

Fleet Compliance Annual Report: Model Year 2015, Fiscal Year 2016



The U.S. Department of Energy (DOE) regulates covered state government and alternative fuel provider fleets, pursuant to the Energy Policy Act of 1992 (EPAAct), as amended. For model year (MY) 2015, the compliance rate with this program for the more than 301¹ reporting fleets was 100%. Fleets used either Standard Compliance or Alternative Compliance reporting methods.

Fleet Compliance at a Glance

More than 294 fleets used Standard Compliance and exceeded their aggregate MY 2015 acquisition requirements by 8% through acquisitions alone. The seven covered fleets that used Alternative Compliance exceeded their aggregate MY 2015 petroleum use reduction requirements by 46%.

Overall, DOE saw a decrease from MY 2014 in total biodiesel fuel use reported of more than 653,000 gallons of pure biodiesel (B100), but a slight increase in the number of biodiesel fuel use credits earned; about 6.2 million gallons of B100 were reported in MY 2015. There was a small increase

in the number of reported light-duty (LD) alternative fuel vehicles (AFVs) acquired,² a value that is negligible when the number of other creditable vehicles reported is taken into account. MY 2015 marked the second year that fleets complying via Standard Compliance could earn credits for the acquisition of certain non-AFV electric drive vehicles, as well as investments in alternative fuel non-road equipment and alternative fuel infrastructure and emerging technologies. The data for MY 2015 suggest a continued presence of EPAAct-covered state and alternative fuel provider fleets in the AFV, alternative fuel, and advanced technology vehicle markets.

Standard Compliance Results

Covered state and alternative fuel provider fleets operating under Standard Compliance (10 CFR Part 490, Subpart C or D) achieve compliance by acquiring AFVs and certain non-AFVs; purchasing biodiesel for use in medium- or heavy-duty (MD/HD) vehicles; investing in alternative fuel infrastructure, non-road equipment, and emerging technology; and/

or applying banked credits earned previously or acquired from other covered fleets.

In MY 2015, the more than 294 fleets that used Standard Compliance:

- Acquired 16,309 LD AFVs
- Earned 544.5 credits for the acquisition of 1,193 creditable non-AFVs (i.e., hybrid electrics, certain plug-in hybrid electric vehicles [PHEVs], MD/HD electric vehicles, and neighborhood electric vehicles [NEVs])
- Earned 2,309 biodiesel fuel use credits through the purchase of about 6.2 million gallons of B100³
- Earned 225 credits for investments of \$21.9 million in alternative fuel infrastructure and non-road equipment
- Applied 2,080 banked credits.

¹ 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).

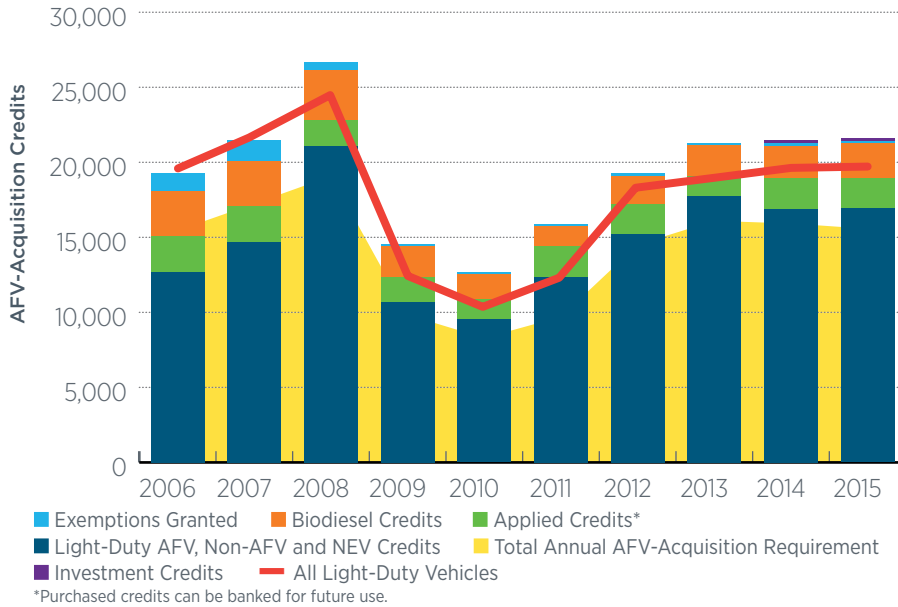
² AFVs include any dedicated or dual-fueled vehicle (i.e., any vehicle that operates solely on or is capable of operating on at least one alternative fuel). The following fuels are defined or designated as alternative fuels: methanol, denatured ethanol, and other alcohols; blends of 85% or more of alcohol 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.

³ 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.

What Is EPAAct?

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

Standard Compliance Methods



In addition, these state and alternative fuel provider fleets earned a total of 10,330 bankable AFV credits.

As a whole, the fleets operating under Standard Compliance went beyond compliance, exceeding their AFV-acquisition requirements (15,558) by approximately 39%.

Vehicle Acquisitions

Acquiring AFVs is typically how covered fleets comply. Under Standard Compliance, 75% of the non-excluded light-duty vehicles (LDVs) that state fleets acquire must be AFVs, while 90% of the non-excluded 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 2015, the number of LD AFV acquisitions by covered fleets was 17,502, a slight increase from the number in MY 2014 (17,476). Changes to the program

effective in MY 2014 allow covered fleets to earn partial AFV-acquisition credits for the acquisition of some vehicles that are not AFVs. Specifically, acquiring hybrid electric vehicles (HEVs), PHEVs that are not AFVs,⁴ and MD/HD electric vehicles can earn a covered fleet 0.5 credit per vehicle, while the acquisition of NEVs can earn a covered fleet 0.25 credit per NEV.

Acquisition of LD vehicles and NEVs that earned less than a full credit each resulted in fleets earning a total of 16,828 credits for acquisition of LD

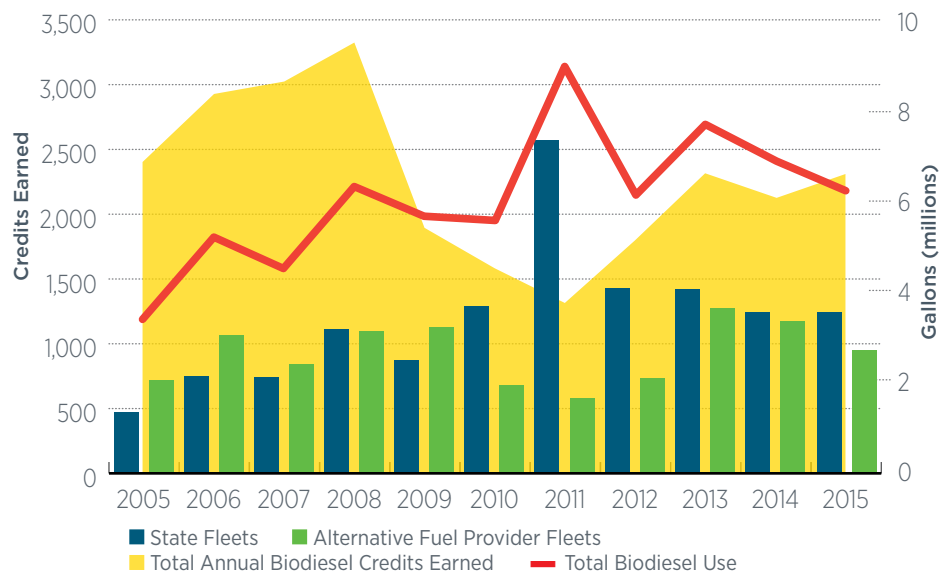
vehicles and NEVs in MY 2015—slightly less than in 2014.

The slight increase from MY 2014 for MY 2015 in the number of AFVs acquired is not necessarily unexpected; even though the MY 2015 figure includes now creditable non-AFVs, the total number of vehicles acquired by covered fleets would not change dramatically over one year. In other words, the number of categories of vehicles for which credits may now be earned has expanded; however, the number of vehicles in total that are acquired may or may not grow, depending on fleet needs. In addition, once covered fleets have achieved compliance, they may earn bankable credits for any MD/HD vehicles they acquire. In MY 2015, covered fleets earned 4,264 credits for the acquisition of MD/HD vehicles. In total, fleets acquired 21,766 creditable vehicles of all size categories. Flexible-fuel vehicles accounted for nearly 90% of these acquired AFVs.

Biodiesel Fuel Use

Covered state and alternative fuel provider fleets may earn one biodiesel fuel use credit for every 450 gallons of pure biodiesel (B100) or one biodiesel fuel-use credit for every 2,250 gallons of 20% biodiesel blends (B20)⁵ they

Annual Biodiesel (B100) Use and Biodiesel Credits Earned



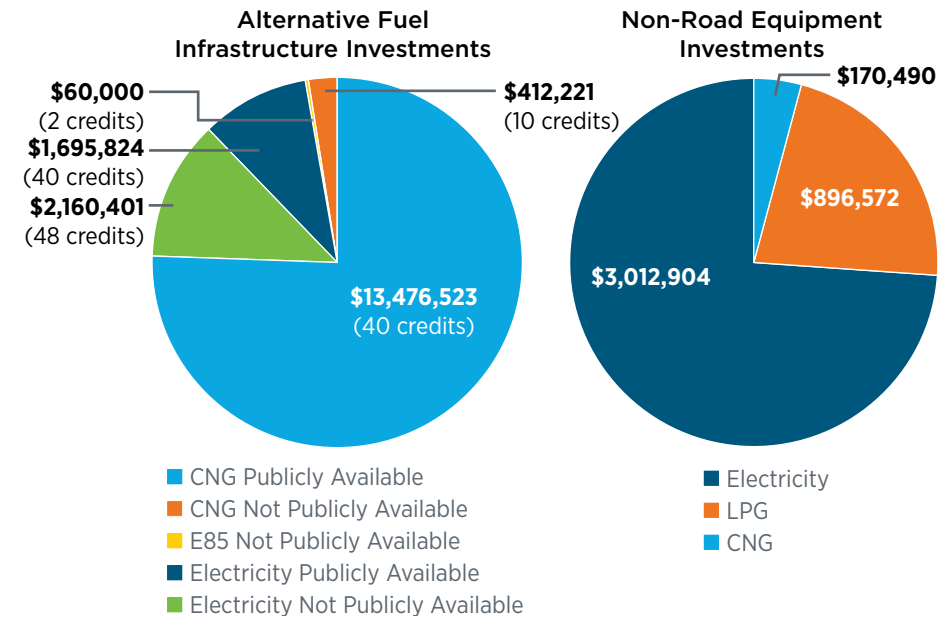
⁴ To be considered an AFV, the vehicle must be a dedicated vehicle or a dual-fueled vehicle. Some plug-in hybrid electric vehicles are considered AFVs and others are not, depending on whether the vehicle in question meets the “dual-fueled vehicle” definition. For additional information, please review program guidance (epact.energy.gov/pdfs/plugin_hybrid_electric_vehicles.pdf).

⁵ Learn more about calculating biodiesel fuel use credits at epact.energy.gov/pdfs/biodiesel_guidance.pdf.

purchase for use in MD/HD vehicles (10 CFR sections 490.701-702). In MY 2015, covered fleets reported using just over 6.2 million gallons of B100 in B20 or higher blends, thus allowing these fleets to earn a total of 2,309 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 that some fleets are reporting only the amount of biodiesel that will earn them those credits rather than reporting all of their biodiesel use.

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 2015, fleets exceeded their AFV-acquisition requirements and earned 10,330 credits for future use. Fleets also used 2,078 banked credits to comply with EAct—an increase over the number of credits applied in MY 2014, when



fleets used 2,022 banked credits. There were 11 transactions between covered fleets involving the transfer of 1,956 banked credits. The number of credits exchanged in MY 2014 was 383, considerably less than in MY 2015, but the number of transactions decreased by two in MY 2015 (11) compared to MY 2014 (13).

Investments

Covered fleets may earn credits for investments in non-road equipment, alternative fuel infrastructure, and

emerging technologies related to electric drive vehicles.⁶ Generally, fleets will earn one credit for every \$25,000 invested.

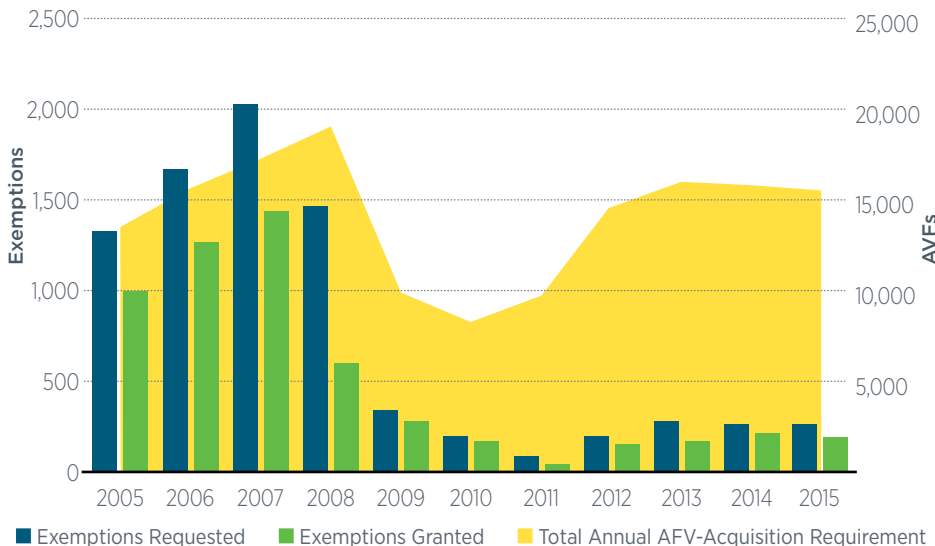
For the alternative fuel infrastructure category—that is, investments in MY 2015 for which covered fleets reported amounts and sought credits—funds were spent for E85, CNG, and electricity infrastructure. The total spent on public and non-public infrastructure totaled more than \$17.8 million. Fleets earned 225 credits for these investments.

In MY 2015, covered fleets earned 81 credits for investments in alternative-fueled, non-road equipment.

Exemptions

Overall, granted exemptions⁷ in MY 2015 represented 1.2% (total number of exemptions granted/total AFV-acquisition requirements) of covered fleets’ compliance credit activity. State and alternative fuel provider fleets received 189 vehicle exemptions—slightly less than the 212 exemptions granted in MY 2014.

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



⁶ Learn more about investments at epact.energy.gov/pdfs/investments.pdf.

⁷ Exemptions are detailed on the EAct website at epact.energy.gov/exemptions.

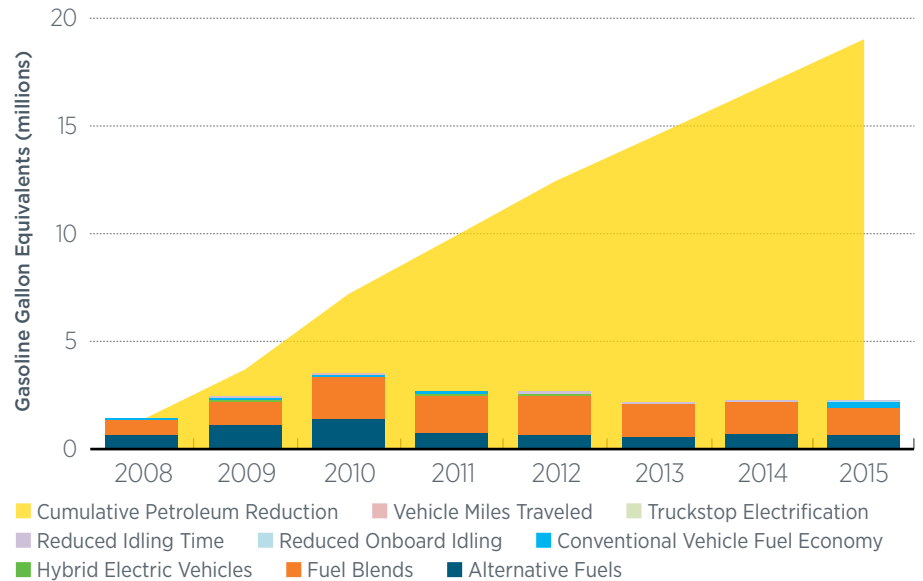
In MY 2015, only four fleets sought exemptions, continuing the trend that began in MY 2008 (a reduced number of fleets seeking exemptions annually). MY 2007 was the peak year for fleets seeking exemptions, when 43 fleets filed for exemptions.

While MY 2015 had 262 exemption requests, this total number of requested vehicle exemptions is still significantly lower than in other program model years. The general trend for exemptions remains downward. Over the period from 2000 to 2008, the average yearly number of exemptions requested was over 1,400, and the average number granted was over 1,000. In contrast, the average yearly number of exemptions requested from 2009 to 2015 was about 232, with an average of 172 granted. With the increased availability of AFV models and opportunities to earn AFV-acquisition credits under the program, and increased availability of alternative fueling infrastructure across the nation, the number of exemption requests and granted requests should continue to remain low and slowly shrink further.

Alternative Compliance Results

MY 2015 marked the eighth year that covered state and alternative fuel provider fleets could choose DOE's Alternative Compliance option in lieu of complying with EPA's Standard Compliance. EPA's 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

Petroleum Reductions Achieved by Alternative Compliance Strategy



in the chart above. Fleets must obtain a waiver from DOE for the upcoming model year. To receive a waiver, fleets first must submit an intent to apply for a waiver to DOE; they then must follow up that intent by filing a complete waiver application that includes a plan showing how they intend to reduce their fleets' petroleum consumption.

Plans and Achievements in MY 2015

DOE approved waiver applications for eight fleets to participate in Alternative Compliance for MY 2015. Seven of these fleets were able to meet their required petroleum fuel use reductions for MY 2015. The seven fleets' total required petroleum use reduction for MY 2015 was 1,515,888 gasoline gallon equivalents (GGE), and their total actual petroleum consumption reduction was 2,211,434 GGE, exceeding the requirement. The seven fleets exceeded their petroleum reduction requirement as a group by 695,546 GGE. The fleets met and exceeded their petroleum reduction goals using the following methods (percentages based on the total

petroleum reduction reported [amount required plus additional achieved]):

- Using biodiesel blends (56%)
- Using alternative fuels (27%)
- Improving fuel economy (14%)
- Limiting engine idling time (3%).

The petroleum reduction the seven fleets in Alternative Compliance achieved in MY 2015 was nearly equal to the petroleum reduction the eight fleets in the same program achieved in MY 2014.

Notices of Intent

During MY 2015, DOE received nine notices of intent to apply for a waiver from Standard Compliance for MY 2016. This is two fewer notices of intent than were received in MY 2014 for MY 2015 compliance.

For More Information

Learn more about the State and Alternative Fuel Provider Fleet Program and Standard and Alternative Compliance at epact.energy.gov, or contact the Regulatory Information Line at 202-586-9171 or regulatory.info@nrel.gov.