designed to operate on at least one alternative fuel. These fuels are defined or designated as alternative fuels: methanol, 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 P-Series.

<sup>3</sup> This number of credits equals the number of light-duty AFVs acquired plus the number of biodiesel credits earned.

<sup>4</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 use to meet no more than 50% of its annual AFV-acquisition requirement.

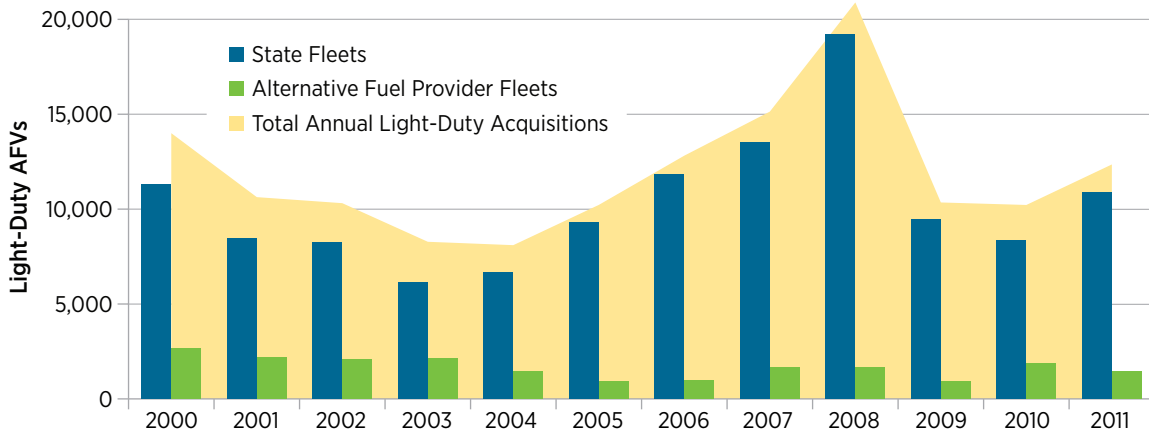
### Vehicle Acquisitions

Acquiring AFVs is typically how covered fleets comply. Under Standard Compliance, 75% of covered light-duty vehicles (LDVs) that state fleets acquire must be AFVs while 90% of covered 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 2011, the number of covered-fleet light-duty AFV

acquisitions was 12,353, approximately 2,200 more than the previous year and the fifth highest annual total over the life of the program. E85 flexible fuel vehicles accounted for nearly 96% of these acquired LDVs.

Light-Duty AFV Acquisitions



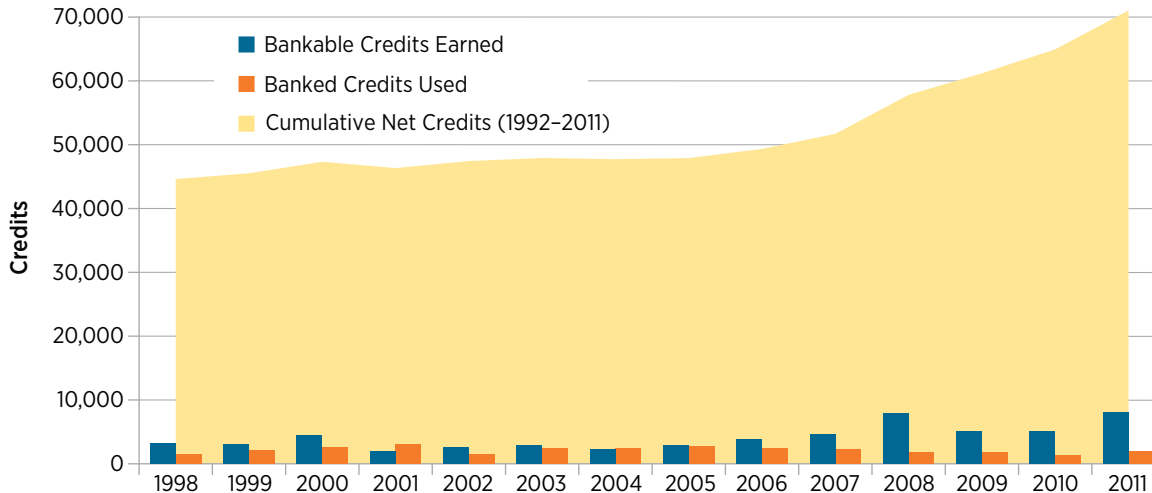
### Credit Use and Acquisition

Covered fleets earn bankable credits by acquiring more AFVs than are required in a given model year. These 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 MY 2011, fleets exceeded

their AFV-acquisition requirements and earned 8,011 credits. Fleets also used 1,877 banked credits to comply with EPCa—a 40% increase from MY 2010. There were 26 transactions between covered fleets involving the transfer of 467 banked credits, which could be used to help fleets meet their

AFV-acquisition requirements. The number of credits exchanged in MY 2011 was less than half that exchanged in MY 2010 (1,090 credits) while the number of transactions also decreased by several in MY 2011 (26) compared to MY 2010 (31).

Annual Credits Earned and Used



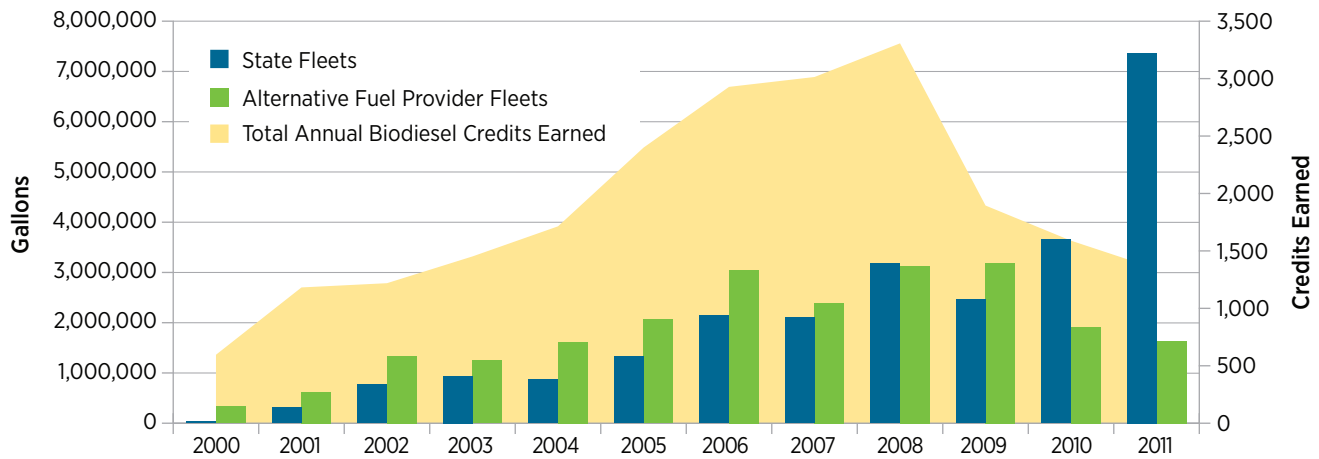
### Biodiesel Fuel Use

Covered 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>5</sup> they purchase for use in medium- or heavy-duty vehicles (10 CFR sections 490.701–702). In MY 2011, covered fleets reported using over 9 million gallons of B100 in B20 blends, allowing covered fleets

to earn a total of 1,343 biodiesel fuel use credits. State fleets earned fewer biodiesel credits than in previous years but reported a significant increase in biodiesel use. This increase likely reflects how fleets report rather than a significant change in operations. Reporting biodiesel use is optional for fleets, so this increase is likely due to more state fleets reporting and a shift to reporting total

biodiesel use instead of only the portion eligible for credit. The credits awarded likely do not reflect the total amount of biodiesel purchased because each fleet may apply its biodiesel use only to meet no more than 50% of its annual AFV-acquisition requirement. Without this limit, biodiesel fuel use credits would have exceeded 20,000 in MY 2011.

Annual Biodiesel (B100) Use and Biodiesel Credits Earned



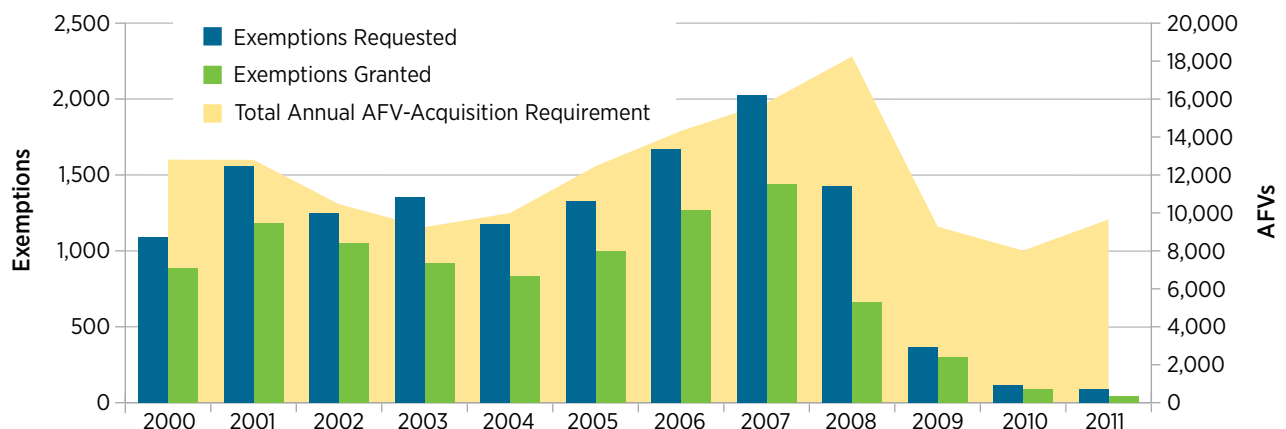
### Exemptions

Overall, granted exemptions<sup>6</sup> represented less than 0.5% (total number of exemptions granted/total AFV-acquisition requirements) of fleet compliance credit activity in MY 2011. Fleets received 46 vehicle exemptions—the lowest total

recorded for the program. In MY 2011, only 10 fleets requested exemptions—a few less than in MY 2010 when only 12 fleets requested exemptions and still a significant decrease from MY 2008 when 33 fleets requested exemptions. MY

2011 continued the additional trend of fewer vehicle exemptions requested (87), a decreasing trend apparent since 2007. The number of exemptions requested for MY 2011 was the program’s lowest since 2000 with the average being 1,121.

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



<sup>5</sup> Learn more about calculating biodiesel fuel use credits at [eere.energy.gov/vehiclesandfuels/epact/biodiesel.html](http://eere.energy.gov/vehiclesandfuels/epact/biodiesel.html).

<sup>6</sup> Exemptions are detailed on the EPA website at [eere.energy.gov/vehiclesandfuels/epact/exemptions.html](http://eere.energy.gov/vehiclesandfuels/epact/exemptions.html).

## Alternative Compliance

MY 2011 marked the fourth year for covered SFP fleets to participate in DOE's Alternative Compliance option to comply with their EPA requirements. EPA 2005 established Alternative Compliance, and the option was put in place by final rulemaking in March 2007 for initial application in MY 2008. Under Alternative Compliance, fleets may 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 (in this case, MY 2012). To receive a waiver, fleets must submit to DOE an intent to apply for a waiver from Standard Compliance. Then they must file an official waiver application that includes a plan showing how they intend to reduce their fleet's petroleum consumption.

### Plans and Achievements in MY 2011

DOE approved waiver applications for 15 fleets to participate in Alternative Compliance for MY 2011. Of these fleets, 10 fleets were able to meet their

required fuel reductions for MY 2011 although all achieved compliance. The 10 fleets' total required petroleum-use reduction for MY 2011 was 1,456,912 gasoline gallon equivalents (GGE). Their total planned petroleum-consumption reduction was 2,076,925 GGE, and in the aggregate, the 10 fleets far exceeded the requirement, reducing petroleum consumption as a group by 2,601,596 GGE. The 10 fleets achieved this amount of reduction and met their petroleum-consumption reduction goals by:

- Using alternative fuels (29.4% petroleum reduction achieved)
- Using biodiesel blends (66.8% petroleum reduction achieved)
- Acquiring and using hybrid electric vehicles (1.6% petroleum reduction achieved)
- Employing fuel economy measures in conventional vehicles (2.2% petroleum reduction achieved).

## Notices of Intent

In MY 2011, DOE received 28 notices of intent to apply for a waiver from

Standard Compliance for MY 2012. This is 19 fewer notices of intent than were received in MY 2010 for MY 2011 compliance.

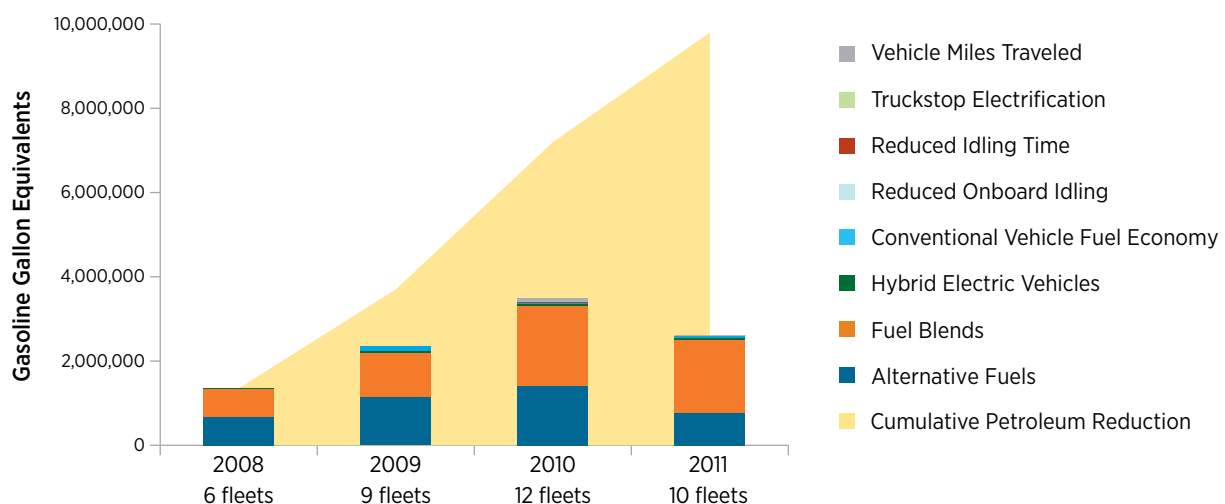
## Conclusion

In MY 2011, covered fleets successfully met their Standard Compliance requirements. Their efforts included acquiring 12,353 AFVs and consuming over 9 million gallons of pure biodiesel (B100). The 10 fleets operating under Alternative Compliance reduced petroleum consumption by 2.6 million GGE. All fleets have filed their annual reports, and all fleets are currently in credit compliance.

### What Is EPA Act?

The Energy Policy Act of 1992 (EPA Act) was passed by Congress to reduce the nation's dependence on imported petroleum. Provisions of EPA Act 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



Front page photo by Pat Corkery, NREL 18094

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