Clerk of the Board California Air Resources Board 1001 I Street Sacramento, CA 95814

SUPPORT for Adoption of Fiscal Year 2015/16 Air Quality Improvement Program and Greenhouse Gas Reduction Fund Low Carbon Transportation Investments Funding Plan

Dear Chairman Nichols and Members of the Board:

The Low Carbon Transportation Coalition appreciates the opportunity to comment on the Fiscal Year 2015/16 Air Quality Improvement Program (AQIP) and Greenhouse Gas Reduction Fund (GGRF) Low Carbon Transportation Investments Funding Plan. The Coalition is made up of auto makers, truck and bus providers, e-motorcycles, utilities, electric vehicle charging equipment providers, consumer groups and other stakeholders. We have come together to support continuing successful implementation of the vital programs funded through the AQIP and GGRF.

The Plan before you today is based on a thorough evaluation of the need for investment in the programs identified. This evaluation built upon experience from last fiscal year, the technical expertise of many of our coalition members and the implementation and technical expertise of the California Air Resources Board (CARB) staff. We consider this Plan to be a conservative assessment of need. Given the state's aggressive air quality and climate change goals, the investments in the specific programs identified in the Plan are likely to be well under what will be needed to meet the goals. However, we agree with the staff's approach to start with conservative investments in the many programs. We also support staff's inclusion of assessment tools to ensure the investments result in significant reductions in pollution, growth in the market for zero-emission technologies and economic benefits.

The Coalition is very appreciative of all the State has done to support transportation electrification. The investments made to support the technology and infrastructure critically necessary for acceleration of the low-carbon transportation vehicle market have contributed to California accounting for half of the 2014 sales of zero-emission cars in the U.S., increasing numbers of hybrid and electric trucks and buses, futuristic port clean-up programs in some of the most polluted areas of our state (e.g. Middle Harbor), and groundbreaking programs designed to increase the number of clean vehicles in disadvantaged communities. California's commitment to low-carbon transportation is unmatched in the U.S. and we appreciate the CARB leadership in developing the comprehensive programs outlined in the proposed Plan.

SB 1275 (De León) ⁽¹⁾ requires CARB to develop an income eligibility limit. We have thoroughly reviewed and discussed the CARB staff proposal. We support the staff proposal to set the income eligibility limits consistent with Proposition 30 ⁽²⁾ and the proposed enforcement approach.

¹ Senate Bill 1275 (De León); Chapter 530, Statutes of 2014.

² Proposition 30; General Election of 2012; Approved By Voters November 6, 2012

Re: Low Carbon Transportation Coalition Comments
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The Low Carbon Transportation Coalition believes the CARB staff proposal is a good starting point for setting an income eligibility limit. Should the eligibility too severely decelerate the market or should research determine an alternative income cap is needed, CARB can reconsider in future years. Our coalition has developed agreed-upon criteria for modifications to the CVRP, including prioritizing simplicity and continued market acceleration. The CARB staff approach seems the least likely to complicate the program. By selecting limits that have already been approved by the voters of California we avoid an acrimonious debate regarding who is "rich enough not to need the rebate." The random audit provision recommended by staff also keeps the program as accessible and simple as possible, and limits infringement upon privacy for consumers considering purchasing a zero-emission vehicle.

We support the CARB staff proposal to increase access to CVRP for low- and moderate-income consumers. If additional funding becomes available and/or sufficient funding exists to maintain the CVRP and existing equity programs in the light-duty sector, then a logical next step would be to try to increase the market for zero-emission vehicles in the low-and moderate-income consumer market. We recognize that the effectiveness of such a program is unknown and the enforcement for such a program may need to be modified relative to the enforcement provisions in CVRP. Further, this program will likely require some consumer education and outreach component to be effective, increasing the administrative costs for this effort in particular.

We support the light-duty vehicle pilot projects recommended by CARB staff and further support the staff's consideration of an agriculture vanpool program in the San Joaquin Valley if funds become available. Our coalition will continue to advocate for increasing funding for these important programs to ensure that they can grow in FY 2015/16. Per our attached budget recommendation, we believe the amount of funding needed to support these programs and meet a growing demand is, conservatively, \$35 million.

We support CARB staff's recommendation to fund HVIP, Zero-Emission Truck and Bus Pilot Projects, Low NOx Engines and Advanced Technology Freight Demonstrations Projects. Our coalition will continue to advocate for increasing funding for these important programs to ensure that they can grow in FY 2015/16. Per our attached budget recommendation, we believe the amount of funding needed to support these programs and meet growing demand is, conservatively, \$167 million. The Low Carbon Transportation Coalition remains committed to continued engagement with the Legislature, stakeholders, the California Air Resources Board and state agencies supporting the growth and success of the ZEV market and the electrification of the transportation sector in California.

Re: Low Carbon Transportation Coalition Comments

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Low Carbon Transportation Investments Funding Plan

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Sincerely,

Eileen Wenger Tutt, Executive Director

California Electric Transportation Coalition

Senior Director, Environmental Affairs Alliance of Automobile Manufacturers

John Boesel President and CEO CALSTART

Colleen C. Quinn, Vice President Government Relations and Public Policy ChargePoint

Ron Davis, General Manager City of Burbank Water and Power Marvin Moon, Director of Power Engineering Los Angeles Department of Water and Power

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William D. Boyce, Supervisor Electric

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Energy Research and Development Sacramento Municipal Utility District

Michael Lord, Executive Engineer

Vehicle Regulation and Certification Engineering Toyota Motor Engineering & Manufacturing NA

Attachment































































Support Funding for Successful Low Carbon Transportation Programs in the State Budget

\$350 million is needed for Low Carbon Transportation Programs in FY15-16 to implement the Governor's ZEV Action Plan, SB 1275 (De León), and SB 1204 (Lara). This allocation would meet market demand for simple incentives for cleaner cars at today's rebate levels, support growing equity programs, and increase funding for cleaner trucks, buses and off-road vehicles. \$350 million equates to 14-17% of anticipated Greenhouse Gas Reduction Fund proceeds in FY15-16. Near- and mid-term needs are expected to grow to ~20% of expected proceeds. Long-term planning is underway at CARB. Specific needs and rationale are outlined below.

Medium and Heavy-Duty Vehicles: \$150 million (SB 1204, Lara)

SB 1204 (Lara) created the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program. The program calls for investments that are needed to develop and commercialize cleaner technologies for trucks, buses, and off-road vehicles and equipment.

\$75-85 Million Total for Pilots and Early Commercial Deploymentⁱ

Funding is needed to support early market demand for cleaner vehicles, including expansion of the market to smaller fleets that are new to advanced technologies.

- \$15 million for the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP) to meet projected demand and provide market certainty for manufacturers and suppliers.
- \$60-70 million for additional zero- and near-zero emission deployment programs to accelerate realworld deployment of cleaner trucks and buses. Significantly increased funding is needed to deploy zero emission buses (transit and school) and trucks. Incentives could also support early commercial deployment of existing near-zero emission heavyduty trucks.iii

\$60-70 Million Total for Research, Development, & Demonstration^{iv}

Funding is needed to develop cleaner technologies, bring them to market, and address cost and performance barriers. The allocation suggested here is conservative given needs in the broader sector:

- Zero Emission Vehicles: build on existing zero emission truck and bus demonstrations.
- Near-Zero Emission Long Haul Trucks: bring advanced engines and powertrains to market
- Zero- and Near-Zero Emission Off-road Equipment: accelerate development of zero- and near-zero emission technologies for off-road applications such as marine, rail, construction, and agriculture.
- **Automation & Intelligent Transportation Systems:** develop and commercialize solutions that improve efficiency in medium- and heavy-duty applications.

Light-Duty Vehicles: \$200 Million (SB 1275, De León)

SB 1275 (De León) created the Charge Ahead California Initiative to accelerate the deployment of zero emission passenger vehicles and to improve access to zero emission transportation in disadvantaged communities.

\$165 Million for Clean Vehicle Rebate Project (CVRP)

- Multiple, independent estimates support this estimated program need, including both the California Electric Transportation Coalition^v and the Union of Concerned Scientists^{vi}.
- This level of funding will prevent market disruption and allow for long term planning that will include a future phase-down of rebates.

\$35 Million for Equity Programs

- \$20 million (approximately) to assist low-income participants in the Enhanced Fleet Modernization Program in the purchase of used zero or near-zeroemission vehicles when they retire high-polluting vehicles. vii
- Sufficient funding for additional equity programs in disadvantages communities, such as improving access to financing, the deployment of charging stations in multi-family residences, rebates for public fleets, and car/van sharing.

Rationale: Now is the Time to Invest in Successful SB 1275 and SB 1204 Programs for Zero- and Near-Zero Emission Vehicles

The Low Carbon Transportation Programs have a proven record of success. Over 40% of all new light-duty plug-in electric vehicle sales are in California. Dealer participation and consumer responses have been positive. California also leads the nation in zero-emission truck and bus deployments.

All stakeholders are making increased investments in market acceleration efforts, both inside and outside of California. Automakers, utilities, local governments, and nonprofit stakeholders are all increasing efforts and investments to support zero-emission vehicles. Stakeholders are also working with other states to implement programs to accelerate the markets for zero/near-zero emission vehicles. California's leadership supports these efforts, and success elsewhere helps California achieve its goals.

Zero and near-zero emission vehicles create jobs.

Increasing fuel diversity and consumer choice results in jobs creation and increases household income levels across all income brackets, particularly for low- and middle-income households. Xi Additionally, many leading manufacturers and suppliers of zero-emission cars, trucks, and buses are California employers.

Now is not the time to reduce CVRP rebate

<u>levels.</u> Long-term, data-based planning is needed, as outlined in SB 1275.

- SB 1275 (De León) directed ARB to develop a long-term plan for low carbon transportation programs that includes phasing down lightduty vehicle consumer rebates in response to market and technology assessments.xii
- We support the development of this longterm plan and the informed phase-out of incentives, but reducing rebates in FY15-16 before that plan is complete is premature and could undermine market acceleration needed to meet state goals.
- The expiration HOV lane access for plug-in hybrid vehicles will slow the market, making CVRP incentives even more important. Green stickers providing carpool lane access for these vehicles are expected to run out mid-2015.

Maintaining existing CVRP incentive levels for FY15-16 is important to **avoid market disruption** and to capture **climate and health benefits** from these vehicles. ⁱⁱ The FY14-15 plan includes \$25 million for zero emission truck and bus pilot projects. Based on conversations with manufacturers, suppliers, transit agencies, and others, we expect demand for this funding to grow substantially in FY15-16. This funding is important to commercialize these technologies and build economies of scale to bring down costs. This funding also provides immediate emissions benefits in the disadvantaged communities where the vehicles are deployed.

demand, as could changes in expected program solicitation structures and restrictions.

iii SB 1204 (Lara) requires that "Until January 1, 2018, no less than 20 percent of funding made available for purposes of this paragraph shall support early commercial deployment of existing zero- and near-zero emission heavy-duty truck technology."

iv This is a partial list of areas needing investment. The overall estimate is conservative and reflects priorities and numbers from the technology roadmap done by the California Hybrid, Efficient, and Advanced Truck (CalHEAT) Research Center, which outlined a plan for the development and commercialization of technologies needed to meet California's climate and air quality goals. These estimates are in line with investments needed to develop advanced technologies in a timeframe that allows the state to meet emissions goals for trucks (including long-haul), buses, and off-road equipment. A slower investment ramp-up would delay the market availability of zero- and near-zero emission options, particularly in the long haul and off-road sectors.

^v The California Electric Transportation Coalition estimates approximately 75,000 vehicles will receive rebates, about a 30 percent growth in the number of rebates relative to FY 14-15. Of the 75,000, rebates for 44,000 battery electric vehicles, 30,000 rebates for plug-in hybrid electric vehicles, and 1,000-2,000 rebates for fuel cell vehicles. The coalition assumed 5 percent overhead for program administration.

vi Union of Concerned Scientists estimates 30 percent growth in rebates for existing plug-in electric vehicle models, totaling 58,000 rebates. Of the 58,000, rebates for 31,500 battery electric vehicles and 26,500 rebates for plug-in electric vehicles. Union of Concerned Scientists estimates 15,000 rebates for new models, 8,000 rebates for battery electric vehicles, 5,000 rebates for plug-in hybrid electric vehicles, and 2,000 rebates for fuel cell vehicles. Union of Concerned Scientists assumed 5 percent overhead for program administration.

vii Increased incentives through this program, often referred to as an "EFMP-Plus Up", would assist low-income participants in the purchase of zero-emission or near zero-emission used vehicles when they turn in higher polluting vehicles. This program has the potential to use much more than \$20 million, given the incentive levels currently being proposed by the California Air Resources Board.

viii Rebates for public fleets in disadvantaged communities (proposed at \$10K/vehicle) have the potential to require significantly more funding, but the overarching \$35 million estimate of equity program needs assumes that program is limited in order to ensure that the remaining programs (i.e., financing/loan loss reserve, deployment of charging stations in multi-unit dwellings, and car/van sharing) have sufficient funding to move beyond the start-up phase and become operational, even if still at pilot-scale.

ix California is only ten percent of the national new vehicle market, but 40% of new plug-in vehicle sales are in California. Incentives are a major reason why California is receiving far more than its "fair share" of plug in vehicles.

^x Auto makers are introducing new and/or next generation models. Utilities and charging infrastructure providers are significantly increasing their investment in infrastructure and education and outreach. Local governments are more active than ever before in supporting the broad state transportation electrification goals, while environmental NGOs and equity groups have increased advocacy efforts and education efforts significantly.

xi David Roland-Holst, U.C. Berkeley, *Plug-in Electric Vehicle Deployment in California: An Economic Jobs Assessment*, September 2012. Materials and link to full study at: http://caletc.com.

xii SB 1275: "Rebate levels can be phased down in increments based on cumulative sales levels as determined by the state board." And "The funding plan shall include a market and technology assessment for each funded zero- and near-zero-emission vehicle technology to inform the appropriate funding level, incentive type, and incentive amount. The forecast shall include an assessment of when a self-sustaining market is expected and how existing incentives may be modified to recognize expected changes in future market conditions."

ⁱ These estimates take into account supplier/manufacturer production capacity as well as expected fleet demand. Zero emission bus demand in particular is growing and makes up a substantial portion of the zero emission truck and bus pilot funding. However, these are rough estimates that could vary depending on several unknown factors. Changes in product offerings and incentive eligibility could affect