

LOW CARBON FUEL STANDARD
PROPOSED NEW TEMPORARY FUEL PATHWAY

Renewable Propane



May 8, 2019

July 30, 2021

Pursuant to section 95488.9(b)(4) of the Low Carbon Fuel Standard (LCFS) regulation,¹ the Executive Officer may approve a new Temporary pathway for a fuel or feedstock fuel combination not found in Table 8 of the LCFS regulation. ~~This document proposes a carbon intensity (CI) value for a new Temporary pathway of Renewable Propane and includes the rationale for assigning the CI to this particular Temporary pathway.~~ Carbon intensity (CI) values for a Temporary pathway for Renewable Propane were approved by CARB under section 95488.9(b)(4) in 2019. This document proposes to update these temporary CIs to clarify that the CIs are applicable to the Renewable Propane produced by various fuel production technologies approved by the Executive Officer (e.g. hydrotreating, fluid catalytic cracking). This update does not change the CI values of previously certified Temporary pathway nor the original effective date of the previously approved pathway for LRT-CBTS reporting.

~~Public comments on the originally proposed new Temporary pathway were accepted for 45 days (February 8 to March 25, 2019). After reviewing comments received during this period, staff proposes to revise this pathway to reflect variances in CI based on type of feedstock (see Table 1 below). The updated proposed pathways will be posted for additional public comment for 15 days (May 9 to May 22, 2019). Public comments on this document will be accepted through September 15, 2021 prior to certification. Upon certification, this new Temporary pathway will be available for LRT-CBTS reporting for the quarter in which it is certified.~~

Rationale

Pursuant to section 95481(a)(125) of the regulation, renewable propane is defined as the liquefied petroleum gas (LPG or propane) that is produced from non-petroleum renewable sources. The proposed Temporary CIs below are applicable to the renewable propane produced from various technologies approved by the Executive Officer. ~~Various technologies can be used to produce renewable propane. The proposed Temporary CIs below are applicable only to the renewable propane that is produced from a hydrotreating process.~~ The same feedstocks that are currently used in the production of biomass-based diesel (see Table 8 in section 95488.9(b)(4)) can also be used to produce renewable propane. ~~In response to public comment,~~ Staff is proposing to offer separate Temporary pathway CIs for renewable propane produced from fats/oils/grease residues and plant oils (excluding palm oil and palm derivatives). This is consistent with the approach taken for Temporary pathway CIs for Biomass based Diesel. Staff determined the proposed CI values using the most conservative data from LCFS certified renewable diesel pathways that produce propane as a coproduct. The resulting CI was increased by an additional 5 percent and rounded to the nearest five CI points when applicable, consistent with the methodology used to

¹ All citations to the LCFS Regulation are found in Title 17, California Code of Regulations (CCR), sections 95480-95503

determine existing Temporary CI values listed in the regulation. Staff recommends that the Temporary CI values for Renewable Propane shown in Table 1 below be proposed to be certified by the Executive Officer.

Table 1. Proposed Temporary CI for Renewable Propane

Fuel	Feedstock	Process Energy	CI (gCO_{2e}/MJ)
Renewable Propane	Fats/Oils/Grease Residues	Grid electricity, natural gas, and/or renewables	45
	Any feedstock derived from plant oils (excluding palm oil and palm derivatives, as a sole feedstock or blended with other feedstocks)	Grid electricity, natural gas, and/or renewables	65
	Any other feedstock	Grid electricity, natural gas, and/or renewables	Baseline (2010) CI value for USLD