

**CleanFuture, Inc.**  
P.O. Box 23813  
Portland, OR 97281-3813  
office: +1 503 427-1968  
e-mail: [john@CleanFuture.us](mailto:john@CleanFuture.us)

February 20, 2024  
Liane M. Randolph  
Chair, California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

(Comment submitted electronically)

RE: CleanFuture Comments on the Low Carbon Fuel Standard Rulemaking Package

Dear Chair Randolph:

CleanFuture appreciates the opportunity to provide written comments on the Proposed Amendments to the Low Carbon Fuel Standard Regulation, posted on December 19, 2023. This letter focuses on selected elements of the proposed amendment:

1. Align Deliverability of Low-CI Electricity with other Clean Fuel Standards
2. Establish a temporary CI for biogas to electricity
3. CARB's Proposed Remedy of 4x Penalty for CI Exceedance is Excessive
4. Allow Book and Claim of Biomethane to Off-site Electric Generators
5. Third-party Verification (3PV) of Electricity and Hydrogen for Quarterly Fuel Transaction Reporting (QFTR)

CleanFuture is a leading environmental company that has worked for over a decade to electrify and improve the efficiency of a wide range of vehicle fleets. CleanFuture, Inc. has built a strong platform connecting clean vehicle fleet customers with low carbon fuels (electricity and other fuels), particularly zero and sub-zero CI fuels, serving both on the supply and demand side in multiple programs and jurisdictions.

CleanFuture is an industry leading company connecting clean vehicle fleet customers with low carbon intensity fuels, serving both on the supply and demand side in California's Low Carbon Fuel Standard ("LCFS"), Oregon's Clean Fuels Program ("CFP"), Washington's Clean Fuels Standard ("CFS"), and other emerging clean fuel standards. CleanFuture is a designated credit generator and aggregator for hundreds of fleets and thousands of vehicle units for these state CFS programs. CleanFuture provides full-service low carbon consulting to its clients including fleet efficiency; low carbon fuel utilization; clean vehicles and vehicle technologies; and monetization strategies. CleanFuture has worked for over a decade to improve the efficiency of a wide range of vehicle fleets. CleanFuture is the leading supplier of renewable electricity from biogas as a transportation fuel to heavy-duty EVs in California's LCFS and Oregon's CFP. We

also serve as a third-party aggregator and supply funding to fleets to incentivize and advance heavy-duty vehicle electrification and charging stations, while improving economics for biogas to renewable energy projects.

### **1) Align Deliverability of Low-CI Electricity with other Clean Fuel Standards**

Under the existing LCFS regulation, biogas-to-electricity projects participating in the LCFS must physically wheel the power into California, while RNG projects may be located anywhere in North America and use book-and-claim accounting to demonstrate use for LCFS compliance. We acknowledge CARB's proposal to limit book-and-claim accounting for RNG starting in 2040 but that is a long time away. The most efficient, cost-effective way to make sure the LCFS program enables the most beneficial projects is to maintain a level playing field for pathways that rely on the same feedstock. A major step towards aligning requirements for projects with the same feedstock (biogas), and unlocking the untapped emissions reductions of biogas-to-electricity, would be to let such projects utilize book-and-claim accounting anywhere in the Western Electricity Coordinating Council (WECC), as is already the case in Oregon under their Clean Fuels Program and in Washington under their Clean Fuel Standard. In the ISOR staff mention exportability of the LCFS into other jurisdictions, and other jurisdictions are adopting or aligning their respective clean fuel standards with the LCFS. CleanFuture requests that CARB reciprocate and adopt beneficial rules and practices that may originate outside of California.

### **2) Establish a temporary CI for biogas to electricity**

No temporary CI exists for dairy biogas-to-electricity projects and CARB's failure to correct this discriminates and disadvantages the use of Low-CI electricity in electric vehicles. CleanFuture received the first certification on a dairy biogas-to-electricity pathway in the LCFS in 2019 and CleanFuture has certified many Low-CI electricity pathways since and has been denied a temporary pathway on all pathway certifications. This disadvantages the use of biogas into electric transportation fuel for EVs, as compared to biogas to biomethane projects which have a temporary CI pathway available, especially as CARB's backlog for pathway approvals has lengthened from a few months into 15 to 24 months.

Project economics for biogas-to-electricity projects is more challenging because they are not eligible to participate in the federal Renewable Fuel Standard. Failure to allow a temporary CI for biogas-to-electricity further disadvantages dairy biogas electricity projects than if those projects were to upgrade and clean that same biogas into biomethane for vehicles.

### **3) CARB's Proposed Remedy of 4x Penalty for CI Exceedance is Excessive**

CleanFuture incorporates by reference the comments submitted by the RNG Coalition dated February 20, 2024, which reflect our stance on CARB's proposed penalty for CI exceedance. agrees that on CARB's. Other stakeholders have expressed similar objections on the proposed

CI exceedance penalty, yet section 2.2 of the RNG Coalition provides substantive comment on this topic.

#### **4) Allow Book and Claim of Biomethane to Off-site Electric Generators**

The current LCFS regulation requires direct connection of biogas to the generator, however we urge CARB to allow book and claim biomethane to electricity if for electric vehicle charging. CleanFuture has many large fleet clients with inadequate electric supply capacity at fleet depot locations, with Advanced Clean Fleets (ACF) and other requirements for zero emission vehicles this is a monumental challenge. Allowing book and claim electricity for biomethane (offsite from the digester) yet local to electric vehicle fleet fueling would bolster and alleviate electric distribution constraints at freight and goods movement facilities.

#### **5) Third-party Verification (3PV) of Electricity and Hydrogen for Quarterly Fuel Transaction Reporting (QFTR)**

CleanFuture is supportive of moving towards 3PV of quarterly fuel transaction reports (QFTR) if the verification protocols and guidelines for electricity and hydrogen can be reasonably matched with the characteristics of dispensing these fuels high transaction counts of relatively low transaction value across diffuse and diverse vehicle applications.

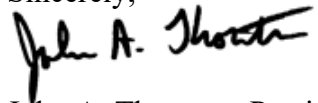
The established third-party verification (3PV) of QFTR in liquid and gaseous fuels is at the wholesale distribution level, however CARB fails to recognize that verification of QFTR for electricity and hydrogen would be analogous to 3PV of every retail gasoline or diesel fuel fill-up. This is excessively burdensome and costly.

CleanFuture recognizes the “less intensive verification” in the proposed rule text as a step in the right direction. However, this is excessive to require site visits to every electricity and hydrogen dispensing location. Or perhaps staff intend this to mean a site visit to a reporting entity or aggregator, yet this is overly costly and burdensome even at a central office location where a remote desk audit of electronic transaction data could work. While CARB staff surveyed verification bodies (VB) on potential 3PV of QFTRs for EVs and hydrogen for preliminary scoping, however VBs are unfamiliar with EVs and hydrogen fueling and as such provided inadequate or flawed feedback to staff.

CleanFuture encourages CARB to reconsider proposed 3PV requirements related to electricity and hydrogen QFTR, CARB must more carefully consider protocols and requirements for zero emission vehicle transactions at the retail level. We suggest CARB should defer and instead phase in 3PV of these QFTR until after CARB convenes workgroups with fuel reporting entities and third-party verification bodies to allow development of specifics on sampling plans and verification requirements. f

CleanFuture comments CARB on the success of the LCFS of incentivizing the adoption of low carbon fuels and technologies. Thank you for your consideration of these comments. Please advise if any further input on these issues would be constructive.

Sincerely,

A handwritten signature in black ink that reads "John A. Thornton". The signature is written in a cursive style with a prominent initial "J".

John A. Thornton, President  
CleanFuture, Inc.