EPA Docket Center (EPA/DC) Environmental Protection Agency 1200 Pennsylvania Ave., NW Washington, DC 20460

Submitted via electronic mail to: <u>a-and-r-docket@epa.gov</u>

Docket Number: EPA-HQ-OAR-2010-0799; NHTSA-2010-0131

Request for Consideration of Late-Filed Comments, and Late-Filed Comments on Proposed Rule, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards

# **Introduction and Request for Consideration**

The 25x'25 Alliance, American Council on Renewable Energy, American Seed Trade Association, Association of Equipment Manufacturers, American Farm Bureau Federation, Biotechnology Industry Organization, National Association of Wheat Growers, National Farmers Union and National Sorghum Producers (hereinafter referred to as "25x'25 partners") seek leave to file late comments in the above-referenced dockets and respectfully submit such comments. These comments respond to the original notice of the proposed rule, **2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards**, published in the *Federal Register* on December 1, 2011 (76 FR 74854). 25x'25 partners submit that the Environmental Protection Agency ("EPA") and the National Highway Traffic Safety Administration ("NHTSA") should accept and consider these comments, despite their late filing, for the following reasons:

- Additional comments are, as of this date, still being solicited and accepted electronically on the EPA website for this proceeding at <a href="http://www.nhtsa.gov/fuel-economy">http://www.nhtsa.gov/fuel-economy</a>.
- In an earlier extension of the comment period in this proceeding issued on January 6, 2012, EPA
  and NHTSA stated that "NHTSA and EPA will consider all comments received before the close of
  business on the comment closing date, and will also consider comments received after that
  date to the extent practicable."
- 25x'25 partners submit that it is only in light of recent analyses of market trends and events
  that they could reasonably have understood the implications of the proposed rule as reflected
  in the comments submitted herein.
- 25x'25 partners have not submitted prior comments.
- 25x'25 partners accept the record as it is and do not seek any delay in the issuance of a final rule in this proceeding.
- 25x'25 partners have reviewed such submitted comments only insofar as necessary to discern
  whether other commenters have raised the substantive issues 25x'25 partners seek to have
  EPA and NHTSA consider.

• Consideration of these late-filed comments, to the extent practicable given the timing and the otherwise relatively complete state of the record, is therefore in the public interest.

25x'25 partners, representing a coalition of farm and related public policy organizations, understand the importance of flexible fuel vehicles and the greenhouse gas reduction potential of biofuels and offer the following comments on the following issues:

## **Background Information**

The continued production of flexible fuel vehicles (FFVs) and the advancement of biofuels into the market are critical to expanding renewable fuel use, reducing greenhouse gas (GHG) emissions, and enhancing air quality. Today, nearly 12 million FFVs operate on American roadways. The use of midlevel ethanol blends and E85 in FFVs is a cost-effective and efficient way to help meet the agencies' ambitious standards for improving tailpipe emissions through biofuels utilization. Ethanol and other advanced biofuels such as biobutanol facilitate  $\rm CO_2$  emission reductions both within the vehicle, and, more importantly, throughout its production and combustion life cycle. Furthermore, increased biofuel use contributes to public health: Higher ethanol blends reduce emissions of hazardous air pollutants such as particulate matter (PM 2.5 and ultrafine particles) that result from the burning of aromatic hydrocarbons such as benzene, toluene, and xylene found in conventional fuels.

Despite the many benefits of biofuels, the proposed rule effectively eliminates statutory incentives intended to promote their use. Moreover, it appears to pick favorites by providing much more generous credits to other "advanced vehicle technologies," such as electric and plug-in hybrid vehicles. After a careful review of the proposed new rule in light of recent developments, we believe that the rule:

- 1. Does not sufficiently incentivize the production of FFVs; and
- 2. Does not adequately value the GHG reduction potential of biofuels.

Together, these oversights place the rule in conflict with other established national priorities, policies, and legislation (such as the federal Renewable Fuel Standard (RFS) and the Energy Independence and Security Act (EISA)) while ignoring the economic, public health, and environmental benefits that can be achieved through increased biofuel usage.

#### Rationale for Modification to the Rule

The automotive industry is a business characterized by high capital and development costs, and long vehicle development and life cycles. The proposed GHG standards are very stringent and will drive long-term change in the industry, requiring careful allocation of limited development and capital funds to produce the greatest reduction in GHGs. The proposed rule puts forward a common-sense approach to establishing the adoption of two selected technologies by making their future compliance value clear throughout the life of the rule, which states:

"EPA is proposing that CO<sub>2</sub> compliance values for plug-in hybrid electric vehicles (PHEVs) and bifuel compressed natural gas (CNG) vehicles will be based on estimated use of the alternative fuels, recognizing that, once a consumer has paid several thousand dollars to be able to use a fuel that is considerably cheaper than gasoline, it is very likely that the consumer will seek to use the cheaper fuel as much as possible. Accordingly, for CO<sub>2</sub> emissions compliance, EPA is proposing to use the Society of Automotive Engineers "utility factor" methodology (based on vehicle range on the alternative fuel and typical daily travel mileage) to determine the assumed percentage of operation on gasoline and percentage of operation on the alternative fuel for

both PHEVs and bi-fuel CNG vehicles, along with the CO<sub>2</sub> emissions test values on the alternative fuel and gasoline." (76 FR 74880)

This approach of forecasting a high usage rate for the selected fuels and fixing the rate for the duration of the rules provides certainty as to the future  $CO_2$  compliance value of these technologies. This certainty is needed by auto manufacturers to enable informed long-term investment trade-offs to be developed regarding these technologies.

However, EPA does not provide a similar level of certainty with regard to ethanol FFVs. Rather, it makes a backward-looking argument to estimate future E85 use. "Actual use," presumably after the fuel has been used, has been proposed as a way to calculate E85 CO<sub>2</sub> compliance values. EPA cites patterns of historical usage of E85 in FFVs, ignoring the rapidly increasing production of renewable fuels needed to comply with the RFS contained in the 2007 Energy Independence and Security Act (EISA). Most forecasts of the implementation of this act foresee significant increases in the usage of higher ethanol blends in flex-fuel vehicles, as opposed to past ethanol usage being constrained by the availability of higher blends than E10.

While the "actual use" approach that EPA proposes offers the hope that FFVs would be able to use the E85 CO<sub>2</sub> compliance values once these vehicles are designed, developed, and sold, this hope is a poor substitute for the certainty offered for PHEV and bi-fuel CNG vehicles. It is unlikely that automakers would invest in FFVs based on the uncertain prospect of a CO<sub>2</sub> compliance benefit when other technologies are certain to yield a CO<sub>2</sub> compliance benefit. The resulting shortage of FFVs will make EPA's implementation of the EISA more challenging.

Unlike natural gas and electricity, ethanol and other potential drop-in biofuels used in FFVs have inherent "lifecycle" CO<sub>2</sub> reduction benefits. As outlined in the EISA, ethanol must meet one of several GHG reduction targets. Taking only the currently predominant fuel, corn-based ethanol, EPA itself has found that, on average, corn-based ethanol meets the 20 percent reduction in GHG emissions required in the EISA.

Yet the proposed rule ensures that even if manufacturers could prove that their FFVs ran *solely* on ethanol, they would have no regulatory incentive to include such cars in their fleet. This is because the "0.15 divisor," a statutorily-mandated incentive that boosts the effective fuel economy of FFVs under the CAFE program, is omitted by EPA under the proposed CO<sub>2</sub> standards. Since fuel economy and CO<sub>2</sub> are directly correlated, the absence of an incentive in the EPA portion of the rule eliminates any benefit a manufacturer might gain from utilizing the incentive under the CAFE standards. In other words, the proposed rule not only fails to provide additional incentives for alternative fuel vehicles, it effectively eliminates existing incentives, thereby benefiting petroleum at the expense of cleaner alternatives. In the long run, the removal of a statutory incentive for alternative fuel vehicles will harm air quality, increase GHG emissions, and slow the development of clean alternatives to petroleum-based fuel.

Given the considerable influence the final CAFE-GHG rule will have on the synergistic relationship between fuels and vehicles between 2017 and 2025, and likely beyond, it is imperative the agencies give thoughtful consideration to how future fuels and vehicles can seamlessly and cost-effectively comply with the objectives of this rulemaking. With respect to biofuels, the use of E10 and E15 in legacy and newer vehicles between 2017 and 2025 will prove to be an inadequate substitute for the role FFVs can and should play. If FFVs are adequately incentivized in the final rule, use of E85 and other blends of ethanol in these vehicles will ensure compliance with the 2017-2025 rulemaking and fulfillment of the RFS by 2022 in a way that avoids the infrastructure costs, implementation hang-ups, and legal challenges that have surrounded the E15 waiver.

### **Recommended Changes to the Rule**

The remedy for addressing the lack of parity for FFVs and biofuels is clear: The agencies can and should provide a level playing field for each vehicle technology. Further, the life-cycle CO<sub>2</sub> reductions that ethanol provides must be recognized, and the CAFE incentive for biofuels must be preserved in the combined EPA/NHTSA rule. To these ends, EPA should:

#### 1. Either:

a. Use the Society of Automotive Engineers "utility factor" methodology (based on vehicle range on the alternative fuel and typical daily travel mileage) to determine the assumed percentage of operation on gasoline and percentage of operation on the alternative fuel. This will provide equity in treatment of alternative fuels and create a sensible incentive for continued production of FFVs.

### Or:

- b. Adopt the recommendation offered by the Alliance of Automobile Manufacturers to maintain meaningful FFV credits in the final rule. By using this alternative methodology based on E85 usage in FFVs to calculate GHG emission reductions, a sensible incentive for continued production of FFVs is created.
- 2. Add the life-cycle CO<sub>2</sub> reduction benefits of ethanol to the CO<sub>2</sub> compliance standards by providing a multiplier showing life-cycle CO<sub>2</sub> reduction, rather than simply measuring tailpipe CO<sub>2</sub> emissions, for all blends containing biofuels. This calculus must take into account *at least* the recognized minimum life-cycle CO<sub>2</sub> reduction of 20% for the biofuel portion of any fuel blend. This would be a conservative recognition of ethanol's GHG benefits in light of the fact that future ethanol must meet the requirement of advanced biofuels and achieve a 50 percent GHG reduction.
- 3. At blends of E85 or higher, a 0.15 multiplier must be used for CO<sub>2</sub> calculations, in order to preserve existing statutory incentives for alternative fuels. The inclusion of this multiplier in CO<sub>2</sub> standards would align with EPA's mandate to reduce emissions of GHG and other pollutants, because it will promote investment into alternative engines and fuels that reduce CO<sub>2</sub> on a lifecycle basis, while at the same time reducing a variety of other dangerous criteria pollutants.

These three changes would provide greater certainty in the manufacturing of FFVs and additional credit for biofuel usage based on sound science.

#### Conclusion

As written, the rule could have devastating economic consequences. Failure to meet the biofuel volume targets of the RFS due to an absence of vehicles, because of the lack of meaningful incentives for manufacturers to produce FFVs, would adversely impact America's agricultural and rural economies and our national energy security. EPA's Regulatory Impact Analysis of the RFS2, released in February of 2010, concluded that the implementation of the Renewable Fuel Program would, in the year 2022 (relative to 2007), increase farm income by \$13 billion or 36 percent, improve energy security by \$2.6 billion, and reduce our nation's expenditures on foreign oil by \$41.5 billion. It would also reduce the cost of corn ethanol production by 13 cents per gallon and cut fuel costs by 2.4 cents per gallon for gasoline and 12.1 cents for diesel fuel. In addition, the monetized health benefits were estimated to be as high as \$2.2 billion. This potential, as well as the many gains already made in moving toward the RFS goals, would be jeopardized by the proposed rule.

As noted earlier, the production of FFVs using ethanol and advanced biofuels is a cost-effective means for auto manufacturers to achieve GHG reductions. It is important to note that FFV incentives represent no cost to taxpayers or the government and no additional costs to consumers. Other vehicle technologies, such as natural gas, will require far more resources to establish the infrastructure necessary to enable them to have a meaningful impact on the market.

In summary, the proposed rule will become a self-fulfilling prophecy, one that will create negative outcomes both for consumers and for the environment. The rule presupposes that FFV owners will not elect to use biofuels on the assumption that ethanol fuel blends will remain as expensive as standard gasoline, without the same driving range. Drivers are therefore assumed not to take actual advantage of the potential GHG savings their vehicles make possible. There is also assumed to be no incremental push toward biofuel blends based on their ability to provide the higher octane required for better mileage with lower PM emissions than conventional gasoline despite accumulating evidence for major health problems from such PM emissions.

These assumptions drive the proposed rule to deny the credit for GHG savings that FFVs would deserve if they were used with biofuels. The problem is then compounded by the absence of *any* incentive for alternative fuels under EPA's CO<sub>2</sub> standards, even for dedicated vehicles, thus eliminating the benefit purportedly offered under the CAFE rules. This loss of credit ensures that vehicle manufacturers have no real world incentive to manufacture such vehicles, despite the modest incremental cost of making an FFV compared to a standard motor vehicle. The net effect will result in dramatic declines in FFV manufacture. The dramatic decline in FFV production will then ensure that customers will not be able to purchase FFVs even if biofuel blends are available in widespread locations or are available at costs considerably less than standard gasoline as a function of the major biofuels production scale-up the RFS calls for. Seeing the prospective loss of their major new market and the potential for very poor investment recovery, biofuel producers will simply not make the investments required to produce biofuels at scale.

As a result, the nation will fail to achieve the Renewable Fuel Standard, the rural American economy will lose its biggest opportunity for sustained economic health in generations, and the high-compression engines required to produce fuel economy will not have a high-octane fuel free of the toxic emissions that already comprise a major unaddressed health problem today. Only biofuel blends can provide the critical octane while decreasing PM emissions, but this rule will ensure it is not available for that purpose. And biofuels offer a better alternative for GHG reduction, both in use and in manufacture, than natural gas vehicles or electric vehicles powered by electricity generated – as 70 percent currently is – by fossil fuels, with the inherent GHG emissions and 33% average energy conversion efficiency of the electric grid.

In short, the proposed rule sets up a cascade of negative effects that will deprive biofuels of their opportunity to make a critical contribution to national policy only they can make, and it does so simply by embodying an implicit assumption that biofuels will not make that contribution because they have not already done so. 25x'25 partners appreciate the opportunity to submit late-filed comments on the proposed rule and urge their consideration to the extent practicable by EPA and NHTSA in adopting a final rule. Please feel free to contact us with any questions related to information contained within these comments.

### Respectfully submitted,

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