



California Biodiesel Alliance

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Jim Aguila  
Chief, Climate Change Program Planning  
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California Air Resources Board  
1001 I Street  
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**Re: Comments on Verification and Pathways Workshop held February 10, 2017.**

Dr. Mr. Aguila:

The National Biodiesel Board (NBB) appreciates the efforts that California Air Resources Board (ARB) staff are making to improve the consistency and ease of obtaining a carbon intensity (CI) value for biodiesel. The current Tier 1 and Tier 2 models do have a number of issues that we believe would be productive to address. We are pleased to provide feedback on the proposed data sheet and the specific questions that agency staff proposed.

*Staff is seeking stakeholder feedback on development of the simplified CI application data summary form.*

Not all natural gas utilities bill based on the energy content; some use the volume of gas as the billing unit. If staff want to cross reference to the billing information, this additional option should be added to the biodiesel and renewable diesel sheets. The average energy content of natural gas in each state is available from the EIA.

[https://www.eia.gov/dnav/ng/ng\\_cons\\_heat\\_a\\_EPG0\\_VGTH\\_btucf\\_a.htm](https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm) Natural gas is also billed at 60F, so the conversion unit in GREET (32F) is not appropriate.

Some biodiesel plants use distillate bottoms as a fuel; this should either be clarified as being included in "Biomass" or added as a separate input to the sheet.

Methanol for the process is both purchased directly and is the diluent used for the sodium or potassium methylate. Just reporting the methanol purchases will underestimate the methanol consumption. There are different dilution rates used, so including this methanol as part of the "chemicals" will not be accurate.

The inclusion of the additional co-product data is an important update for many biodiesel plants and all renewable diesel plants. In addition to the mass of the products, there can be significant variation in the energy content and this information should also be required of applicants. The CA GREET 2.0 co-product default values for renewable diesel are not reflective of any actual plants.

*Staff is seeking stakeholder feedback regarding default feedstock production parameters in determining the CI for Tier 1 pathways. For applicants who wish to apply for a Tier 2 pathway with non-default (user-specific) feedstock production parameters, stakeholder suggestions are requested for application requirements and verification protocols.*

Some biodiesel plants are co-located with oil extraction plants (renderers or oilseed crushers), and these plants should be able to use their own data for the energy and chemical inputs in the model. The data quality and verification protocols for this data are no different than the biodiesel production data requirements at the same site—that is two years of data should be required.

Some biodiesel producers may source feedstocks from suppliers who are willing to provide data on their energy and chemical consumption. This is a more difficult situation. However, if the feedstock supplier can supply two years of data and is willing to be subject to verification as if they were the fuel supplier, then the facility-specific data should be allowed. If not, then the default values should be employed.

*Staff is seeking stakeholder feedback related to allowing disaggregation of a single feedstock type sourced from multiple regions to account for varying energy mixes and transport distance, rather than aggregating the feedstock and requiring conservative energy mixes and transport distances.*

The ARB's current approach of using the longest transportation distance for all feedstock is creating additional work for agency staff and applicants in that it promotes the filing of multiple pathways for the same plant and feedstock just to be able to use the average feedstock distances.

We believe that producers would take advantage of the ARB proposal to disaggregate the single feedstock source so that multiple CIs could be obtained from a single application. We also agree that there would have to be a threshold applied to get some limit on the number of CIs. We believe this should be an absolute value (g/MJ) rather than % threshold, as transportation differences apply to all pathways

#### *Consideration of Facility-Specific Co-products*

We strongly believe that additional co-products should be included in the determination of the CI. There must be some sort of mass balance down round the plant inputs and outputs. These co-products all find some use either as feedstock for other processes or as sources of energy displacing other fossil fuels. There should not be an issue with the reported volumes of these products as plants track all of this data currently.

*Consideration of Standard Values for Fuel Process Chemical Inputs (Excluding Methanol and Hydrogen)*

The calculation of the carbon intensity of the chemicals in the current CA GREET is troublesome. Not all of the chemicals used in biodiesel plants are included in the model. Citric acid doesn't have any impact on the CI and sodium methoxide is treated as methanol. Treatment of the CI of other chemicals has been inconsistent in that sometimes a third-party value for a CI is allowed and other times the existing carbon intensity value in GREET is not even allowed to be used. We view this as a priority area for additional efforts and consideration.

Having said that, a single value for all biodiesel plants is probably not appropriate. Different values should be used for vegetable oil plants and UCO/Tallow/DCO plants as they use different chemicals and different quantities of some of the same chemicals. Plants that use an enzymatic process have a very different mix of chemicals and should have a different value.

Allowing plants to use their own chemical data should not present insurmountable verification issues. Since the ARB has data that can be used to establish a reasonable range for the chemical inputs, verification of actual chemical use should only be required for usage that is outside of this normal range. Including the actual chemical usage for the CI calculations has the benefit of focusing attention on the CI contribution and driving innovation. Using standard values removes the innovation drive and focus on being efficient.

*Other Potential Changes to Pathway Application Requirements*

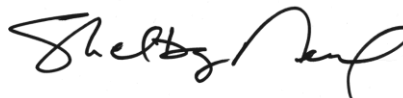
We look forward to reviewing a functioning copy of the proposed CI calculator. It is important that this be thoroughly reviewed by ARB and others so that the problems with the existing CA GREET model are avoided.

Thank you, in advance, for your consideration of our views on this matter. If we may be of any assistance, please feel free to contact us at any time.

Sincerely,



Jennifer Case  
Chair  
California Biodiesel Alliance



Shelby Neal  
Director of State Government Affairs  
National Biodiesel Board