

June 6, 2023

**Submitted electronically via arb.ca.gov**

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

***RE: Tesla comments on the May 23, 2023, Public Workshop Auto-Acceleration Mechanism for the Low Carbon Fuel Standard (LCFS)***

Dear Ms. Laskowski and California Air Resources Board's (CARB) Transportation Fuels Branch Staff:

Tesla thanks CARB staff for hosting stakeholder perspectives on a potential auto-acceleration mechanism and the follow up discussion during the May 23, 2023, LCFS workshop. Tesla continues to support increasing the stringency of the LCFS program beyond 30% by 2030<sup>1</sup> in order to accelerate benefits while supporting the clean fuel transition, including a step-change as soon as possible, and the addition of an auto-acceleration mechanism. Further, in response to the announcement during the meeting that the May 23<sup>rd</sup> workshop may be the last technical workshop, I also touch upon additional technical updates that are deserving of update consideration within this or another near-term rulemaking.

**Implementing Rule Changes in 2024**

With a supply and demand imbalance of over 5 million MT per year, as of the last reported data,<sup>2</sup> the most important factor for market participants is the speed at which CARB implements new rules. With percent reductions in carbon emissions approaching 13%<sup>3</sup>, surpassing expectations since 2020, and seeing LCFS credit prices fall since that time from ~\$200 to a low of \$62 this year,<sup>4</sup> delaying a stringency increase and step-change will likely continue to suppress credit values, market confidence and investment in clean fuels in California. Changes to the program that take place years from now will prolong reinvestment strategies, delaying emissions reductions. This is especially true in our current high interest rate environment. On a societal level, given humankind's limited global carbon budget, a ton of carbon reduced today is worth far more than a ton of carbon reduced tomorrow. Tesla encourages CARB staff to continue to do everything possible to finalize rules that begin to correct the market in early 2024.

**Step Change in 2024**

Just as speed to implementation of the rule changes is critical to health of the program, so too is the speed to implementation of the step change. The difference between a 2024 implementation and a 2025 implementation in the step change could result in a bank size growing up to 10 million MT higher. Such a large bank increase could require years to rebalance, lowering demand for newly generated credits during that period. By allowing such a large supply and demand imbalance and the creation of such a large total bank, many

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<sup>1</sup> <https://www.arb.ca.gov/lists/com-attach/88-lcfs-wkshp-nov22-ws-W2lQZAEuZJVYQlz.pdf>

<sup>2</sup> <https://ww2.arb.ca.gov/resources/documents/low-carbon-fuel-standard-reporting-tool-quarterly-summaries>

<sup>3</sup> <https://ww2.arb.ca.gov/resources/documents/lcfs-data-dashboard>

<sup>4</sup> See California Low Carbon Fuel Standard Credit Price from July 2020 through February 13, 2023, <https://www.neste.com/investors/market-data/lcfs-credit-price#71535ffc>

smaller credit-generating companies who have been critical to the success of the program thus far could experience financial hardship, potentially resulting in lower credit generation in future years as they slow or cease operation. Further, delaying a step change, to use a battery electric vehicle (BEV) analogy, sends a message to participants that California is taking their foot off the accelerator, engaging regenerative braking. As the leading state in the US, this effectively implies that CA feels it has done enough near-term and is willing to sacrifice near-term additional emissions reductions and reinvestment when it is critically needed.

### **5% Step Change + Target of 30%-35% in 2030**

Tesla agrees with CARB staff that a more aggressive step-down will likely increase credit prices, result in more low carbon fuels and reduce the credit bank.<sup>5</sup> Since the step change and target work in tandem, Tesla believes a step change of 5% is appropriate when paired with a compliance curve of 30% in 2030 if implemented in 2025; however if implemented in 2024, CARB staff could consider a light decrease to the step change (~4%). If CARB delays the implementation of a step change, or implements step-change less than 5%, Tesla recommends Alternative C (35% by 2030). California has always been a leader in climate change mitigation efforts and should lead the world and set a target of 30-35% by 2030.

### **Auto Acceleration Mechanism**

As mentioned, Tesla appreciates the perspectives of other stakeholders that CARB staff coordinated during the May 23, 2023 Workshop. Tesla supports AJW's perspective that a ratchet trigger should be based upon a credit-to-deficit (CtD) ratio with a 1.1 CtD threshold, based on a prior year average as reported during the same cadence as the cost containment mechanism, with CARB announcing whether the ratchet was triggered on May 15<sup>th</sup>. If CARB implements a two-test trigger, Tesla would support a Credit-to-Deficit Ratio trigger of 1.1 paired with a Deficit-to-Bank Ratio trigger of 0.5. We support the ratchet being implemented on July 1<sup>st</sup> following the triggering and a permanent curve shift when the ratchet is triggered. We also support CARB's oversight of the ratchet, whereby if the ratchet were triggered two years in a row, CARB would have the discretion to implement it in the third year.<sup>6</sup>

Further, Tesla believes that a permanent curve shift is preferable to a temporary shift, as most supply/demand imbalances resulting in an oversupply are caused by permanent structural changes like the building of renewable diesel plants, co-processing plants, renewable natural gas facilities, and deployment of electric vehicles. Permanent curve shifts are also simpler and easier to model for market participants, resulting in more certainty for companies considering investments in LCFS generating activities.

Tesla agrees with UC Davis that credit/deficit variability and seasonality is normal however believe that freezing post-acceleration is unnecessary and results in removal of the benefit of market stability created through the notion of an auto-acceleration mechanism.

### **Follow up rulemaking with a comprehensive technical rulemaking**

The current rulemaking is necessary to halt the imbalance of supply and demand, and we encourage CARB to conclude by the end of 2023 so it can be implemented Jan 1, 2024. While Tesla provides comment in response to the May 23, 2023 workshop above, inclusive of support for the adoption of an auto-acceleration mechanism within this rulemaking, should CARB staff determine that for the sake of expediency and market correction that the rulemaking would benefit from proceeding with increased stringency and an initial step-change alone, the auto-adjustment mechanism could be considered in a subsequent rulemaking in 2024. To be clear, Tesla is not

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<sup>5</sup> See slide 13, CARB May 23, 2023 LCFS Workshop presentation found here.

[https://ww2.arb.ca.gov/sites/default/files/2023-05/LCFSPresentation\\_052223\\_0.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-05/LCFSPresentation_052223_0.pdf)

<sup>6</sup> [https://ww2.arb.ca.gov/sites/default/files/2023-05/AJW\\_052323.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-05/AJW_052323.pdf)

encouraging this approach. However, we do express concerns around some of the comments regarding rulemaking timelines slipping further into 2024 or beyond.

We would also advocate that if CARB is not able to address some of the additional technical issues within the rules at this time, CARB should follow up this rulemaking with a comprehensive technical rulemaking that addresses antiquated methodologies such as:

- Review and update EER methodology – The EER for BEV should be 4.0 or above, however it remains low due to outdated methodology
- GREET model – An update from the CA-GREET 3.0, based on the Argonne’s GREET1 2016, should be considered to align with Argonne’s most current model
- Land Use Change – Questions around crop-based biofuels could be addressed in future rulemaking
- Pipeline methane leakage – Updated data on actual rates of methane leakage from pipelines should be considered along with a discussion of whether CARB should change the GREET measurement of GWP from 100 years to 20 years
- Geofencing radius – Given the density of chargers in urban areas and greater understanding of the accuracy of geolocation, reductions to geofencing radii should be considered to accurately account for charging related emissions reductions.
- FSE registration 5 decimal point accuracy - CARB should consider reducing the registration accuracy to 4 decimal points, as most iPhone and Android phones have GPS chips with 4 decimal point accuracy

### **Conclusion**

In conclusion, Tesla encourages CARB to consider numerous technical updates however recognizes the urgency to prioritize market correction by concluding this rulemaking and implementing program updates in early 2024. Consequently, we suggest that CARB staff prioritize rule finalization with a step-change and potentially the postponing technical updates and adoption of an auto-acceleration mechanism if time does not permit.

Respectfully submitted,



Thad Kurowski

Public Policy & Business Development