



Chairman Kumar Barve  
House Environment and Transportation Committee  
251 Taylor House Office Building  
6 Bladen Street  
Annapolis, MD 21401

February 23, 2022

RE: House Bill 831

Dear Chairman Barve and Members of the Committee,

I am pleased to have the opportunity to offer this written testimony in support of HB 831, An Act Concerning Reducing Greenhouse Gas Emissions – Commercial and Residential Buildings. We do believe the bill is missing some important elements regarding the potential use of biodiesel and renewable diesel as an immediate carbon-reducing pathway and have included suggested amendments at the end of this written testimony. I also plan to testify orally at the February 25<sup>th</sup> hearing.

I am Director of State Regulatory Affairs for Clean Fuels Alliance America. Clean Fuels represents the farmers, the producers, the distributors and the end users for our all of the products our members and the U.S. industry are producing, which include biodiesel, renewable diesel, sustainable aviation fuel, Bioheat<sup>®</sup> fuel for thermal space heating as well as maritime and railroad fuels.

Clean Fuels supports the carbon reduction goals established in current state law as well as the more aggressive goals proposed in pending legislation in both the House and Senate. However, we are disappointed that no biodiesel pathways are established for either the thermal heat sector, the medium and heavy-duty transportation sector nor the electricity generation sector in any of these bills. We understand the focus of HB 831 is on the thermal heat sector.

Made from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil and animal fats, biodiesel and renewable diesel are better, cleaner fuels that are available now for use in existing diesel engines and heating furnaces and boilers without modification. Nationwide, some 3 billion gallons was consumed last year, and we project use will exceed six billion gallons by 2030, eliminating over 35 million metric tons of CO<sub>2</sub> equivalent greenhouse gas emissions annually. With advancements in feedstock, use will reach 15 billion gallons by 2050.

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The IPCC's 6<sup>th</sup> assessment released last summer provided us with a stark warning: "It is unequivocal that human influence has warmed the atmosphere, ocean and land. From a physical science perspective, limiting human-induced global warming to a specific level requires limiting cumulative CO<sub>2</sub> emissions, reaching at least net zero CO<sub>2</sub> emissions, along with strong reductions in other greenhouse gas emissions."

Simply put, reducing carbon emissions now, is more valuable than reducing the same amount of emissions later. It's the same principle we learned in high school: a dollar invested now is worth more than a dollar invested 20 years from now. This is because earlier reductions limit the long-term climate impact caused by the accumulation of greenhouse gases. This significant and often overlooked principal is frequently absent from policy discussions, which, for example treat a reduction of CO<sub>2</sub> in 2021 with the same weight as a reduction in 2050. This is simply not accurate and skews the market to seek options which may not be deployed for years or decades, if ever at all.

The increased use of biodiesel in home heating oil applications not only has significant GHG benefits as noted by researchers across the nation, but replacing petroleum-based diesel with biodiesel also results in a dramatic reduction in co-pollutants, sometimes called criteria pollution or tailpipe emissions. These dramatic reductions can lead to significant health benefits in the form of reduced asthma attacks, avoided work loss days, and reduced cancer risks.

Often, the modeling framework to assess the health benefits from a reduction in criteria pollution employs a top-down method, estimating a reduction in a specific criteria pollutant like PM, and assuming there is a normal distribution of these benefits among citizens. While this is appropriate to generally characterize the benefits of a policy designed to reduce these harmful emissions, it often fails to help decisionmakers and citizens truly understand how the reduction in these emissions will affect their local community and in what way.

To better characterize the health benefits biodiesel can have on local communities who switch from diesel, Clean Fuels commissioned a study by Trinity Consultants, a globally renowned air quality modeling firm who specializes in air dispersion modeling. Their work, which is published online, characterizes the benefits of these fuels much more granularly, allowing decisionmakers to understand where the benefits of reduced particulate matter, improved health outcomes, would occur and to whom. The results demonstrate that the use of B100 as a heating oil replacement reduces carcinogenic, diesel particulate matter emissions by 86%. Furthermore, since the use of diesel is most heavily concentrated in environmental justice communities these health benefits are likely to accrue where they are needed the most, in historically disadvantaged communities.

And other states like New York, Connecticut, Rhode Island and Massachusetts have established biodiesel pathways in reducing carbon emissions. Massachusetts has an aggressive incentive program, part of their APS (Alternative Portfolio Standard), that has resulted in the displacement of 46 million gallons of petroleum-based heating oil. The program, now under review, has the potential to double that figure if the program, as recommended, moves from

B10 to B20. In addition, Massachusetts' Governor Baker has issued an executive order requiring state agencies to increase their use of biodiesel in state buildings for heating purposes over the next ten years.

New York state, Connecticut and Rhode Island last year all adopted Bioheat mandates. Those three states alone make up about 40 percent of the heating oil market in the Northeast and the mandates, when fully implemented, will result in 480 million gallons of biodiesel being consumed annually in the Northeast. While we are not suggesting Maryland adopt a Bioheat<sup>®</sup> mandate, these initiatives demonstrate that other states have recognized biodiesel as a viable and immediate carbon reduction pathway in the thermal heat sector.

In conclusion, renewable fuels such as biodiesel and renewable diesel provide greenhouse gas reductions immediately, benefit American (including Maryland) farmers and are cost-effective. Other states have acknowledged the important role that biodiesel can play in reducing greenhouse gas emissions immediately and so should Maryland.

Below are suggested amendments to HB 831. The amendments simply direct the state to study biodiesel and renewable diesel as a pathway to immediate greenhouse gas reductions.

Thank you for the opportunity to testify. We look forward to working with you, the Committee members and your staff on this vitally important bill.

Sincerely,

*Stephen C. Dodge*

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Suggested amendments (in red):

Section 2 – 1602

**(A) It is the goal of the State that holistic retrofits, including weatherization measures, **biodiesel blends** and heat pump installations, be implemented in 100% of low-income households with minimal or no upfront costs for the resident by January 1, 2030.**

Section 2 -1603

(B)(11)

**(XI) One representative of the liquid home heating fuels industry who specializes in heating system design and technology.**

(F)(2)

**(IV) The use of biodiesel and renewable diesel as a carbon reduction pathway in the thermal heat sector, including a review of biodiesel initiatives in other states and existing studies of biodiesel life-cycle analysis compared to heat pumps for residential heating applications.**