



September 19, 2022

VIA ELECTRONIC FILING

Cheryl Laskowski
Chief, Transportation Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, Ca 95814

Re: Neste Comments on LCFS Rulemaking Workshop Held On August 18, 2022

Dear Ms. Laskowski:

Neste appreciates the opportunity to provide these comments to the California Air Resources Board (CARB) regarding the LCFS Rulemaking Workshop on August 18, 2022. These comments are in addition to the comments submitted by Neste on August 8 regarding the LCFS Rulemaking Workshop on July 7, 2022, and we hope that CARB considers all of our recommendations as part of the upcoming LCFS rulemaking.

California GREET Model:

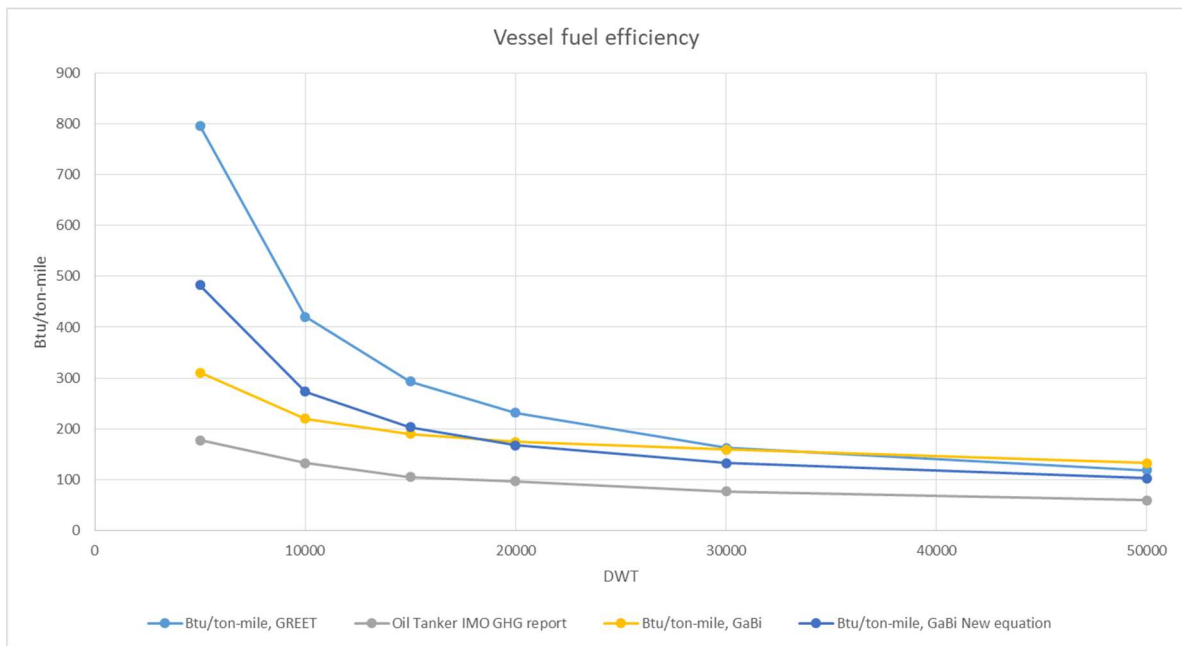
Neste would like to encourage CARB to use the most up to date GREET model developed by Argonne National Laboratory (ANL) and other best available data to update the California GREET 3.0 (CA-GREET 3.0) model. Argonne's GREET model has improved over time and is seen as a valuable independent tool to determine CI values of renewable fuels. Therefore, the updated CA-GREET should use the most up-to-date ANL GREET model and associated GHG data.

One major improvement opportunity in the CA-GREET 3.0 is how the vessel transport emissions for renewable diesel and associated feedstocks are calculated. The current calculation approach does not reflect the reality of vessel transport emissions when considering chemical product tankers with sizes of 30,000 deadweight tonnage (DWT) and under. The model over-estimates emissions for vessel transport and this issue worsens as vessel size decreases. This over-estimation is primarily due to two factors: (1) the vessel fuel efficiency curve and (2) the assumption of a return trip with an empty vessel (back-haul). Assuming an empty return trip results in overall vessel payload capacity utilization of 50% at best. In practice the type of chemical product tankers used to transport both feedstock and final products for renewable fuels have a much higher capacity utilization ratio than what is assumed in the CA-GREET. In most cases, these vessels do not return empty as they have flexibility in terms of the type of goods that they can transport. This is in contrast to crude oil vessels that may return empty because they are not able to load other cargo types.

To illustrate the scenario above, Neste compared IMO (International Maritime Organization)¹ and GaBi LCA software data to GREET model values of fuel efficiency. The graph clearly shows a significant difference between CA GREET and the other fuel efficiency curves for vessels between 5,000 – 30,000 DWT.

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<https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Third%20Greenhouse%20Gas%20Study/GHG3%20Executive%20Summary%20and%20Report.pdf>



The carbon intensity (CI) difference between data based on international studies and LCA databases, and current GREET model calculations can be several points higher, depending on the transport distance and vessel size. The difference can be as high as a 15-20% increase in the total CI score of a pathway. This gap should be addressed by CARB by adjusting CA-GREET to take into account this discrepancy when calculating the actual transportation CI scores for renewable diesel and other renewable fuels that rely on smaller vessel sizes.

Tier 2 Pathway Deemed Complete Protocol

Neste has concerns with CARB deeming Tier 2 pathway applications complete until after the verification body has issued their validation statement, versus the current completion point being when the application is sent to the verification body for verification. We are further concerned by the fact that CARB is not committed to truing up the fuel CI, as noted by the “potential” to true up the CI to alleviate concerns with delays in certification. All renewable fuels producers require timely processing of fuel pathway applications, and this change will create delays and could have significant effects on the viability of investments in new renewable fuels. Neste instead proposes that CARB allow regulated parties to pay an optional expedited application fee for fuel pathways that require a more urgent approval. This will ensure faster delivery of the most advanced renewable fuels, and will help California be the top destination of new, lower CI fuels. This is a win-win for CARB and fuel producers, as it creates more certainty without requiring additional budget from CARB.

Temporary Pathway Credit True-Up

Neste appreciates that CARB is proposing to true up fuel CI using the certified CI going back to the first quarter a temporary CI was used while the pathway application was being processed. Timely processing of the applications will continue to be of importance, but this certainly will help.

Neste also supports comments requesting the ability to annually adjust the fuel pathway carbon intensity (CI) post-verification and that fuel producers receive the additional credits. This provision incentivizes efforts to further reduce a fuel’s CI year to year, and it brings higher value to lower CI fuel producers. We look forward to the implementation of this provision, especially when Oregon is on track to include a similar provision.

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Additional Proposals to Consider - Administrative Streamlining and Updates:

In light of CARB wanting to harmonize its LCFS program with other state programs, we strongly encourage that CARB establish pathway reciprocity with Oregon CFP and Washington CFP, similar to how those programs established reciprocity with CARB pathways. In fact, Neste suggests that CARB evaluate pathway reciprocity with the low carbon fuels programs in Oregon, Washington, British Columbia, and Canada (federal). This will allow California to reduce its administrative burden while more quickly receiving innovative low carbon fuels approved by nearby programs considering how similar they are to the LCFS. All efforts to harmonize the programs will also increase the exportability of the LCFS program into other states that do not have similar programs.

Neste looks forward to continued participation in the LCFS rulemaking, and being a leader in the fight against climate change.

Please feel free to contact me if you want additional information or have questions regarding our submission.

We appreciate your consideration.

A handwritten signature in black ink that reads "Oscar Garcia". The signature is written in a cursive, flowing style.

Oscar Garcia

West Coast Regulatory Affairs Manager
Neste US, Inc.