



March 15, 2023

VIA ELECTRONIC FILING

Ms. Cheryl Laskowski,
Branch Chief - Low Carbon Fuel Standard
California Air Resources Board,
Industrial Strategies Division - Transportation Fuels Branch
1001 I Street
Sacramento, CA 95814

Re: *Anew Climate, LLC Comments Regarding the February 22, 2023 Low Carbon Fuel Standard Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard*

Dear Ms. Laskowski:

Anew Climate, LLC (*Anew*), formed through the combination of Element Markets and Bluesource, is one of the largest climate solution providers in North America with an established track record of participation in California's various sustainability programs. We appreciate the opportunity to provide the California Air Resources Board (*CARB*) with our comments regarding the topics presented in the February 22, 2023 Public Workshop to Discuss Potential Changes to the LCFS Regulation (the *Workshop*).

Strong CI Reduction Target

We urge CARB to adopt a strong carbon intensity (CI) reduction target such as the 35% reduction target considered in the agency's previous modeling. As an active participant in multiple environmental commodity markets, Anew is witnessing first-hand how depressed pricing in today's LCFS market is affecting investment decisions and hindering capital allocation. During the November 9, 2022 CARB workshop to discuss potential changes to the LCFS program, CARB staff reported that the significant investments in alternative fuels displaced over 3.1 billion gallons of petroleum fuel in 2021.¹ The LCFS program continues to deliver transportation emission reductions and incentivize further investments in biomethane, renewable diesel and biodiesel, and electric vehicles and EV infrastructure.

To ensure this progress continues, as mentioned in a group comment letter submitted to CARB on December 21, 2022 with DTE Vantage, Energy Power Partners, Iogen Corp., and Opal Fuels,

¹ [CARB Presentation](#), slide 8, November 9th Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard.

Houston Office

3200 Southwest Freeway
Suite 1310
Houston, TX 77027

Salt Lake City Office

2825 E. Cottonwood Parkway
Suite 400
Cottonwood Heights, UT 84121

Additional Offices

Carlsbad, CA Calgary, AB
San Francisco, CA Budapest, Hungary
Los Angeles, CA

Anew strongly supports further reductions in the 2030 LCFS target and recommends CARB implement at least a 30% targeted reduction in carbon intensity by 2030.

We commend the agency's efforts to model scenarios based on a 30% CI reduction target by 2030. While we support a higher target, a 30% reduction scenario would help set California on a path to meet its ambitious target of at least a 40% reduction in economy-wide GHGs by 2030 and carbon neutrality by 2045. Strong CI reduction goals will continue to accelerate carbon reductions in the transportation sector while establishing clear market signals that will drive innovation and investments. Given the strong market response to the program, we respectfully request that CARB continue considering and modeling a 35% reduction target in addition to the 30% reduction target.

We believe it is crucial to have updated targets in place no later than January 1, 2024. Investors will not act until appropriate market signals are in place, and these signals are driven by CARB's actions on book-and-claim and the avoided methane credit.

Methane Avoidance Crediting

Methane abatement is a powerful tool for reducing greenhouse gas emissions and should be targeted and accelerated whenever possible. We support crediting for LCFS avoided methane projects without any time restriction as long as methane emissions abatement remains unregulated at the federal level.

The LCFS program is of key importance to continued methane emissions mitigation in California. We believe, and CARB has confirmed in previous workshops, that continued growth and use of this versatile renewable commodity will be necessary to achieve California's climate goals as set out in the 2022 Scoping Plan. By phasing out crediting for avoided methane too quickly, CARB risks stalling project development and thereby creating a shortfall in the future when biomethane will be needed in California to support clean hydrogen and electricity for zero emissions vehicles and for use in non-transportation sectors.

To the extent CARB decides that it must restrict methane avoidance projects, Anew appreciates CARB's proposed phase out procedure for the avoided methane credit, which improves on previous suggestions discussed during the November 9th workshop. Anew urges CARB to provide clear timing and certainty around the timeline for phase out. Certainty is absolutely crucial to maintaining investor confidence in California's regulatory process and to ensure future innovation and investment in the low carbon fuel sector.

We also request that CARB confirm the accuracy of the following statements in its rulemaking and guidance (or restate the following points, if not accurate):

- Generally, avoided methane crediting will be available until 2040.
- No new fuel pathway applications will be accepted after January 1, 2030.
- Pathways that are certified or recertified prior to 2030 will be eligible for 10-year crediting period.

- If that crediting period ends between 2031-2035, the pathway can be recertified for another 5-year crediting period, but no longer than through 2040.

Book-and-Claim

The proposed adoption of California Renewable Portfolio Standard (RPS) delivery requirements for biomethane used in natural gas vehicles (NGVs) would not provide greater certainty that imported biomethane molecules can be traced to California NGV fuel tanks; instead, the RPS language creates a complex set of requirements that no imported biomethane can meet. RPS application data shows that since the AB 2196 language was adopted, no applications for certification were approved by the CEC for use of out-of-state biomethane under the RPS program.²

Protectionist language incorporated into the RPS did not create an effective “California-only” supply of renewable resources without imports and exports. Instead, CAISO is now looking to expand electricity markets regionally to broaden the adoption of renewables.³ Harmonizing biomethane-related market provisions across the U.S., as CAISO is attempting to do with renewable power, is a better outcome for the climate and for California fuel consumers.

Imports of biomethane are not a problem that requires such dramatic measures to fix. California imports more than 90% of its conventional gas but only 77% of its biomethane.⁴ Given that the success of state grant programs⁵ is increasing availability of in-state biomethane, we question why CARB would propose eliminating imported biomethane eligibility for NGVs at this point in time.

If the motivation is to reduce the attractiveness of NGVs, existing CARB rules (Advanced Clean Trucks, Advanced Clean Transit, Advanced Clean Fleets, etc.) are already incentivizing adoption of alternative technologies. As heavy duty (HD) and medium duty (MD) Zero Emission Vehicle (ZEV) options emerge, NGVs will phase out as noted in the Scoping Plan. If ZEV penetration occurs more quickly than expected, market forces provide that biomethane providers will also shift to production of ZEV fuels. These transitions occur without effectively barring imports of biomethane in the near term, a decision that could jeopardize availability of supply if adoption is slower than expected.

If MD/HD ZEV penetration is slower than expected, NGVs are a proven alternative that improves air quality relative to diesel vehicles.⁶ Limiting the available supply of biomethane for

² California Energy Commission RPS application data available here:
<https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx>

³ See <http://www.caiso.com/informed/Pages/RegionalSolutions.aspx> (noting that CAISO is pursuing strategies to manage higher amounts of renewable energy into the electricity system, including expansion of the energy market across the western U.S. region – accelerating California’s efforts to meet the state’s ambitious clean energy goals, while saving costs, lowering emissions, and promoting economic growth).

⁴ See Renewable Natural Gas Coalition Comments to LCFS Workshop submitted December 9, 2022.

⁵ Information on such grant programs is available at <https://www.cdfa.ca.gov/oefi/ddrdp/> and <https://calrecycle.ca.gov/climate/grantsloans/organics/>

⁶ In-Use Emissions Testing and Activity Profiles for On-Road Heavy-Duty Vehicles: Summary of 200 Heavy-Duty Vehicle Emissions Testing Program from the University of California, Riverside and West Virginia University, March 2023, CEC-500-

NGVs in the near term will shift supply away from the LCFS market that may be necessary to ensure program goals are met if adoption of new technologies is slower than expected.

In addition, to our knowledge, CARB has not identified any factual evidence how this near-term restriction would address any environmental or administrative concerns that have been raised regarding the present approach. Much needed climate investment in the form of many millions of dollars has flowed, and continues to flow, into avoided methane and other biogas projects that are only economically feasible if they are able to access the LCFS program incentive through a book-and-claim delivery approach.

To limit book-and-claim as of 2028 abandons a significant opportunity for further methane reductions and creates an arbitrary limit on out-of-state projects that will increase the policy risk of the LCFS program for all potential clean fuel providers. We respectfully urge CARB to abandon this near-term restriction. ***At a minimum, CARB should align the phase out of book-and-claim delivery with the phase out of avoided methane crediting as of 2040.*** A majority of the out-of-state biomethane facilities that are contributing to global methane abatement and lowering California's transportation CI rely on book-and-claim delivery and would therefore be unable to avail themselves of the 10 or 5-year credit extension period envisioned for avoided methane projects. For these facilities, the reality is that extending avoided methane crediting until 2040 is not useful unless CARB also extends their ability to use book-and-claim delivery until the end of the respective crediting period.

If CARB does intend to proceed with the proposed changes to the book-and-claim eligibility of biomethane, we would like to request immediate clarification regarding the 2028 start date for restricting book-and-claim.

Specifically, we request that CARB clarify whether existing book-and-claim R-CNG pathways will be allowed to continue beyond 2028, with only new pathway applications post-2028 restricted under the new book-and-claim requirements.

We note even more acutely that, for pathways certified between 2018-2022, the viability of the underlying methane-abating RNG projects was based on the ability to deliver biomethane via book-and-claim well beyond 2028. Removing book-and-claim eligibility for all biomethane projects in 2028 will sharply reduce investor confidence, and consequently put future investments in innovative technologies at risk. CARB must provide sufficient notice and ensure stakeholder engagement for such proposed changes. We are highly concerned about the number and scale of potentially stranded assets by this proposed concept, which will result in the loss of investor confidence in California's climate programs and therefore undermine climate innovation across all technologies.

Finally, we urge CARB to take into consideration the potential ripple effects for other programs such as the federal RFS that a de-facto ban in California on imported biomethane could have. This action could undermine California's and CARB's stature as thought-leaders and models on environmental regulation and exportable climate policy solutions.

Step Down / Acceleration Mechanism

Anew commends CARB for its successful track record of implementing the LCFS and setting strong CI reduction targets. However, as identified in the 2022 Final Scoping Plan, California will now work toward a 48% reduction in GHGs by 2030 (based on 1990 levels).⁷

In addition to the overall increased stringency of the LCFS program, we urge CARB to incorporate both a step-down mechanism and an acceleration mechanism to compliment the overall program. Both mechanisms are urgently needed to address the swelling credit bank. However, they should not be a substitute for substantially increasing the stringency of the program. Both will work in tandem, as the inclusion of an acceleration mechanism will reduce the GHG reductions that are left on the table when the program is overperforming. The increased stringency, combined with a complementary acceleration mechanism, will deliver more reductions of GHGs that are critical to meeting California's GHG reduction goals.

The step down and, in particular, the automatic acceleration mechanism will send a clear signal to the market that further investment in clean fuels is desired and will have reasonable certainty of being rewarded. Investors would not need to pause decision-making on necessary clean fuels projects until LCFS program staff are able to amend the regulation. The LCFS would avoid the overperformance we have recently witnessed, and the lost opportunities to deliver the reductions we need that resulted from overperformance. A strengthened and more responsive program will send clearer market signals and support investments/innovation. In our view, the acceleration mechanism could be based on the number of credits generated over a given time period (e.g. four quarters). We are currently working with other stakeholders and experts on refining a proposal and look forward to submitting this to CARB in the coming weeks.

Crediting True-Up

We urge CARB to consider a broad crediting true-up with respect to CI scores. A credit true-up would benefit the LCFS program by recognizing carbon intensity reductions realized by certified projects and incentivizing both continued reductions in carbon intensity and expanded production of low-carbon fuels. During the registration and credit generation process, new LCFS projects generate credits under a temporary carbon intensity calculation that is typically materially lower than the actual carbon intensity that the project secures. Because of the lengthy timelines involved in the application and review process, this temporary CI score can be in place for many months.

Unfortunately, as the program is currently administered, there is no opportunity for a true up once the provisional/certified CI score is established no matter how big the difference between the temporary and provisional/certified CI score. In contrast, if a plant is not operational for a period and the CI of the produced fuel increases as a result, CARB requires that crediting be recalculated based upon the higher CI. Anew urges CARB to be consistent and implement a true-

⁷ CARB, [Final 2022 Scoping Plan](#), November 16, 2022.

up mechanism to adjust for any difference between the temporary CI LCFS crediting and the actual provisional and certified CI crediting.

Syncing LCFS Electricity Crediting with federal RFS eRIN Program

We urge CARB, as EPA moves forward with the implementation of electric vehicle charging pathways under the Renewable Fuel Standard (colloquially referred to as eRIN pathways), to work with EPA to harmonize the LCFS and RFS programs. This harmonization is essential to assure that federal stimuli driving increased deployment of electric vehicles and the continued development of methane-abating biogas facilities are harnessed for the achievement of CARB's strategic goals established in the 2022 Scoping Plan. As CARB Staff continues its review of the LCFS program, we strongly encourage CARB to consider the following inconsistencies with the RFS eRIN program:

Book-and-claim delivery of biomethane to power generation: EPA is proposing to allow qualifying biomethane to be delivered via book-and-claim contract mechanisms to a power generator sourcing natural gas from the common carrier pipeline system. This allows biomethane to be delivered to high efficiency utility scale generators, creating more electricity per therm compared to typical on-site biogas generators. This approach also creates an avenue for biomethane to decarbonize transportation fuels in meaningful quantities outside of use in internal combustion engines, while creating more options and a more level playing field for biomethane producers. Currently California does not allow book-and-claim delivery of biomethane to power generation, a prohibition that unduly restricts participation in LCFS electric pathways and serves no apparent policy purpose.

Separation of the REC Program: The eRIN pathway does not require that the EV charging site retire a REC as part of the transaction. Rather EPA is setting up the eRIN program as a standalone incentive program to bring qualifying electricity to EV's. Requirements focus on the parties demonstrating that the electricity used to charge EV's is derived from qualifying biogas and there is no double counting of that biogas in the RFS program. For California EV stakeholders trying to participate in both the LCFS and eRIN programs, they seemingly will be required to procure both a California REC (usually wind or solar) and unrelated biogas generation rights and match both to the same kWh of electricity dispensed to EV's, an unneeded administrative burden. We urge CARB to consider following the EPA approach and allowing parties that secure an eRIN pathway to similarly meet LCFS requirements by showing procurement of biogas derived electricity, without any requirement to also secure a REC.

Thank you for your consideration of our feedback and we look forward to working through these proposals with CARB staff.
