

September 24, 2018

Mary Nichols, Chair

California Air Resources Board
1001 I Street, P.O. Box 2815
Sacramento, CA 95812-2815

Re: Support for a Strong Innovative Clean Transit Standard

Submitted online via CARB's Web Comment Submittal Form

Dear Chair Nichols and Board:

The Union of Concerned Scientists (UCS) and the Greenling Institute (GLI) are pleased to have this opportunity to comment on the Innovative Clean (ICT) Proposed Standard. We came together in 2016 to analyze the growing electric truck and bus industry and produced the report "*Delivering Opportunity: How Electric Buses and Trucks Can Create Jobs and Improve Public Health in California*," which assessed the technology, public health, and job benefits of these technologies.¹

We believe the adoption of a strong ICT Standard is critical for meeting California's greenhouse gas and air pollution reduction goals; to ensure all can utilize and access the cleanest transportation technologies; and to create inclusive, high-quality job opportunities for California's neediest workers.

We appreciate the hard work of the CARB staff and Board in creating and advancing this important standard.

First and foremost, we support approving this standard or as soon as possible, and recommend a final approval take place no later than December 2018. We cannot afford to wait any longer to begin our committed transition to 100 percent zero-emission buses.

We would also like to offer additional improvements to the standard to further accelerate the transition to zero-emission buses in an achievable way that promotes an inclusive and equitable transportation electrification workforce.

I. ADVANCED CLEAN TRANSIT COALITION RECOMMENDATIONS

First, we want to underscore the previously mentioned comments by the Advanced Clean Transit coalition, which UCS is a part of:

¹ Union of Concerned Scientists, The Greenlining Institute, *Delivering Opportunity: How Electric Trucks and Buses Can Create Jobs and Improve Public Health*, at <https://www.ucsusa.org/clean-vehicles/electric-vehicles/freight-electrification#.W6PZolJRfOQ>.

1. **The standard should clearly state that all buses must be zero-emission by 2040.** Since CARB began workshops in May 2015, the goal of this standard has been achieving a full transition to zero-emission buses by 2040, yet the actual language of the standard doesn't explicitly say this. In fact, it could be several years past 2040 when the full transition is achieved based on how the standard is currently written.

The standard's proposed standard of 100 percent zero-emission buses purchases beginning in 2029 would guarantee a transition by the end of 2040 only for buses on the road for 12 years. But many buses in California are on the road for 14 years or longer, and there is up to a two-year lag between when a bus is purchased and when it hits the road. So, a 2029 purchase standard would likely not achieve the goal of all zero-emission buses by 2040. Anything past 2040 ignores the state of technology and how quickly other jurisdictions are making this transition, namely in China.

2. **The standard should apply to shuttle, articulated, coach, and double-decker buses sooner.** Under the proposed standard, these buses are not subject to the purchase standard for eight years despite comprising one-third of transit buses.

Waiting until 2026, as currently proposed, would miss an opportunity to reduce emissions from these buses. Several models of these buses are on the road today and becoming increasingly available across manufacturers. We recommend these buses fall under the purchase standard two years after at least two models of a given type of bus have completed testing by the Federal Transit Administration. There are currently 14 companies that make over 30 different models of buses ranging from standard transit buses to shuttle buses, coach buses, double-decker buses, and long, articulated buses. Ten of these manufacturers are based or have operations in California.

3. **Small transit agencies should submit transition plans by 2021 to take advantage of current incentive funding.** Under the draft plan, transit agencies with less than 100 buses have until 2023 to submit plans for transitioning their fleets to zero-emission buses by 2040. If these transit agencies wait five years to come up with a plan, they could miss taking advantage of the significant amount of incentive funding currently available across the state for the bus itself as well as electric vehicle charging infrastructure. And due to the gaps between agencies' purchases, a delay in planning could result in a several years delay in deploying zero-emission buses.

Additionally, we believe the **2021 Waiver for Early Compliance that would waive the 2024 purchase requirement should be greater than 1,150 buses.** We recommend this number increased to at least 1,250 zero-emission buses. The California Air Resources Board's numbers show there are already 787 buses on the road, on order, or awarded. There are also several financial opportunities agencies can utilize in the next few years to purchase hundreds of additional zero-emission buses. For example, \$35M of the \$180M in HVIP funding for FY17/18 was designated for zero-emission buses. At these funding levels, with an incentive of \$165,000 per bus (including the additional incentive funding for buses in disadvantaged communities), this program would fund more than 200 zero-emission bus purchases. Similar total HVIP funding has been appropriated for next year.

Before the 2nd Waiver for Early Compliance targets in 2021, we will see 3 years of HVIP funding. If HVIP funding remains consistent, this funding source alone could bring in 600 buses, greatly exceeding the 1,150 bus target.

Additional sources of funding include the Volkswagen mitigation money, \$130M of which has been allocated for school, transit, and shuttle buses. If, for example, the allocation is awarded evenly between the three categories, \$43M could be allocated to fund over 250 zero-emission buses (assuming similar HVIP incentive values).

II. MAXIMIZING WORKFORCE OPPORTUNITIES FOR THOSE MOST IN NEED

We take this opportunity to highlight some of the workforce recommendations from our “*Delivering Opportunity*” report that reinforce many recommendations made by Jobs to Move America and others related to transit agencies’ procurement, maintenance, and operation of zero-emission buses:

- Support the development of and place a high priority on projects that have robust recruiting and hiring policies targeting underserved communities, provide high-quality jobs, have robust minority-owned business procurement goals (i.e., supplier diversity), and partner with or provide support to workforce development programs aimed at underserved communities.
- Invest in skills-development programs aimed at training members of underserved communities (particularly those with barriers to employment) to fill emerging employment needs in the heavy-duty electric vehicle industry and related transportation-electrification fields.
- Track and report individual level data on the progress of efforts to train and employ members of underserved communities.
- Reference and use the US Employment Plan to evaluate and score procurement proposals with the aim of encouraging commitments to creating good jobs and improving access for people historically excluded from manufacturing jobs.

The ICT Standard can help create equitable and inclusive economic opportunities generated by zero-emission bus deployment by requiring transit agencies to prioritize the procurement of buses and related services from contractors that demonstrate how they will leverage, support, and/or create training programs to recruit, train, and hire workers from disadvantaged communities and low-income households. One way to do this is for transit agencies to assign preference points to bidders/contractors that demonstrate workforce equity efforts (including but not limited to):

- Hiring of low-income workers and other individuals with barriers to employment (through targeted or local hiring policies, or others);
- Diverse workforce demographics;
- Partnerships with skills development programs (or its own training programs) targeted at low-income workers and people with barriers to employment, such as job training and pre-apprenticeship programs; especially those that provide support services to participants (e.g. child care, transportation assistance, financial stability, etc.); and/or

- Paying of prevailing wages; providing benefits for hires, partners, and dependents (medical and dental coverage, paid vacation and sick leave, retirement savings, transportation reimbursement, childcare assistance, paid training opportunities); predictable scheduling; and opportunities for advancement for entry-level workers

BYD's community benefit agreement is a model for how to create equitable economic outcomes (like the ones listed above) in the emerging transportation electrification sector.² The ICT Standard must ensure more people like Danny Alvarez—who is formerly incarcerated and now works at BYD—can access high-quality opportunities in the clean energy economy.³ By incorporating these recommendations, the ICT Standard would be aligning with the Transformative Climate Communities program—which is quickly becoming a social equity “gold standard”—and would be implementing key recommendations from CARB's SB 350 “Low-Income Barriers Study: Overcoming Barriers to Zero-Emission and Near Zero-Emission Transportation and Mobility Options.”

III. CONCLUSION

Adoption of these improvements will help California realize the benefits of this standard sooner while maintaining the achievable transition CARB has created.

Staff have smartly crafted appropriate offramps to accommodate specific transit agency's unique situations, and for delays outside of transit agencies' control, such as manufacturing delays or infrastructure setbacks. We expect staff will provide updates to the Board on the status of this standard as they do with other measures implemented by the Board, however, attempts to establish regulatory performance benchmarks ignore the three years' worth of work and technical evaluation that has already gone into this standard. Such a measure would ignore the rapid technology development we've seen to date, and would delay roll-out of zero-emission buses when they are already well-suited for use in many cases. With only voluntary commitments from transit agencies, the statewide transition to zero-emission buses would be unlikely and transit agencies could miss out on significant near-term incentive funding.

This standard is necessary to provide transit agencies a clear path for transitioning their fleets, manufacturers the market signal needed to continue developing and improving this technology, and to illustrate to communities and cities California's commitment to achieving our clean air goals. Additionally, incorporating the workforce equity recommendations above into the standard will ensure that workers with barriers to employment can access the economic opportunities generated by this effort, thus putting California's clean energy economy on an equitable and inclusive path.

² Jobs to Move America, *Labor and Community Groups Sign Landmark Agreement with Electric Bus Manufacturer BYD in Los Angeles*, at <https://jobstomoveamerica.org/labor-community-groups-sign-landmark-agreement-electric-bus-manufacturer-byd-los-angeles/>.

³ Uplift California, *Electric Bus Company Helps the Formerly Incarcerated Build New Dreams*, at <http://upliftca.org/portfolio/danny-alvarez/>.

Sincerely,

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