

LOW CARBON FUEL STANDARD
PROPOSED NEW TEMPORARY FUEL PATHWAY

**Renewable Naphtha and
Renewable Gasoline Blendstock**



~~November 14, 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 carbon intensity (CI) values for new Temporary pathways for Renewable Naphtha.~~ Carbon intensity (CI) values for a Temporary pathway for Renewable Naphtha 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 Naphtha and Renewable Gasoline Blendstock 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 this document the Temporary renewable naphtha pathways will be accepted for 45 days from November 14, 2019 through December 30, 2019 through September 15, 2021. If relevant comments received during this period require significant revisions of the originally published pathway, an updated pathway will be posted for additional public comment. Upon certification, these Temporary pathways will be available for LRT-CBTS reporting² effective Q3.~~

Rationale

~~Pursuant to section 95481(a)(125) of the regulation, Renewable naphtha is defined as a renewable gasoline blendstock and is a co-product from the production of renewable diesel. The proposed Temporary CIs below are applicable to renewable naphtha and renewable gasoline blendstock produced from various technologies approved by the Executive Officer. ~~Various technologies can be used to produce renewable naphtha.~~ The proposed Temporary CIs below are applicable to renewable naphtha that is a co-product of renewable diesel production by hydrotreating renewable feedstocks (i.e., animal fat, UCO).³ The same feedstocks that are currently used in the production of biomass-based diesel (see Table 8 in section 95488.9(b)(4)) can be used to produce renewable naphtha. Staff determined the proposed CI values using the most conservative data from LCFS certified renewable diesel pathways that could produce naphtha as a co-product. The resulting CI was increased by an additional 5 percent and~~

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

² The proportion of fossil blending component in renewable naphtha is determined primarily by the Reid Vapor Pressure (RVP) and octane number of both components to achieve specific target values. The gasoline blend is required to receive a "Pass" using the current CARB Predictive Model v3.0 specification. Appropriate quantities of fossil blendstock used must be reported as CARBOB in the LRT

³ ~~Temporary pathway CIs listed in Table 1 if certified, are not applicable to renewable naphtha produced from additional processing (i.e., hydrocracking) of any hydrocarbon stream generated during renewable diesel production.~~

rounded to the nearest five CI points when applicable, consistent with the methodology⁴ used to determine existing Temporary CI values listed in the regulation.

Table 1. Proposed Temporary CI for Renewable Naphtha and Renewable Gasoline Blendstock

Fuel	Feedstock	Process Energy	CI (gCO_{2e}/MJ)
Renewable Naphtha and Renewable Gasoline Blendstock	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

⁴ LCFS ISOR Section 95488.9(b). Table 8: Revisions to the Temporary Pathways Table; page 23 of 50, or III-101