

Briefing Notice

Can Fuel Efficiency Standards Be Met Cost-Effectively? The Potential for High-Octane, Low-Carbon Fuels

Monday, November 13, 2017 2:00 PM – 3:30 PM

Room 106 Dirksen Senate Office Building

Please RSVP to expedite check-in: <u>www.eesi.org/111317cafe#rsvp</u> Live webcast (connection permitting) will be streamed at: <u>www.eesi.org/livecast</u>

To cut petroleum usage and reduce greenhouse gas emissions, fuel efficiency standards are set to rise significantly by 2025 under the Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) standards—jointly administered by the National Highway Traffic Safety Administration (NHTSA) and EPA. However, the automotive marketplace has changed significantly since the standards were written in 2009. Sustained low gas prices and the growing popularity of trucks and SUVs have led the auto industry to claim that it will be impossible to meet both 2025 and long-term efficiency standards without significant changes to the programs. Fortunately, there is another low-cost pathway available to regulators to preserve strong fuel efficiency standards and improve fuel quality.

The **Environmental and Energy Study Institute** (EESI) invites you to a briefing examining how highoctane, low-carbon fuel can enable CAFE compliance. Research suggests that high-octane, low-carbon fuel is the lowest-cost compliance option for both consumers and the automotive industry. Speakers for this forum are:

- Dr. Robert McCormick, Principal Engineer, Fuels and Combustion Science Group, NREL
- Brian West, Group Leader, Fuels, Engines, and Emissions Research Group, ORNL
- Dean Drake, President, the Defour Group LLC
- Andrew Varcoe, Partner, Boyden Gray & Associates

Taking steps to reduce GHG and toxic emissions from the passenger vehicle fleet is critical. The U.S. transportation sector is responsible for 27 percent of greenhouse gas emissions as well as half of all toxic emissions in the United States. Numerous health studies have linked tailpipe exhaust to serious developmental and many chronic health conditions. While electric vehicles represent the greatest *potential* reduction in lifecycle and tailpipe emissions and will play an important role in decarbonizing the transportation sector, the internal combustion engine is likely to dominate vehicle sales for the next several decades. Therefore, it is important to ensure that fuel economy is addressed in these vehicles.

Higher-octane, low-carbon fuels enable greater engine efficiencies, thereby lowering GHG and toxic emissions and improving fuel economy. Automotive engineers have expressed interest in raising the octane level of gasoline, which would enable the design and sale of these more efficient engines, but the administration must act to enable a viable pathway for these fuels to enter the marketplace. A high-octane, low-carbon blend of 25 percent ethanol and 75 percent gasoline (E25), for example, would lead to fuel efficiency improvements between 5 and 10 percent, significantly reducing consumer fuel costs and harmful tailpipe emissions.

This event is free and open to the public. For more information, contact Jessie Stolark at jstolark@eesi.org or (202) 662-1885

