

Sacramento Electric Vehicle Association

Letter in support of Mobility Recommendation #3: Zero-Emission Vehicles (3.2)

The Electric Auto Association is an active non-profit, national volunteer educational organization of Electric Vehicle (EV) owners and the EV curious. The Sacramento chapter has over 700 members and has engaged the community in over 50,000 one-on-one conversations about Electric Vehicles at over 200 events, including 60 events last year.

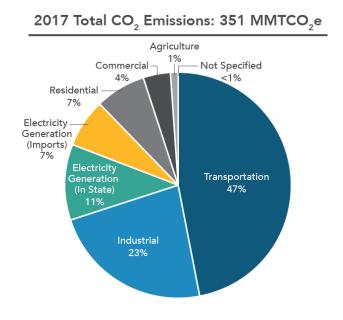
We urge you to adopt Cal Green Code Tier 2 (July 1, 2020, revision) for "EV Capable" charging infrastructure in new construction (3.2). It requires panel space and capacity, along with raceways to 20% of spaces in a parking structure. It does not require wire or the EV charging stations.

This is one of the lowest cost and highest impact recommendations in the report. Here are some of the key reasons:

Market Adoption of EVs: Transportation represents nearly half of California's

greenhouse gas (GHG)
emissions. Electric vehicles
significantly reduce these
emissions. And, most residents
can replenish their daily driving
needs by charging overnight
while they sleep.

Approximately half of
California's residents live in
apartments or other
multi-unit dwellings (MUD) or
homes without garages
without access to charging



This is still one of the most significant barriers to greater EV adoption in the region. For these residents to embrace clean vehicles, they should be

- able to charge their EVs near their homes while they sleep with the same convenience as residents of single family homes.
- Environmental Justice: Half of our community residents do not have the financial wherewithal to live in homes with garages or carports able to support EV charging. They are effectively locked out of EV ownership and unable to contribute to the climate change solution and enjoy the benefits of clean vehicles that cost less to own. Furthermore, their health is the most likely to be impacted as they are typically closer to heavy gas and diesel vehicle traffic. MUD residents should not be forced to choose between affordable housing and the air quality, health and economic benefits of clean electric transportation.
- EV Adoption rate: We can't fight climate change by restricting adoption of electric cars to only those who can buy homes with garages - the wealthier 50% of our population. Current building codes already require EV Ready support in new single family home construction.
- Low Cost: The low cost "EV Capable" option for parking spaces in new construction provides the best approach to minimize initial infrastructure costs while allowing affordable deployment of charging stations as the EV market develops. Based upon the cost estimates provided by the California Air Resources Board (CARB), the cost to install a raceway with an adequate panel capacity is approximately \$800 per EV charging space. This represents a cost increase for the parking space of less than 0.1 percent.
- Long Life Assets: Parking facilities typically have a long lifetime. The average lifespan of any concrete structure is 75-100 years. By installing EV charging infrastructure in new construction, a future retrofit cost of \$3,750 to \$6,975 per charging space can be avoided. f CARB recommends that the Tier 2 standard become the base requirement in future releases of the building code.
- Workplace: The low cost "EV Capable" requirement for parking spaces in new workplace construction enables businesses to subsequently add EV charging at a low cost rate matching the EV market build up. Workplace is one of the options apartment residents have to charge if their homes are older and without charging capability. Experience in Sacramento clearly demonstrates the impact on the EV adoption rate resulting from providing charging infrastructure in public garages near the workplace at a very low

cost.

• Property Value: Not only does this recommendation save money over time, it makes the residential or commercial property more marketable. As EV prices drop and the benefits of EV ownership grow, tenants and owners will increasingly recognize the value of being able to charge at home or the workplace. Prospective tenants will place the ability to charge their vehicle as a key criteria in selecting home or office. Having low cost built-in infrastructure allows for the future addition of low cost chargers for a minimum additional cost as demand grows.