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California Air Resources Board
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Uploaded to LCFS Comments

Reference: **Comments Low Carbon Fuel Standard (LCFS) Proposed New Temporary Pathways for Renewable Propane**

Dear ARB Staff,

WPGA would like to take this opportunity to provide our comments on the proposed temporary fuel pathway code (FPC) for renewable propane. The elements of the proposed FPC are:

- Renewable propane is co-produced with renewable diesel and jet
- Renewable diesel from fats/residue has a temporary FPC of 45 g CO_2e/MJ (Table 8)
- Renewable diesel from vegetable oils has a temporary FPC of 65 g CO_2e/MJ (Table 8)
- Separating propane as a fuel will result in a 5% increase in CI

ARB proposes a temporary FPC of 65 g CO_2e/MJ for all fats and plant oils except palm oil and derivatives. Apparently, this carbon intensity (CI) value is simplification of the accounting of fats and vegetable oils. For example, renewable propane would receive the same CI for tallow as for soy oil feedstock. We recommend that ARB provide separate temporary FPCs for Fats/Oils/Grease residue and vegetable oils excluding palm oil of 45 and 65 g CO_2e/MJ, respectively. This approach follows the approach in Table 8 of the regulation. This request is supported by the following accounting steps that are currently taken by fuel producers.

Feedstock Accounting Steps

Fuel producers currently account for the mixed feedstocks used in biodiesel, renewable diesel (RD), and ethanol production facilities. A mix of tallow and soy oil feedstocks would be handled by the co-mingling method identified by ARB. Fuel producers are required to track the feedstocks for renewable diesel production and the CI of the RD is determined based on the accounting systems used to track feedstocks (for example, First In, First Out).

Fuel producers are currently able to track the CI of multiple feedstocks and multiple fuels via the commingling method. An example is starch ethanol plants that use corn and sorghum as feedstocks and produce wet and dry DGS ethanol. The situation for RD producers is analogous. Consider the example of a producer using tallow and soy oil feedstocks and producing RD, Renewable Jet, and Renewable Propane. Once the fuel pathways are certified, the CI for the production phase for each fuel would be established (essentially the same). The CI of the feed/fuel combination would be identified by either ARB approved pathways or temporary FPCs. Credit generation would be established via the commingling method.

The same accounting principles apply for a temporary FPC as certified pathways. The fuel producer is obliged to track feedstocks and assign them to the fuel products. Since fuel producers are already applying the comingling method to mixed feedstocks and fuel products, ARB should allow this approach to continue for renewable propane.

The specific actions for generating credits would be the following:

- Fuel producer tracks feedstocks to hydroprocessing facility (they already to this).
- Fuel producer tracks production of renewable diesel, jet, and propane (they already do this). They would add renewable propane sold to the LCFS to their tracking system.
- Fuel producer enters fuel sales onto LRT for renewable diesel, propane, and jet.
- CI is determined by feedstock/fuel combination per ARB approved pathway.

The above method is identical for a temporary FPC or a certified provisional CI.

Equity Among Fuels

Allowing separate temporary FPCs for fats/residues and vegetable oils would provide an equitable treatment under the LCFS. While a higher CI for renewable propane based on a presumed use of soy oil would represent a relatively short financial burden, the perception as well as the loss of near-term reliable income is an issue. The LCFS credit income is essential for RD producer that are contemplating the sale of renewable propane. Missing out on 20 g/MJ of CI point for two quarters (the duration of the temporary FPC) is a significant financial shortfall.

New renewable diesel production facilities have the opportunity to utilize the 45 and 65 g CO_2e/MJ CI values from Table 8. Therefore, RD producers that choose to produce propane under the LCFS should not be placed at a financial disadvantage.

Table 8. Temporary Pathways for Fuels with Indeterminate CIs

Fuel	Feedstock	Process Energy	CI (gCO_2e/MJ)
Ethanol	Corn	Grid electricity, natural gas, and/or renewables	90
	Grain Sorghum	Grid electricity, natural gas, and/or renewables	95
	Any Sugar Feedstock	Bagasse and straw only; no grid electricity	55
	Any Cellulosic Biomass	Grid electricity, natural gas, and/or renewables	50
Biomass-based Diesel	Fats/Oils/Grease Residues	Grid electricity, natural gas, and/or renewables	45
	Any feedstock derived from plant oils, excluding palm oil	Grid electricity, natural gas, and/or renewables	65

Thank you for your consideration.

/s/ Joy Alafia

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