November 14, 2022

Chair Randolph and Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Support for Fiscal Year 2022-23 Funding Plan for Clean Transportation Incentives Accompanied by Carl Moyer Program Guideline Changes With Amendments

Dear Chair Randolph and Members of the Board:

On behalf of the undersigned, we respectfully submit this comment in response to the California Air Resources Board (ARB)'s Fiscal Year 2022-23 Funding Plan for Clean Transportation Incentives Accompanied by Carl Moyer Program Guideline Changes. This Plan marks an historic $2.6 billion investment in clean transportation with a strong focus on equity. This will surely serve as a catalyst and side kick to the robust regulatory agenda that will do the actual heavy lifting to getting to a zero-emission future in California. The following provides areas of support and places for improvement.

I. Support for a Strong Focus on Zero-Emissions.

We find it refreshing to see an air agency actually align program investments with their own findings about the need for a near-total and widespread transition to zero-emissions. This Plan appropriately prioritizes zero-emissions, which is where all of our groups have determined we need to go. Critically, Air Districts are starting to recognize what our organizations have said for a long time – "the only way to achieve the required NOx reductions [to attain the 2015 ozone standard] is through extensive use of zero emission technologies across all stationary and mobile sources." This finding echoes those made in CARB's 2012 Vision for Clean Air, CARB's 2020 Mobile Source Strategy, the Legislature's findings in SB 350, and the Governor's direction in Executive Order N-79-20. We don't have time to waste pursuing incrementally cleaner combustion strategies. We are aware that the Board will likely hear from a litany of folks from the methane industry advocate for continued investment into biomethane combustion strategies as a silver bullet strategy. From production to tailpipe, these are not zero-emissions, and even their purported greenhouse gas benefits are undermined by distortionary accounting and pervasive methane leakage. As such, we ask that you ignore this rhetoric for combustion based methane strategies, which is a boutique technology that is not equipped to solve the challenges of actually making it safe to breathe. Moreover, we ask that the agency not pursue aggressive renewable diesel strategies as these are not zero-emission strategies.

II. Support for Good Jobs Attached to These Investments.

As ARB spends billions of taxpayer dollars, it is critical that it ensure good jobs and community benefits flow from these investments. In particular, we highlight and strongly support the October 26 letter[1] submitted by a coalition of groups asking to strengthen Hybrid Vehicle Incentive Program (HVIP) to create stronger jobs standards. Moreover, we suggest that the ARB continue to work to ensure that associated infrastructure investments are completed with strong labor standards.

III. Support Shifting Carl Moyer Towards Zero-Emissions.

We appreciate the plan acknowledging what we have known for a long time – that all sources of combustion must transition to zero-emission. Unfortunately, most "static" cost-effectiveness analyses that examine dollar-per-ton of reduction may not effectively guide policymaking or investment strategy for the broader energy transition that must take effect to address both the climate and air pollution crises.[2] For instance, short-term static cost-effectiveness can create the appearance that investments in incrementally cleaner combustion are more effective than zero-emission investments, even though over the long term these investments generate more GHG emissions, lock in years of additional pollution, and fail to buy down the costs of future zero emission technology deployment that is ultimately needed for meeting climate and air quality goals. **We therefore welcome amendments that ensure new and increasingly available zero-emission equipment in the off-road sector can utilize these investments.**

We do remain concerned about the following provisions: "The air districts would retain the flexibility to apply a more stringent limit than the Carl Moyer Program Guidelines and would also retain their ability to direct their current limits for Carl Moyer funding to the categories that serve

[1] https://www.arb.ca.gov/lists/com-attach/6-fundingplan2022-UDNcaF0xiBGVhM0d.pdf.

[2] Kenneth Gillingham et al, "The Cost of Reducing Greenhouse Gas Emissions," Journal of Economic Perspectives (Sep. 2018), p. 69. DOI: 10.1257/jep.32.4.53.

their local priorities." Some air districts continue to focus on combustion subsidies, and we are concerned this discretion would continue along this path. Indeed, many of the Air Districts where combustion technologies enjoy the greatest access to subsidies are the same ones with both the poorest air quality and the highest levels of industry influence. While we would generally support Air Districts having authority on where to focus and prioritize Carl Moyer funds (e.g. off-road versus school buses versus on-road), we do not believe Air Districts should have discretion to use other cost effectiveness thresholds. As explained above, investments that myopically rely on static cost-effectiveness analysis without taking into view the broader context of the State's air quality and climate obligations risk undermining the need for a widespread market transformation to zero-emission. [3]

IV. Support Changes to HVIP Funding.

a. Aligning Fleet Size Limits with ACF

We welcome the alignment of fleet size limits in the new proposal with the forthcoming Advanced Clean Fleets Regulation. Allowing fleets facing impending compliance deadlines in 2024 to avail themselves of unprecedented levels of funding support in the next two years will strongly increase the chances of a stable launch to the regulation. At the same time, early purchases of ZEV trucks in these fleets will reduce the risk of "pre-buys" of combustion trucks, and increase the incentive to initiate fleet transition and infrastructure planning, which all provide positive feedback loops at a nascent but rapidly growing stage in the ZE truck market. We therefore support the one additional year before implementing fleet size limits.

b. Voucher Adjustments

We strongly support CARB Staff's proposed voucher adjustments (+15% for fleets of 10 or fewer trucks, no change for fleets between 11-100, -20% for fleets with 101-500 vehicles, and -50% for fleets with 500 or more trucks). We further support the allowance for the smallest fleets to stack with other State incentives. Taken together, these changes ensure that HVIP continues to provide progressive support to the smallest fleets while catalyzing badly-needed action across the sector.

c. Bulk Purchase Requirements for Large Fleets

We also strongly support the bulk purchase requirements for fleets above 500 trucks. This will be an important policy lever to encourage greater deployment from companies best poised to deploy zero-emission trucks. With new incentives via the Inflation Reduction Act, we believe there can be more asked of the large corporations operating these larger fleets in California. By requiring the largest fleets to purchase 30 trucks on their own in order to receive the valuable HVIP vouchers, the bulk purchase requirement will incentivize larger, simultaneous orders from fleets that are resourced to help scale the market. These larger purchases will encourage manufacturers to scale production, motivate fleets and utilities to initiate extensive infrastructure planning that is not always triggered by one-off truck orders, and achieve larger reductions of air and climate pollution.

[3] Id. at p. 63

V. Eliminate the Voucher "Plus-Up" for Fuel Cell Vehicles and Apply Fleet Limits in a Technology Agnostic Manner.

Earthjustice respectfully requests CARB eliminate or significantly reduce the drastic "plus up" offered to hydrogen fuel cell vehicles ("HFCVs"). Currently, Class 8 HFCV vehicles are eligible for a +100% enhancement over the base voucher. By contrast, early drayage truck adoption receives only a +25% and disadvantaged community placement receives only a +15% voucher enhancement. As CARB Staff member Andrea Morgan stated during the June 28th workshop: "demand within HVIP is so significant, that there's an opportunity cost associated with each of our dollars." We agree, however, we see no climate or environmental justice justification for offering 5 times as large of a voucher enhancement for HFCVs as for disadvantaged community placement.

Similarly, CARB should not single out HFCVs for exemptions to the large fleet limits because this policy would create a perverse incentive for large fleet operators to choose a less cost-effective decarbonization strategy than the battery electric vehicles ("BEVs") they would likely choose if the fleet limits were technology agnostic. Incentivizing adoption of alternative ZE technology while foreclosing access to more efficient, less expensive battery-electric trucks within the same fleets is counter-productive. These technologies require distinct charging and refueling infrastructure, and could lead to costly, duplicative infrastructure deployment for minimal air and climate benefit. We urge Staff to treat all zero-emission technologies consistently, and allow large fleets to access whichever ZEVs are most suitable to their needs only under the conditions mentioned above (reduced voucher amounts for large purchase contracts).

Currently, all HVIP-eligible HFCVs are Class 8 buses. There is no policy rationale for providing disproportionate support to these HFCVs. First, fuel cell buses are not a "new" technology. They have been in operation in transit fleets for more than a decade.

Second, HFCVs are not necessary for decarbonizing this vehicle segment and BEVs have so many advantages for bus operators that hydrogen is unlikely to play a long-term role as a bus vehicle fuel. Despite having been in operation for far longer than battery-electric buses, HFCVs were shown to be the least reliable and have the highest cost-per-mile of any vehicle in operation in a study of AC Transit's fleet. Academics, truck manufacturers, and multiple independent analysts have concluded that hydrogen should play a limited role in road transportation and that battery electric technology is best positioned to efficiently decarbonize the vast majority of heavy-duty road transportation, including long-haul trucking. It is possible hydrogen could play a niche role in certain heavy-duty long-haul applications where the need for sub-20 minute refueling times outweighs their higher cost and inefficiency relative to battery electric long haul trucks. No such HFCV is currently commercially available or expected to be prior to 2024.

Third, HFCV buses do not provide an environmental benefit over BEVs. Almost all the hydrogen that HFCVs use in California today is produced through the steam methane reformation of fossil gas, a process that emits nitrogen oxides, particulate matter, carbon monoxide, and other pollutants into disadvantaged communities. The fiction that these buses rely on “renewable hydrogen” is based on weak book & claim regulations that allow for coupling fossil hydrogen with the purchase of out-of-state biogas credits. Whereas most HFCVs are unlikely to operate on green hydrogen absent a mandate to do so, the California Renewable Portfolio Standard is shifting BEVs to an increasingly zero-emission power supply. It is unreasonable to divert limited public funds to offer higher incentives for vehicles running on dirtier fuels.

VI. Support for School Bus Funding Changes.

We appreciate the Plan’s recognition that the restrictive approach from the $135 million administered during the last funding cycle may have excluded school districts that desperately need support to advance zero-emissions.[4] Large School Districts like Los Angeles Unified School District (LAUSD) have immense needs, and we hope the ARB will recognize the need to support efforts at LAUSD and other larger school districts, in addition to continued support for rural school districts and those in smaller Air Districts. We are also pleased to see that the $1.125 billion allocated from AB 181 for school buses will have a broader set of prioritization criteria that will allow more school districts to partake in this funding in the coming year.

VII. Strong Support for 2R Refuse Truck Initiative.

We are very pleased to see an effort to double the number of zero-emission refuse trucks in California. We could not agree more with the statement that “refuse is ready for zero-emissions.”[5] This program is critical, and we encourage the ARB to advocate that the California Energy Commission create a companion infrastructure program for refuse trucks to complement this program.

VIII. Support for Commercial Harbor Craft Investments

We generally support the significant investments in commercial harbor craft in the plan. We suggest a deep focus centered around advancing zero-emission operations at California’s busy and heavily polluting ports (e.g., San Diego, Los Angeles, Long Beach, Hueneme, Stockton, and Oakland). Generally, California’s port authorities have been too tepid in addressing this source, which is well within their ambit of authority to move to zero-emissions. Thus, we suggest using a significant portion of these funds to advance zero-emission port projects to help alleviate the already unconscionable levels of pollution port communities are exposed to.

IX. Conclusion

We look forward to continued work with ARB to implement these historic investments.

Sincerely,

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[4] Plan, at 144-145.
[5] Plan, at 142.

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