

July 5, 2018 Clerk of the Board, California Air Resources Board 1001 I Street, Sacramento, California 95814

RE: Proposed amendments to the low carbon fuel standard regulation and to the regulation on commercialization of alternative diesel fuels - April 27, 2018 Hearing

To the California Air Resources Board,

Thank you for the opportunity to provide comments on the proposed amendments to the low carbon fuel standard regulation and to the regulation on commercialization of alternative diesel fuels resulting from the April 27, 2018 public hearing. The LCFS program is critical to the rapid and economically viable electrification of ground transportation in California and we appreciate the Board's ongoing efforts on this program.

Lyft is a peer-to-peer ridesharing company that operates in the United States and Canada. California represents one of our largest markets and our headquarters is located in San Francisco. Though to date our service comprises less than 1% of total CA vehicle miles traveled (VMT), we are growing rapidly and have ambition to become a viable alternative to car ownership for a large percentage of Californians.

For environmental and operational cost reasons, Lyft is very interested in electrifying the vehicles on its platform. Recent reports by <u>Rocky Mountain Institute</u> and <u>Lawrence</u> <u>Berkeley National Lab</u> (reports attached) have found that mobility services (like Lyft) performed by electric autonomous vehicles have the potential to reduce about <u>one</u> <u>gigaton</u> of CO2 in the US alone by the 2030s. Professor Sperling's recent book "Three Revolutions" eloquently outlines opportunities and barriers to this potential low-carbon future and prominently features services like Lyft as a key enabler to making shared, electric, autonomous vehicles replace personal gasoline vehicles.

But in order to begin this transformation as soon as possible (which is critical to mitigate CO2 accumulation), governmental intervention is needed because zero-emission vehicles (ZEVs) are not yet at cost-parity with non-ZEVs. In April of 2018, the California Public Utility Commission released a <u>report</u> detailing the opportunities and challenges for Transportation Network Companies ("TNCs", like Lyft and Uber) to expand the number of ZEVs on their platforms. The CPUC found that the cost of ZEVs, including



BEVs, was a major barrier to TNC drivers, the majority of whom are considered "low income." According to the CPUC, the median income for a BEV-purchasing household in CA is over \$150,000 per year, while the typical TNC driver makes less than ½ of this and as a result cannot afford to purchase a BEV. There are other major barriers to TNC BEV proliferation like access to fast charging, DCFC installation and fuel cost, and long-range BEV availability, but for the purposes of this comment, we will focus on the major barrier to making ZEVs affordable and accessible to TNC drivers – the cost premium of ZEVs – by leveraging the LCFS.

We would like to propose that CARB considers modifying the LCFS program to allow owners/operators of high annual mileage vehicles ("High Mileage Fleet Owners") to capture Point of Sale incentives on ZEVs based on the anticipated mileage of its vehicles. For instance, a TNC (or other High Mileage Fleet Owner) may partner with a car rental company to make ZEVs available to its drivers. These ZEVs will travel around 4 times as many miles per year compared to a personal vehicle (e.g. 50K vs. 12K miles per year). If the vehicles are to be in TNC service for 3 years, we suggest that the fleet owner be able to capture the ~150,000 miles worth of LCFS value up front at Point of Sale. Without this PoS incentive, the potential TNC fleet partners we've spoken with are unable to provide ZEVs at competitive price versus gasoline vehicles, and hence are unable to deploy ZEVs into high-mileage fleets.

Notably, the expected value stream of LCFS credits over time, even in a high-mileage application, is not enough for fleet partners to get over the ZEV purchase cost barrier; only an aggregation of the credit value into a PoS incentive can unlock the ability to scalably deploy ZEVs at scale into high-mileage fleets. A program of this sort could be the fastest way to displace VMT with eVMT on California's roads, and provide the most "environmental bang for buck" of LCFS credit value. In addition, according to the CPUC and our internal data, Lyft drivers tend to be low income and/or minorities, so an additional benefit of such a program would be an economic way for low income and minority drivers to access clean transportation and clean jobs.

The exact mechanism of accounting for and distributing this credit value is open for discussion. One idea would be for companies like Lyft to gather and share data about LCFS credits generated from charging (not captured elsewhere to prevent "double counting") and report this to ARB regularly. This will help set and calibrate the exact PoS incentive. The entity that actually manages the program is up for discussion as well. In one embodiment, the electrical utilities could manage the program (analogously to the potential unmetered residential charging PoS program) and perhaps front-load

lyR

and monetize the future credits from existing credit streams. Other possible managers could be OEMs, EVSE companies, or some other public or private entity.

Lyft Supports Tier 2 Application Process For EER-adjusted Cls

In addition, Lyft would like to express its strong support for the new proposed Section 95488.7(a)(3), providing a Tier 2 application process for requesting Energy Economy Ratio-adjusted (EER-adjusted) carbon intensities (CIs) for alternative fuels used in transportation applications not included in existing Table 5. This forward-looking provision will enhance the efficacy and dexterity of the LCFS program by ensuring new technologies and transportation applications properly are recognized and incentivized. We note proposed Section 95488.7(a)(3) would require the methodology used for calculating an EER-adjusted CI to compare useful output from the alternative fuel technology to that of a comparable conventional fuel technology. To ensure this innovative provision is maximally effective, the regulation should provide more clarity regarding what constitutes a "comparable conventional fuel technology." By their very nature, "innovative technologies and transportation applications" likely are to include outside-the-box approaches that are not directly analogous to any commonly used conventional mode of transit. Accordingly, this provision should clarify the meaning of "comparable conventional fuel technology," or perhaps specify an alternative approach to be used when there is no widely adopted equivalent conventional application. For example, the useful output of an alternative fuel technology instead might be compared to that of the conventional technology it is most likely to replace. This approach would help to ensure EER-adjusted CIs accurately reflect carbon emissions reductions. Lyft commends ARB for crafting regulations that not only accommodate but actively spur the development and deployment of clean transit technologies.

We appreciate the opportunity to provide thoughts and comments to the Board and look forward to working together going forward.

Sincerely,

faml M. an

Sam Arons Director of Sustainability Lyft, Inc.