

ONE HUNDRED FIFTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

March 5, 2018

To: Subcommittee on Environment Democratic Members and Staff
Fr: Committee on Energy and Commerce Democratic Staff
Re: Hearing on “The Future of Transportation Fuels and Vehicles”

On **Wednesday, March 7, 2018, at 10:15 a.m. in room 2322 of the Rayburn House Office Building**, the Subcommittee on Environment will hold an oversight hearing entitled, “The Future of Transportation Fuels and Vehicles.”

I. BACKGROUND

Several federal policies and programs play a role in the development of markets for civilian transportation fuels and vehicles. These include tax incentives, loan programs, research and development support, standards setting on vehicle efficiency and engine emissions, federal procurement programs, vehicle purchase credit, infrastructure development support, and mandates for use of biofuels. Five departments administer federal programs: the Department of the Treasury, the Department of Energy (DOE), the Department of Transportation (DOT), the Department of Agriculture (USDA), and the Environmental Protection Agency (EPA).

A major federal policy goal has been to improve national energy security by reducing demand -- through development of more efficient vehicles -- for petroleum imports, and by expanding and diversifying the supply of transportation fuel. Over time, federal policy has moved beyond energy security to address other important goals to increase domestic vehicle manufacturing, improve air quality, aid rural economies, lower consumer fuel costs, and address climate change by reducing greenhouse gas emissions.¹

¹ Congressional Research Service, *Alternative Fuel and Advanced Vehicle Technology Incentives: A Summary of Federal Programs* (Jun. 2, 2015) (www.crs.gov/reports/pdf/R42566).

As a result, transportation fuels and passenger vehicles have diversified over the past few decades. While gasoline blended with ten percent ethanol remains the most common fuel, vehicles using diesel fuel, higher ethanol blends, compressed natural gas, and electricity are also available. Automobile companies also plan to introduce additional vehicle models powered by fuel cells and hybrid gasoline-electric technology, as well as fully electric vehicles.

The Committee has jurisdiction over a number of important programs influencing these developments. These programs include the renewable fuel standard (RFS) program administered by EPA, the corporate average fuel economy (CAFE) standard program administered by the National Highway Traffic Safety Administration (NHTSA) at DOT, and the research and development and loan programs at DOE.

This hearing will explore potential mid- to long-term directions for transportation fuels and vehicles under current federal policy, and projected supply and demand factors that influence consumer choice of fuel and vehicle purchases. Hearing testimony could also touch on aspects of the RFS program or a related CAFE-greenhouse gas vehicle standards proposal, which NHTSA and EPA are currently considering. For background information on these programs and recent Committee activity on these issues, please see the Democratic memos covering the recent [hearing](#) in the first session of the 115th Congress, as well as [related hearings](#) during the 114th Congress.

II. NREL PROGRAM ON CO-OPTIMIZATION OF FUELS AND ENGINES

One lesser-known program that this hearing will highlight relates to Fuel and Engine Co-Optimization research conducted by DOE's National Renewable Energy Laboratory (NREL). The goal of this program is to determine the combinations of fuel and engine characteristics that deliver the best overall performance in terms of engine efficiency, emissions reduction, and affordability. The program was initiated as part of an overall goal to reduce greenhouse gas emissions from transportation by 80 percent by 2050, with the co-optimization program contributing nine to 14 percent of the reductions. NREL conducts this program with involvement of experts from other DOE national laboratories and input from stakeholders from light and heavy-duty vehicle manufacturers, oil companies and refiners, biofuel companies, regulatory agencies, and consumer organizations.²

III. WITNESSES

The following witnesses have been invited to testify:

John Eichberger
Executive Director
The Fuels Institute

² For additional information on DOE's Co-Optimization work and links to recent publications see: Department of Energy, Bioenergy Technologies Office (www.energy.gov/eere/bioenergy) (accessed Mar. 4, 2018).

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