



March 14, 2024

Hon. Norman Needleman, Co-Chair
Hon. Jonathan Steinberg, Co-Chair
Joint Energy and Technology Committee
Legislative Office Building
Room 3900
Hartford, CT 06106

Co-Chairs Needleman and Steinberg,

Growth Energy is the world's largest association of biofuel producers, representing 97 U.S. plants that each year produce more than 9 billion gallons of cleaner-burning, renewable fuel, 117 businesses associated with the production process, and tens of thousands of biofuel supporters around the country. Together, we remain committed to bringing better and more affordable choices at the fuel pump to consumers, improving air quality, protecting the environment for future generations, sustaining family farms, and driving down the costs of transportation fuels for consumers.

Thank you for the opportunity to provide written testimony for HB 5440, which requires the use of the Argonne National Laboratory's greenhouse gases, regulated emissions, and energy use in technologies (GREET) model in the Department of Energy and Environmental Protection's lifecycle analysis of biofuels. Growth Energy strongly supports the use of GREET in any lifecycle analysis of biofuels, as it is the most accurate and up-to-date lifecycle analysis of greenhouse gas emissions for transportation fuels. Additionally, we support the inclusion of farm-level climate-smart agricultural practices when considering biofuels' lifecycle emissions. There has been a wealth of data including a recent study done by Argonne National Laboratory showing the possibility of a 35 percent reduction in carbon intensity through adoption of current best on-farm practices such as cover crops, no till, low carbon, fertilizer use, and other innovations.¹

Use of Higher Blends of Bioethanol Leads to Better Environmental Outcomes

Growth Energy also strongly advocates for the important role low-carbon biofuels can play in reducing the state transportation sector's carbon emissions. A primary solution for decarbonizing the liquid transportation fuel supply is the promotion of additional use of bioethanol. Today, 98 percent of all gasoline sold in the U.S. contains 10 percent bioethanol. E15 (gasoline with 15 percent bioethanol) is approved for all 2001 and newer vehicles, more than 96 percent of all light duty vehicles on the road today. Consumers have now driven more than 100 billion miles on E15, and retailers have conducted millions

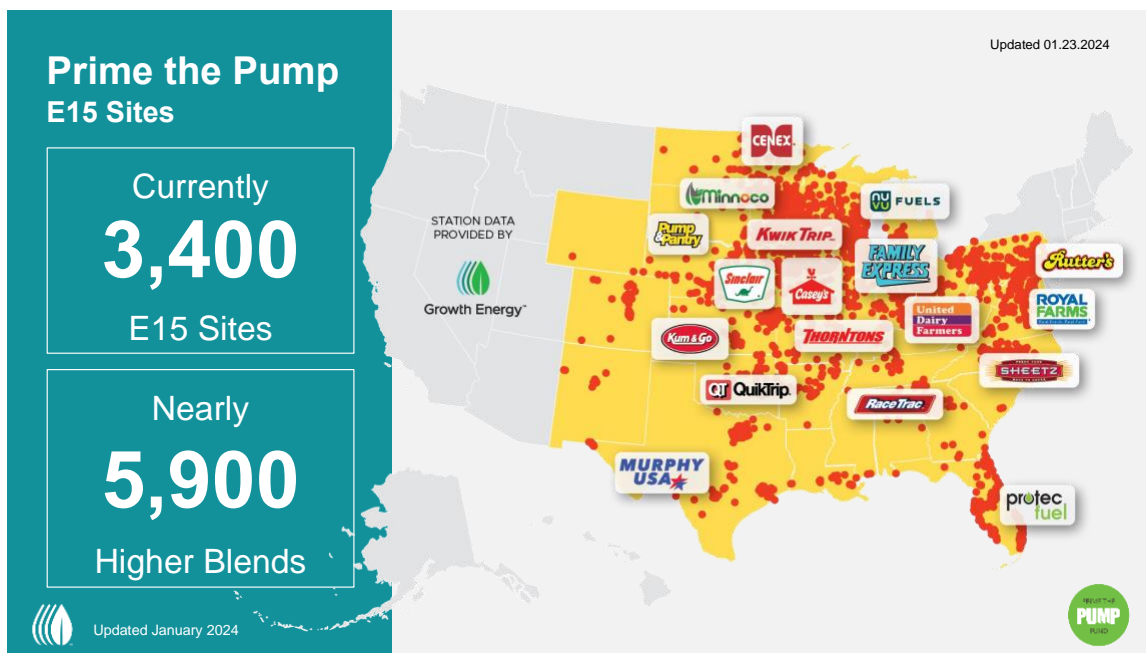
¹ <https://www.anl.gov/article/argonnes-pivotal-research-discovers-practices-technologies-key-to-sustainable-farming>

of transactions with this fuel. There have been no adverse reports of fuel quality experienced with E15 since first being approved 13 years ago.

According to recent data from Environmental Health and Engineering, today's bioethanol reduces greenhouse gas emissions (GHG) by nearly 50 percent compared to gasoline and can provide even further GHG reductions with additional readily available technologies.² A study conducted in 2022 by the University of California – Riverside found that shifting from E10 to E15 reduces emissions including harmful particulates and air toxics such as carbon monoxide, and benzene.²

The potential for fuels with higher blends of bioethanol to reduce GHGs are further illustrated in a national analysis showing more than 177,000 tons in GHG reduction in Connecticut alone if E10 gasoline was replaced with E15.³ These studies illustrate the vital role that higher bioethanol blends play in protecting our air, our climate, and our health.

In addition to its clear environmental benefits, E15 saved drivers an average of 15 cents per gallon last summer.⁴ It is now available at more than 3,400 retail locations in 31 states, and higher bioethanol blends such as E85 are available at nearly 6,000 sites around the country. Unfortunately, in Connecticut, there are no retail locations selling E15 and only 6 retail locations selling E85.⁵



² <https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf>

³ <http://www.airimprovement.com/reports/national-e15-analysis-final.pdf>

⁴ <https://growthenergy.org/2023/09/19/summer-savings-with-e15/>

⁵ <https://getbiofuel.com/fuelfinder/>

Biofuels Are the Primary Feedstock of SAF

Additionally, our members embrace the role biofuels play in the aviation industry, which the state's work on the 2022 Comprehensive Energy Strategy categorized as an industry "hard to decarbonize."⁶ The adoption of GREET for the sustainable aviation fuel (SAF) federal tax credit is critical to the inclusion of biofuels in the efforts to reduce aviation's carbon emissions. With current technologies, farm-based feedstocks—including bioethanol and corn oil—are the primary source of clean, renewable energy that can be used to produce volumes large enough to meet the demand. As a result, harnessing the U.S. bioethanol industry, which at 17.4 billion gallons per year accounts for over 80% of biofuel production in the United States, will be necessary to achieve U.S. goals for decarbonizing the aviation sector. HB 5440 will provide the opportunity for biofuels to be an essential contributor to Connecticut's aviation decarbonization efforts.

Given our experience with state and national fuel policy, and our focus on expanding the use of lower-cost, environmentally beneficial fuels with higher bioethanol blends, we are happy to assist the committee with technical questions as they consider this important legislation. Additionally, we are available to answer any questions on sustainable aviation fuel, GREET modeling, and biofuels' role in decarbonization. Thank you in advance for your consideration.

Sincerely,



Chris Bliley
Senior Vice President of Regulatory Affairs
Growth Energy

⁶ https://portal.ct.gov/-/media/DEEP/energy/CES/Agenda_CES_Technical-Session-1.pdf