

United States Senate

WASHINGTON, DC 20510

March 18, 2021

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Avenue SW
Washington, DC 20250

Dear Secretary Vilsack,

As the Department of Agriculture (USDA) works to ensure the inclusion of agriculture-based biofuels as part of the effort to decarbonize our fuel supply, it's critical that lifecycle carbon assessments of biofuels be based on current and sound science. Fuels like biodiesel offer a sustainable, readily available source of emissions reductions, but full acknowledgement of such contributions require accurate data and modeling.

We were encouraged by your response to a question for the record in your confirmation hearing, in which you committed to "request a review of the current literature and an evaluation of the benefit of a new study focused on biomass-based diesel." We write in support of such a review and request that you instruct USDA complete a full lifecycle assessment of soybean oil-based biodiesel, including direct and significant indirect emissions, before the end of the year.

As you know, USDA updated its assessment for corn ethanol in 2019, providing a federally supported figure for the first time since the 2010 implementation of the RFS. The analysis projected that corn ethanol could reach emissions reductions as high as 47-70 percent compared to conventional gasoline.¹ More recent studies find that average ethanol emissions are approaching this range, with an average of 46 percent greenhouse gas reductions.²

However, similar analysis has not yet been conducted for biodiesel, denying a timely opportunity for a federally directed study to further inform the ongoing discussion about biofuels and lifecycle emission reductions. As part of this review, USDA should consider the most recent analysis conducted by the Department of Energy's Argonne National Lab's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model, USDA's indirect land use change assessment, and the indirect land use change assessment conducted by Purdue University.³

We believe an updated assessment will show significant reductions in the overall lifecycle emissions of biodiesel, reinforcing the fact that America's soybean farmers and biodiesel

¹ <https://www.tandfonline.com/doi/full/10.1080/17597269.2018.1546488>

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

³ <https://www.purdue.edu/newsroom/releases/2020/Q1/dont-blame-u.s.-biofuels-for-indonesia-and-malaysia-deforestation,-study-shows.html>

producers are among the most sustainable in the world. For example, in 2018, Argonne National Lab conducted a life cycle assessment of soybean oil-based biodiesel's direct and significant indirect greenhouse gas emissions. They calculated a carbon intensity 33 percent lower than EPA's outdated 2010 analysis.⁴ Without an update to EPA's soybean oil analysis, which would be influenced by new USDA data, the agency will continue to leave over 3 million metric tons of CO2 emission reductions uncredited every year due to continued reliance on outdated science. These additional reductions will add to the over 25 million metric tons of emissions already avoided annually by domestic biodiesel producers.

Our request comes at a critically important time as states, regions, and municipalities are designing new or expanding existing greenhouse gas reduction targets. We believe that biofuels have already demonstrated their value as a readily available fuel that is compatible with existing vehicle fleets and fueling infrastructure. However, providing an updated, federally supported lifecycle assessment of soybean oil-based biodiesel will help ensure that this product is given accurate credit when considering carbon reduction strategies. Additionally, since EPA generally benchmarks new RFS pathways petitions against soybean oil, USDA providing EPA with an updated assessment could help facilitate new pathway approvals for burgeoning areas of agriculture like winter oilseed cover crops.

We thank you for your timely consideration of this matter and look forward to working with you on this important issue.

Sincerely,



JOHN THUNE
United States Senator



AMY KLOBUCHAR
United States Senator



CHUCK GRASSLEY
United States Senator



JERRY MORAN
United States Senator



DEB FISCHER
United States Senator



M. MICHAEL ROUNDS
United States Senator

⁴ <https://www.sciencedirect.com/science/article/pii/S0960852417321648?via%3Dihub>



JONI K. ERNST
United States Senator



TINA SMITH
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JOSH HAWLEY
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ROGER MARSHALL, M.D.
United States Senator