



California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814

20 February 2024

Subject: Comment Submittal on **Proposed Amendments to the Low Carbon Fuel Standard** as outlined in the Staff Report: Initial Statement of Reasons (ISOR), March 21, 2024

Audi of America (Audi) welcomes the opportunity to submit comments to CARB on the evolution of this important climate policy. California's Low Carbon Fuel Standard (LCFS) is a vital tool that uniquely leverages market incentives to drive reductions in Greenhouse Gas (GHG) emissions.

Audi of America

1950 Opportunity Way
Reston, VA 20190
+1 248 754-5000
www.audiusa.com

To maximize the potential of achieving this core environmental objective, the entities within the primary LCFS value chains, those that can indeed react to the market signal, need to have an explicit participatory role in the program. Program design should be aligned accordingly.

The LCFS can and should serve as a key mechanism in accelerating the transition to zero emissions technologies. Audi views the continued evolution of this fuels policy as vital to supporting our company's goal of completely transforming our vehicle portfolio to plug-in battery electric vehicles (BEVs) over the next decade. In fact, Audi launches its last new internal combustion engine vehicle in 2026. Thus, we are counting on programs like California's LCFS to increasingly leverage the market mechanism it created to support the transition to all-electric vehicles, particularly in the light duty segment which dominates the state's roadways.

What makes the LCFS policy particularly powerful is its ability to incentivize the *utilization* of zero-emission battery electric vehicles (i.e., more eVMT and more GHG reductions) and not just the initial sale of those vehicles.

Thus, an LCFS policy framework that facilitates automakers serving as LCFS base credit generators, alongside electric utilities, indeed provides that direct incentive that will drive further technology innovation, new consumer-facing programs, and further strengthen the market pull for deploying more BEVs, and more *utilization* of those BEVs, in the state of California.



Incentives are important!

In the LCFS ISOR, referenced in the above Subject line, CARB states, “The State is working to rapidly increase the numbers of zero-emission vehicles on the road...”

As was noted in the recent LA Times investigation by Russ Mitchell, demand for EVs from California’s vehicle buyers is starting to show signs of weakening.¹ While Audi remains bullish on the long-term prospect of the BEV market here in California, purchase incentives, like that previously provided under the LCFS **Clean Fuels Reward (CFR)** program are becoming even *more* crucial to bringing in hesitant mainstream vehicle buyers into the BEV market. While there are no doubt multiple factors that influence consumer demand, there is ample evidence that purchase incentives drive increased consumer consideration in EVs and ultimately increased sales.

As was noted in the LA Times piece, “...federal incentives have become scarcer and harder to understand.” This directly impacts consumer demand. A reliable, simple, and widely available purchase incentive is sorely needed. A restructured light-duty CFR would certainly help in this regard. Again, gauging the need for an incentive against California’s stated objective to, “rapidly increase the number of zero emission vehicles on the road” points towards a reconsideration of a light-duty CFR.

Automakers are uniquely well positioned to carry forward a revamped CFR that is much more effective, resilient to credit price fluctuations, and with dramatically lower overhead costs by virtue of our existing expertise in administering these sorts of programs. We look forward to working with CARB to revamp a future CFR that, as noted above, will be increasingly necessary to meet the challenge of achieving higher rates of EV adoption.

Stringency

Audi supports CARB’s interest in exploring LCFS design elements that will underpin a market incentivizing LCFS credit price. This is most directly and favorably impacted by ensuring sufficient program stringency and we would encourage CARB to consider increasing stringency mechanisms accordingly.

¹ <https://www.latimes.com/environment/story/2024-02-15/falling-ev-sales-raise-worries-over-california-climate-plan>



Cross-Subsidization

We would respectfully ask CARB to examine the principle of rate class cross-subsidization in the staff proposal; namely, to explore the validity of taking resources (LCFS credits) generated by and within the residential light-duty vehicle segment and transferring those assets over to another rate class (commercial) and different vehicle class altogether. This asset transfer should be examined both within the context of existing deposits of LCFS credits (and credit sales revenues) generated by residential light-duty EV charging as well as any future residential credit generation.

This takes on additional importance when examining the extent of the need to accelerate light-duty EV adoption, as CARB's staff note, "...with just over 20 years to transition from today's significant fossil fuel usage to a future of clean fuels and technology."

A reminder of First Principles

To enable the aforementioned rapid transition, the private sector must continue to be incentivized to innovate and improve both the customer-facing attributes of EVs as well as the core low-carbon "fuel" technology that sits at the core of an EV.

As CARB notes, the top-level objective of the LCFS program is, "...to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits."² This is echoed by the Purpose statement of regulation itself, "...[to] reduce the full fuel-cycle, carbon intensity of the transportation fuel pool used in California,..."³

It is now abundantly clear that battery electric vehicles are the dominant technology pathway for the light duty segment in California⁴ and the principal path for further advances and further decarbonization (more eVMT) depends on investments in new innovations in battery system design (chemistry, core format, thermal management, power electronics, etc.).

² <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard>

³ https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf

⁴ <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/new-zev-sales>



In other words, the LCFS program offers the *potential* for a unique and increasingly powerful incentive to automakers to offer more (and more capable) EVs in California – to advance and accelerate the most foundational and “first principle” elements of the LCFS policy. LCFS base credit generation, alongside our electric utility partners, creates the additional market pull to accelerate these advances and deploy more EVs in the state.

Data and Methodology Validation

There is the additional benefit realized by CARB connected to the data submittals it requires of automakers to generate LCFS credits. Those data allow CARB to check and validate the methodology and algorithms it uses to award LCFS residential EV charging credits in the first place. Without automaker participation, those valuable data submittals would not be available. These data are widely recognized as vital to the program given the understanding that EV usage and charging behaviors continue to evolve rapidly.

Use of Credit Proceeds

In addition to the opportunity of launching a revamped CFR as described above, automakers will also be central to implementing other programs identified by CARB staff in the ISOR (and elsewhere) as important to supporting transportation electrification, such as, “smart” managed EV charging programs (including demand response), improvements in EV charging convenience and efficiency, Vehicle-to-Home and Vehicle-to-Grid technologies, approaches for mitigating battery degradation, etc. All of these programs have a clear and central role for automakers and thus justify a significant allocation of base credits to fund these activities alongside those allocated to the electric utilities for similar purposes.

The current structure, restricting automakers to Incremental Credit generation only, with the low and decreasing market value of those class of credits (along with the proposed increased costs to register those credits), will lead to automakers abandoning the LCFS program altogether.

Audi supports annual reporting to CARB around the use of LCFS credit proceeds by automakers commensurate with the requirements of other LCFS credit generators.



Conclusion

Audi again appreciates the opportunity to provide input into the proposed LCFS Amendments.

We view the program design choices CARB is considering not an “either/or” proposition, but rather, an opportunity to maximize program efficacy and decarbonizing potential. By aligning the intrinsic incentive that LCFS credit generation provides with the entities that sit directly within the core value chain of delivering the key enabling technologies.

This can be achieved by a considerate apportionment of base credit generation opportunities, combined with a sufficient program stringency and design that supports a robust credit market. This will allow CARB to realize the core environmental outcomes of the LCFS program while achieving its other stated program objectives.

In addition to the above comments, Audi of America supports the comments submitted by the Alliance for Transportation Innovation (ATAI).

Thank you again for the opportunity to comment on this important policy.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. Spencer Reeder', is located below the text 'Sincerely,'.

W. Spencer Reeder
Director, Government Affairs & Sustainability
Audi of America, Inc.