



API Fuels / Downstream Strategies Subcommittee Report

Fuel Carbon Reduction Standard (FCRS) Stakeholder Engagement

August 19, 2021

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1

Voiceover The focus of the presentation is an update on the FCRS work. API continues to also focus on the near term RFS issues (e.g., RVO, Set)

FCRS Policy Progress

Today's Agenda

- Provide update on stakeholder engagement plans
- Demonstrate linkage of FCRS to future Well-to-Wheels vehicle fuel efficiency standard for overall program benefits
- Discuss Endangerment Finding
- Discuss regulatory and legislative milestones and timing to implement FCRS concepts

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2

Recap from July 15 meeting

Progress on Action Items from July 15 Downstream Committee Meeting

- Five potential paths were identified, some of which are interdependent.
- Stakeholder feedback is critical to determine which of the pathways are most viable.
- A carbon intensity standard using 211(c) authority provides the most flexibility
 - Allow credits for CCUS and refinery investments
 - Links directly with a new vehicle WTW standard
- API should look at the RFS Set as the most likely short-term option
 - Defined regulatory timeline to complete the Set – 2023 time period
 - Begin necessary changes and start accruing benefits while the ultimate program is developed.
 - EPA career staff may be receptive and supportive of the carbon intensity changes that will help set up the FCRS in the long term.

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3

FCRS Stakeholder Engagement List

Biofuels / Agriculture

- Advanced Biofuels Association
- Renewable Fuels Association
- Growth Energy
- American Farm Bureau
- Agricultural Retailers Association

Auto OEM

- Alliance for Automotive Innovation
- Toyota Motor North America
- Stellantis

Other

- American Fuel & Petrochemical Manufacturers
- Coalition for Renewable Natural Gas

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4

FCRS Stakeholder Messages

Vehicle/Engine OEMs

- Messages
 - Account for fuel well-to-wheels CO₂ emissions across all vehicle types.
 - Link fuel carbon intensity reductions with vehicle GHG standards.
 - Fuel carbon intensity reductions get included in new vehicle certification and generate credits for OEMs.
- Questions
 - Would you support linking a carbon intensity-based fuel standard with vehicle fuel economy standards to better incent lifecycle GHG reductions? For light duty? Medium and Heavy duty?
 - Do you see 95 RON as a major enabler of near-term transport carbon reduction?

Biofuels

- Messages
 - A well-designed carbon-intensity based fuel standard is needed to drive carbon reduction
 - Vehicle standards should link with a CI fuel standard to establish a WTW fuel economy/CO₂ standard.
 - Consider RVP standards, BD/RD labeling, and infrastructure incentives to increase market access
- Questions
 - Would you support the layering on of a carbon intensity standard on top of the RFS to achieve that goal?
 - Would you support shifting the RFS from a volumetric mandate to a carbon intensity standard to achieve that goal?

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5

FCRS Stakeholder Messages

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6

Benefits of a Well To Wheels Vehicle Standard

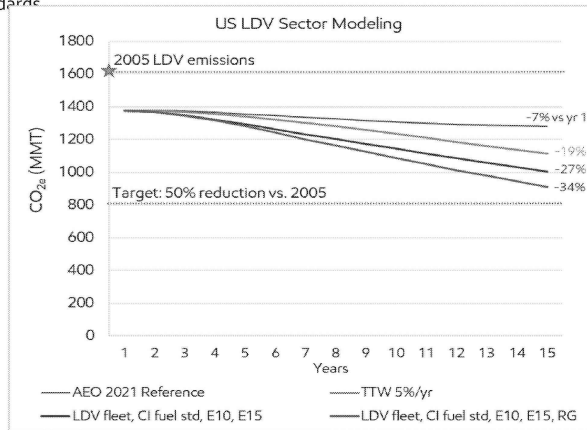
- Enables deeper and faster decarbonization of the existing vehicle fleet through fuel standard CI reductions incentivizing the use of lower carbon fuels
- Enables consistent CO₂ accounting across various fuel/vehicle technologies
 - Current TTW standards focus on combustion emissions only, understating total fuel GHG emissions (e.g., upstream impacts from electricity generation)
 - WTW basis provides a level playing field across ICE, EV, hydrogen, CNG, etc.
- Automakers can achieve greater CO₂ reductions taking advantage of lower carbon intensity fuels
 - New vehicle certification would be based on the fuel standard CI target for a given year.
 - As fuel CI is reduced over time, CAFE compliance becomes more achievable with ICE vehicles, enabling even higher CAFE targets
 - Similarly, as carbon reductions are achieved in the power sector, the CO₂ footprint of EVs would also improve.
 - Layering a higher octane standard (e.g., 95 RON) would increase CAFE compliance options for automakers and could incentivize higher ethanol fuels (e.g., E15)

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7

Well To Wheels Vehicle Standard Analysis

- As modeled, CI-based fuel standards could result in up to 34% lower LDV GHGs in 15 years
- A 50% LDV GHG reduction target vs. 2005 by 2030 would require more stringent CI-based fuel and vehicle CO₂ standards



Data Sources:

1. CO₂ emissions based on EIA energy demand, fuel pool CI
2. EM analysis examples for illustration purposes.

Vehicle CO₂ standard 5%/yr improvement (TTW)
CI-based fuel standard a) E10, E15 and b) E10, E15, RG

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Summary and Next Steps

Summary:

- 1.
- 2.

Next Steps:

- 1.
- 2.

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11

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