



Growth Energy™
Expanding America's Bioeconomy

June 7, 2024

Abbey Brown
Clean Fuel Standard Technical Lead
Department of Ecology
PO Box 47600
Olympia, WA 98504

Re: Comments on Washington's Amendments to the Clean Fuel Standard

Ms. Brown,

We appreciate the opportunity to comment on the Department of Ecology's (Ecology) proposed updates to the state's Clean Fuel Standard (CFS). Growth Energy is the world's largest association of biofuel producers, representing 97 U.S. plants that each year produce more than 9.5 billion gallons of renewable fuel; 119 businesses associated with the production process; and tens of thousands of biofuel supporters around the country. Together, we are working to bring better and more affordable choices at the fuel pump to consumers, improve air quality, and protect the environment for future generations. We remain committed to helping our country diversify our energy portfolio in order to grow more green energy jobs, decarbonize our nation's energy mix, sustain family farms, and drive down the costs of transportation fuels for consumers.

We applaud Ecology's efforts to reduce Washington's greenhouse gas (GHG) emissions in the transportation sector and believe the biofuels industry represents the greatest opportunity to lower carbon emissions immediately as future technologies are developed. Growth Energy's members produce biofuels which, 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.¹ A study conducted in 2022 by the University of California – Riverside found that shifting from E10 to E15 (gasoline containing up to 15% ethanol) in light-duty vehicles reduces emissions including harmful particulates and air toxics such as carbon monoxide, and benzene.²

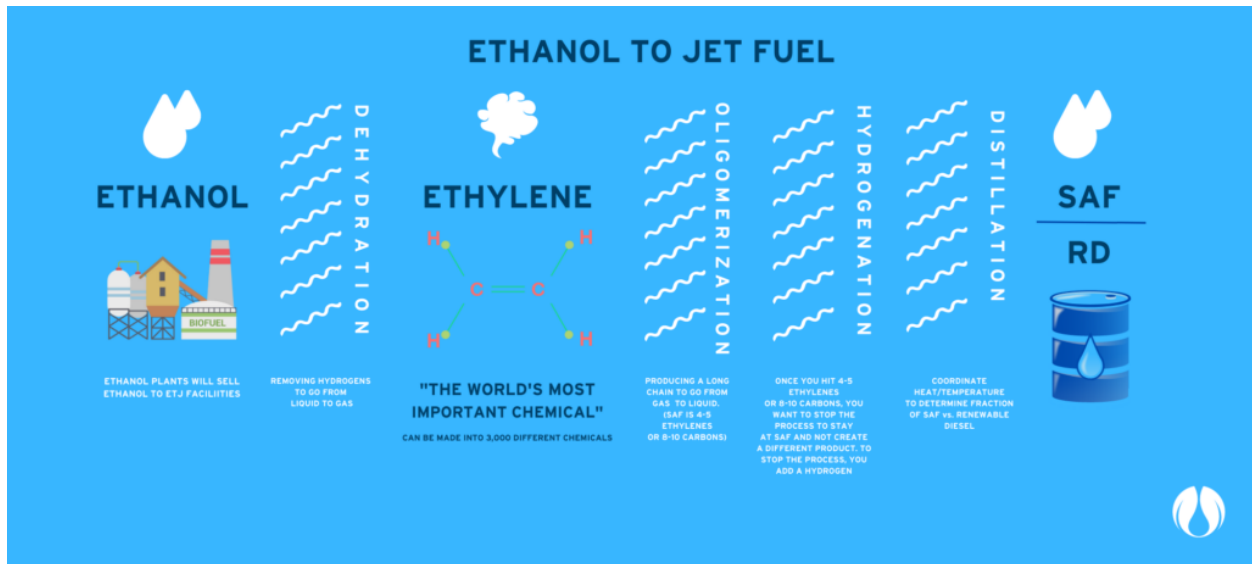
Bioethanol's Role in SAF Production

The opportunity for biofuels to contribute to the aforementioned carbon emissions reductions is evident in the aviation industry and the use of sustainable aviation fuel (SAF). With current technologies, farm-based feedstocks of bioethanol and corn oil are the primary source of clean, renewable energy that can be used to produce volumes large enough to meet demand. While

¹ <https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf>

² https://ww2.arb.ca.gov/sites/default/files/2022-07/E15_Final_Report_7-14-22_0.pdf

Ecology's proposed changes and the request for comments on those changes does not include modifications to the state's carbon lifecycle analysis or the valuation of land use change penalties, Growth Energy believes these issues are critical to the success of SAF. Alcohol-to-Jet SAF, when the policy and carbon intensity modeling is done correctly, can be a crucial component to Washington's ambitious goal of aviation decarbonization.



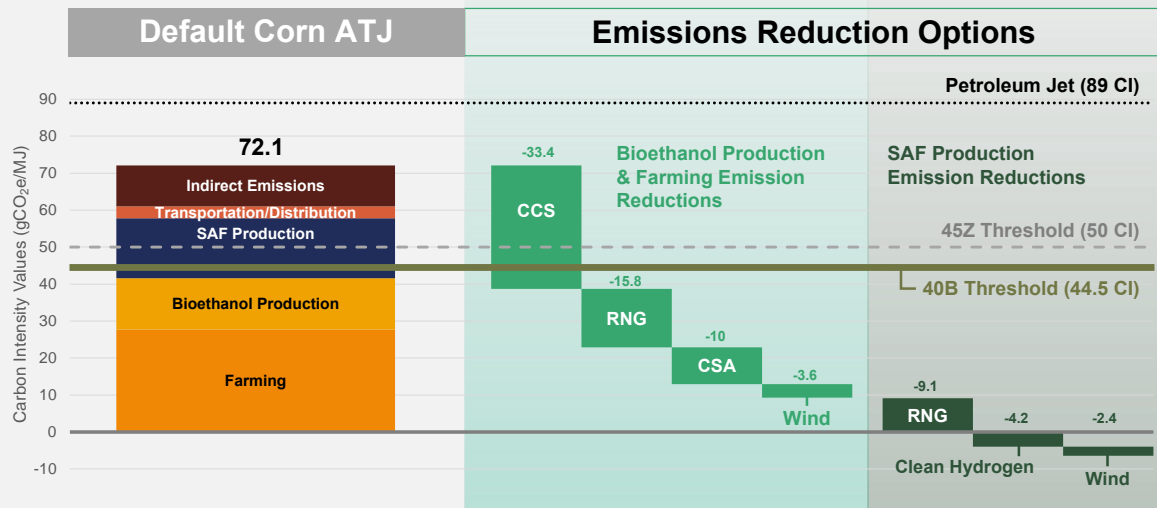
Recognizing the Carbon-Reduction Values of Farm-Level Climate Smart Ag Practices

In order for Washington to take advantage of SAF's ability to reduce carbon emissions, Ecology should consider recognizing farm-level climate-smart agriculture practices. There has been a wealth of data including a recent study done by Argonne National Laboratory (ANL) that show 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.³ Allowing appropriate credit will help bioethanol producers continue to further innovate and lower their carbon intensity, while providing key incentives for farmers to adopt these effective conservation practices. In a recently released 40B guidance for SAF production, the U.S. Department of Treasury acknowledged the role climate-smart agricultural practices play in reducing GHG emissions in the aviation industry.⁴

³ <https://www.anl.gov/article/argonnes-pivotal-research-discovers-practices-technologies-key-to-sustainable-farming>

⁴ <https://home.treasury.gov/news/press-releases/jy2307>

40B GREET Pathway for Bioethanol Feedstock



SOURCE: Department of Energy 40B GREET model (2024)

Revising Land Use Change Penalty Based on Current Science

Currently, Washington's greenhouse gases, regulated emissions, and energy use in technologies (GREET) assigns an indirect land use change (ILUC) penalty of 19.8g/MJ for cornstarch bioethanol. This number is largely based on outdated and flawed data. A review of the more recent science over the last 5 years indicates a decreasing trend in land use values with the newer data indicating values closer to 4 gCO₂e/MJ.⁵ The ILUC value should reflect the latest science that better addresses innovation and increasing yields in agriculture. As Ecology considers alignment with other states' clean fuel programs, it is important to note that Oregon assigns an ILUC penalty of 7.6g/MJ. We request Ecology consider aligning WA-GREET's ILUC value for cornstarch bioethanol with Oregon's value. By recognizing the latest science and adjusting the ILUC penalty, Ecology can allow bioethanol to continue its ability to further reduce GHG emissions within the state's legacy vehicle fleet.

Expanding the Use of Low-CI Power Book-and-Claim Accounting

Ecology currently does not allow for biofuels producers to utilize low-carbon intensity power sourcing via book-and-claim accounting. Allowing biofuels producers to source contracted low-CI power via power purchase agreements incentivizes the generation of cleaner electricity. This would position Washington as a national leader, encouraging the use of low-CI power in other states as the vast majority of biofuels used in Washington is produced out of state. We encourage Ecology to take advantage of book-and-claim accounting for sourcing low-CI power by allowing all fuel types to access this CI reduction tool.

⁵ <https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf>

Third-Party Verification for Fuel Pathways

Verification of pathways is an important component in ensuring the CFS attains its objectives. Bioethanol producers work with accredited and experienced firms to conduct audits and verify producers' pathways achieve their GHG reductions. Auditors' consistent work with biofuel producers allows audit teams to become more familiar with individual producers' processes and operations over time. As a result, the audits become more efficient and effective, improving the integrity of the CFS. While we appreciate Ecology's intent to strengthen the auditing process, we believe a firm rotation requirement would be costly to biofuel producers and could negatively impact audit quality. We encourage Ecology to find an alternative to an audit firm rotation requirement that satisfies the CFS' verification needs without placing undue burdens on biofuel producers.

More broadly, we look forward to continuing to work with you as the proposed changes to the CFS are considered further, and to ensure the role of biofuels in making Washington's fuel mix more sustainable and help the state achieve its ambitious climate goals through the use of bioethanol.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Bliley". The signature is fluid and cursive, with a large, stylized "B" at the end.

Chris Bliley
Senior Vice President of Regulatory Affairs
Growth Energy