TRANSPORTATION ELECTRIFICATION PARTNERSHIP









































CONCEPT PAPER FOR DISCUSSION (7.2.20)

Creating a Statewide California Electric Vehicle Authority

Putting Californians Back to Work in High Quality Jobs, Restarting and Growing our Economy, and Cleaning the Nation's Dirtiest Air

Existing law establishes the target of 1.5 million zero emission vehicles on California's roads by 2025 and 5 million zero emission vehicles on the road by 2030, as well as a network of 200 hydrogen refueling stations and 250,000 electric vehicle charging stations, including 10,000 DC fast chargers, installed or constructed by 2025. Achieving these goals is essential to improving air quality and public health, particularly in disadvantaged communities.

California is the national leader in the adoption of electric vehicles ("EV"), with a market share of nearly 50 percent of all EVs on the road in the United States. California's leadership has helped spur a strong and growing transportation electrification and zero emissions goods movement industry, with EVs recently becoming the state's #2 export. With the current health and economic crisis caused by COVID-19, California needs to help put people back to work, restart our economy, and clean up the dirtiest air in the nation from the San Francisco Bay Area to the Central Valley and down to Los Angeles. Accelerating progress in transportation electrification and zero emissions goods movement can respond to all these challenges while also prioritizing equity, job training, and more. To address these challenges and opportunities, LACI and members of the Transportation Electrification Partnership ("TEP") have developed a concept for a California Electric Vehicle Authority ("CEVA") for stakeholder discussion.

Accelerating the growth of light-, medium-, and heavy-duty EVs in line with the state's human health, air quality, economic development, and climate goals would bring about significant co-benefits, from increased gross state product to job creation. The state, however, faces significant barriers that are impeding efforts to meet existing state goals and enhance California's standing as a national and global leader in transportation electrification and zero emissions goods movement:

- There is a lack of sufficient, consistent, and effective financing for transportation electrification and resiliency. There is not yet adequate financing to support, among other things, the widespread build out of charging infrastructure (especially for medium- and heavy-duty trucks), existing and new manufacturing, the procurement of public and private EV fleets, or to encourage EV adoption in low-moderate income and/or disadvantaged communities.
- California's progress in electrifying transportation can be significantly enhanced with a unified coordinating entity at the state level. There are multiple statewide, regional, and private players working to advance electric vehicles, but efforts are not always coordinated and interests are not always aligned, resulting in significant project delays and inconsistent messaging. Additionally, the lack of a unified state lead/coordinator for transportation electrification and zero emissions goods movement has led to policies and regulations that risk falling short of achieving the EV growth necessary to meet the state's air quality and climate objectives. While CARB, CEC, and CPUC, and other agencies have each made important progress towards achieving the state's goals, we still have far to go in aligning direction and collaboration among all vital agencies as well as with local governments and utilities.
- The COVID-19 crisis is creating new challenges to the EV ecosystem in California that are on top of these longer-standing issues of lack of coordination and financing. The economic recession will severely impact the state's new EV supply chains, likely forcing companies out of business and eliminating high quality jobs. Utilities alone cannot finance the charging infrastructure needed to meet California's ambitious climate goals, particularly for heavy-duty vehicles. And now with the economic crisis, public funds needed to support transportation electrification—and ultimately cleaner air and improved public health in vulnerable communities—are being redirected.

Creating A Statewide Electric Vehicle Authority

TEP has submitted a federal stimulus proposal to leaders of Congress, and related concepts to the Governor and the Legislature, to accelerate transportation electrification and zero emissions goods movement, direct funding if and when federal stimulus comes, and consolidate and create new financing tools. The creation of the CEVA could address many of the existing challenges around enhancing coordination and financing, and could help to secure the state's recovery through equitable deployment of EV programs in the coming years—creating high quality jobs—and make California a world leader in EV deployment, design, development, manufacturing, supply chain, and infrastructure. To do so, we need leadership and coordination as well as incentives and financing tools. Therefore, a CEVA could be charged with:

- Improving existing and creating new financing tools (e.g., incentives, rebates, tax credits, loan guarantees, etc.) for EV manufacturing, supply chain, charging infrastructure, system upgrades and resiliency, procurement, resale and recycling;
- Ensuring wide visibility and accessibility into existing and new financing tools and opportunities;
- Enhancing coordination and streamlining financing policies, requirements and activities to reduce friction, accelerate adoption, and continue to grow utilization; and
- Leading through job training, safety certification, and job pipeline support for high-quality, skilled jobs.

Potential CEVA Financing Functions Could Include:

- Providing funding or financing programs for charging infrastructure development. Charging infrastructure buildouts—
 particularly the substantial customer and utility side upgrades needed to support medium- and heavy-duty vehicle charging
 infrastructure—require investment not just from utilities, other load serving entities and/or EV charging network
 companies, but also other market participants, and existing financing mechanisms do not adequately minimize the upfront
 capital expenditures. The CEVA could lower the risk for these build-outs to early investors/adopters to catalyze the market.
- Providing support and financing to support manufacturers, supply chain, and innovations in the EV industry. The CEVA can support existing manufacturers in the short-term recovery effort from COVID-19, and find ways to encourage new players to locate in California. Likewise, the CEVA could support supply chain (e.g., creating lithium as a co-benefit from Salton Sea geothermal power production, or vice versa) and new market segments (e.g., battery refurbishing from EVs to building or grid storage) through innovative financing tools.
- Creating a variety of financing tools to meet diverse market needs. To fund these programs, we need to both leverage existing tools while creating new funding and financing sources, including but not limited to: a portion of an economic recovery bond (e.g., directly fund infrastructure, seed funding for loan guarantees, revolving loan, etc.); forward financing by borrowing from future credit generators as collateral for low-interest loans, loan guarantees to reduce cost of capital and incentivize matching funds; and other ideas to help unlock private capital markets.
- Providing creative financing solutions to advance light-duty vehicle adoption. There is tremendous need to deploy
 charging infrastructure for use by residents of multi-unit dwellings and renters of single-family homes, as well as for lowmoderate income and disadvantaged communities.
- **Providing financing solutions for public and private sector fleet procurement.** Securing private market financing to procure large-scale EV fleets of all vehicle classes is challenging. The CEVA could offer critical financing to provide confidence to the market, which could come in the form of low-cost loans and loan guarantees and/or tax credits created by the legislature.

Potential CEVA Coordination & Leadership Functions Could Include:

- Serving as the unified face of transportation electrification and zero emissions goods movement, coordinating across statewide efforts. There are multiple vital players (e.g., CARB, CEC, CAISO, CPUC, CTC, GO-Biz, load serving entities and electric distribution utilities, air quality boards, public agencies, local municipalities, manufacturers, dealers, etc.) each of whom is working to advance the transition to zero emission vehicles, but efforts are not always coordinated and interests are not always aligned, which can ultimately result in confusion and project delays.
- Setting consistent policy and regulatory targets and track progress. The CEVA would advance innovations and equity in the EV market and provide certainty for stakeholders seeking to invest in EVs need by providing targets/direction to align policies, targets, and tools across the stakeholders noted above.
- Aligning permitting processes and other local implementation processes with state goals. Local municipalities often lack the bandwidth to effectively engage with utilities and regulatory bodies, and these existing entities do not always have methods for engaging local municipalities, leading to inequitable outcomes.
- Establishing EV related job training programs, safety certification, & skilled jobs. Accelerating buildout of charging infrastructure will require skilled workers. The CEVA can coordinate with community colleges, workforce development agencies, union apprenticeship programs, & other training providers such as LACI to create programs that can rapidly retrain displaced workers and upskill existing workers, while helping put policies and criteria—such as the Electric Vehicle Infrastructure Training Program—in place for safety and quality training. It is estimated that if California received a proportional share of the \$150b TEP stimulus proposal that 370,000 jobs would be created statewide.