



February 19, 2024

Ms. Rajinder Sahota
Deputy Executive Director – Climate Change and Research
California Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: Proposed 2024 LCFS Amendments

Dear Ms Sahota,

Thank you for the opportunity to comment on the Proposed Low Carbon Fuel Standard Amendments, published on December 19, 2023. Camco is a developer and operator of low carbon fuel projects, with a focus on biogas to RNG and biogas to EV projects.

Camco supports the changes ARB have made from earlier regulatory text to remove deliverability requirements and crediting period renewals for biogas projects beginning before 2030. The proposals as previously drafted would have restricted the development and operation of projects producing biogas for use in the transportation sector. However, we are concerned about ARBs proposed 2030 deadline for biogas to CNG and EV projects which would only be able to account for their avoided emissions benefits until 2040. Provided there are no applicable regulations requiring methane capture on dairy and swine farms, digester projects should be eligible to receive credit for avoided emissions. As a leader in developing programs and policies to lower emissions, California's exclusion of these projects from 2030 and the requirement to physically deliver gas, sends a signal to other jurisdictions, which have launched or are in the process of launching LCFS programs, to exclude these types of projects as well.

We support the introduction of a credit true-up mechanism under 95488.10(b). For developers and operators of low CI fuel projects, the current regulatory language provides little flexibility to account for variability in project operations and feedstock supply and increases the administrative burden on regulators and operators by requiring repeated adjustments to a projects' CI score. For reasons outlined below, we would like to see the credit true-up concept extended to also include the periods between a project starting and receiving a provisional CI score and between a provisional CI score and certified CI score.

Project developers are seeing waiting times of between 18 and 24 months from project commencement to provisional CI approval. Even using book-and-claim this can result in a low-CI project foregoing a year's worth of LCFS credits. Allowing credit true-ups through the provisional and initial certification would reduce pressure on staff and developers to process applications and updates as quickly as possible and reduce uncertainty for project owners and developers and LCFS credit counterparties. ARBs penalty mechanism as proposed under 95486.1(g) would discourage projects from over



crediting and in the event a project over credited and was unable to surrender sufficient credits to match its over credited amount the credit buffer account could be used to ensure the program's environmental integrity.

If ARB does not agree with a true-up for projects undergoing provisional and initial certification we suggest that it considers doubling the book-and-claim period from three quarters to six quarters for projects that have received provisional pathways but have not yet received final certified pathways. Oregon, for example, permits electricity projects to use up to a six-quarter book-and-claim period.

Currently there is no temporary pathway for electricity generated from dairy or swine manure. The LCA inputs for this type of project are very similar to biomethane CNG and LNG from dairy and swine manure, which received a temporary pathway of -150 in the 2018 updates. As of January 2024, there were 24 dairy manure-to-electricity Tier 2 pathways with certified CIs of between -353 and -790. It should be possible for ARB staff to follow the methodology outlined in Appendix E: Purpose and Rational for LCFS Amendments, page 74 and determine a pathway of -330 gCO₂/MJ for electricity from dairy and swine manure. Project owners commencing new manure to electricity projects may have to wait two years for provisional CI pathway approval resulting in significant lost revenues (see previous comment). Permitting these projects to use a temporary pathway while waiting would help to mitigate this impact, remove a disincentive to generate electricity versus CNG from animal waste and support the continued growth of the EV sector.

As always, we welcome the opportunity to have further dialogue with ARB staff on changes to the LCFS program so that it can continue to drive emissions reductions in California's transportation sector and provide a model for the country as a whole.

Sincerely,

Charles Purshouse
Vice President, Camco International Group, Inc.