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 Deployment[i]

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 real-world deployment of cleaner trucks and buses. Significantly increased funding is needed to deploy zero emission buses (transit and school) and trucks.[ii] Incentives could also support early commercial deployment of existing near-zero emission heavy-duty 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-zero-emission 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.[viii]

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.[ix] 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.[x] 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 levels. 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 light-duty vehicle consumer rebates in response to market and technology assessments.[xii]
- **We support the development of this long-term 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.

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

[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.

[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."