

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

*Order Instituting Rulemaking
to Continue the Development
of Rates and Infrastructure for
Vehicle Electrification*

Rulemaking 18-12-006
(Filed December 13, 2018)

**COMMENTS ON CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)
TRANSPORTATION ELECTRIFICATION FRAMEWORK (TEF) ENERGY DIVISION
(ED) STAFF PROPOSAL CHAPTERS 6, 9 TO 12**

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SUSTAINABLE ENERGY COALITION

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Introduction

LGSEC represents local governments' (LG) interests, particularly as they relate to advancing an environmentally sustainable, equitable and resilient energy system. LGSEC's membership extends to 14 cities and 23 counties, jurisdictions that collectively govern almost three-quarters of the state's population, reflecting close to two-thirds of California's electricity demands.

LGs, including community choice aggregators (CCAs), should be treated as "primary partners" in transportation electrification (TE) efforts, alongside state and federal agencies, vehicle manufacturers, and investor- and publicly owned electric utilities. All these entities are critical to expanding access to diverse clean transportation technologies, including in Environmental and Social Justice (ESJ) communities.¹

LGs' responsibilities span a wide array of key TE elements, including permitting, inspecting, and in some cases, financing vehicle charging infrastructure, supporting shared mobility, planning and paying for public transportation options, and regulating building and land use characteristics, among other duties.² LGs are in close relationship with the neighborhoods and communities within their jurisdictions, knowledgeable of their unique characteristics and geographic, economic, demographic, and cultural factors that influence their ability to shift from fossil fueled vehicles to cleaner mobility options.

¹For a discussion of CPUC guidance related to ESJ communities, see https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Commissioners/Martha_Guzman_Aceves/Env%20and%20Social%20Justice%20ActionPlan_%202019-02-21.docx.pdf

² As with the early stages of photovoltaic deployment, LGs are grappling with how best to approach the siting of vehicle charging infrastructure, with multiple efforts emerging to streamline the process.

Overarching Recommendations

LGSEC makes the following overall recommendations related to the Energy Division's proposed TEF:

(1) *The TEF's goals should be transparently identified and score card tracked.* Throughout the Energy Division's proposal reference is made to the notion that "all ratepayers" should "benefit" from TE expenditures. The only way such an outcome will be achieved is if these investments effectively result in substantial greenhouse gas and polluting air emission reductions prompted by deep declines in transportation-related fossil fuel use. Achieving this outcome may take time in areas where electric vehicle (EV) penetration is low, as is capacity to adopt zero-emission vehicles, such as ESJ communities. For example, one role of early EV infrastructure deployment is to signal to potential vehicle buyers that they can have confidence that chargers will be available along common routes. In cases where the infrastructure benefits are expected to take extended time to be realized, Program Administrations (PAs) should include a rationale for proceeding with these investments.

It is also possible that, if implemented quite thoughtfully, including as part of storage deployment and microgrids, changes in electricity demand created by well-timed and well-placed charging could create a more reliable, resilient and cost-effective grid, to the benefit of all ratepayers. Measuring and tracking these outcomes should be a central part of TEF submissions and associated CPUC scrutiny.

(2) *The diversity of TE-related efforts should be systematically mapped.* As previously

discussed, investor-owned utility (IOU) efforts are one of multiple TE activities being pursued by the State and other public and private sector entities. Given use of ratepayer monies, to the extent possible IOU investment should be directed either as a means to best leverage other activities, or to address notable gaps that are of particular interest to the Commission (e.g., related to ESJ communities; to improve grid resiliency or reliability). In this context, in addition to IOU stocktakes, a comprehensive inventory of efforts and investments, particularly by LGs and air districts, should be conducted by each of the PAs as part of their TE funding requests, with a demonstration that their proposed programs either effectively serve levers, or fill important gaps.

(3) *A census of community capacity to engage in TE-related efforts should be developed, as well as a systematic approach to deepening capacity.* While the recent dissolution of energy efficiency Local Government Partnerships (LGP) has prompted LGs to shift staffing and resources to non-energy efficiency activities, including TE, not all LGs are resourced and equipped to advance TE. PAs should assess LGs' readiness and funding capacity to initiate and sustain TE projects, as exhibited by the presence of EV Readiness or Action Plans - a comprehensive inventory of which should be developed, with associated forward-tracking capability - streamlined permitting, specialized staff, publicly available information, LG electric fleet vehicles, LG-owned and operated EVSE, among other elements. Previous similar efforts focusing on energy efficiency should be adapted to TE as means to help communities "walk, jog, run", with different tiers of activities supporting LGs (e.g., "Foundational," "Proficiency," "Innovative") linked with varying

amounts of funds to encourage progress.³ Lessons learned from the decades long equity-related energy efficiency evolution should be immediately reflected in the TE, including the core need to nurture LG capacity to effectively engage in infrastructure development efforts over time, and an emphasis on relying on such non-utility entities as CCAs and regional energy networks (RENs) to devise and implement programs, particularly those focused on ESJ communities

- (4) *TEF investments should be explicitly linked to other activities.* To the extent possible, every IOU investment should be attached to a reinforcing activity being pursued by one or more additional “primary partners,” as a means to expand the impact of ratepayer dollars and provide a “second opinion” that the expenditure is being wisely made. Linkages could include matching funds and specific commitments or actions, such as a municipality dedicating EV-only parking spaces or implementing PEV-Readiness Plans. For ESJ communities, the connection could be demonstrated through expressions of support, such as local legislative action, or advocacy petitions, as further discussed in Section 6.1. In addition, as discussed above, PAs should provide capacity-building funds to LGs as a pathway to primary partnerships, similar to energy efficiency efforts previously employed through LGPs. Likewise, private sector partnerships could be developed related to electrifying light-, medium- and heavy-duty and fleet vehicles. IOU collaborations with public sector/rental/car share fleets would have the added benefit of creating a pipeline for the EV secondary market, expanding purchase affordability.

³ See for example, https://eecoordinator.info/wp-content/uploads/2016/04/StrPlan-Refresh-Presentation_2016-03-17.pdf

This approach bolsters Energy Division’s observation that “Agreements and partnerships with third parties could allow the IOUs to maintain an active role in accelerating the buildout of the EV charging infrastructure, while also reducing their overall financial and resource obligations and the ratepayer costs associated with infrastructure construction; marketing, education and outreach efforts, and the operation and maintenance of the EVSPs.”¹

- (5) *Non-IOU entities should be able to serve as PAs, lead TE implementers and co-financiers on an equal basis as IOUs; throughout the proposed TEF, 'IOUs' should be replaced by "Program Administrator."*⁴ RENs, CCAs and other local government entities have demonstrated an ability to effectively serve communities while increasing local capacity to manage complex energy functions. LGs have a responsibility, interest and, in many cases, capacity to meaningfully advance TE infrastructure and associated community benefits. Where an LG, including CCAs, RENs, air districts, county transportation authorities, and metropolitan planning organizations, has evidenced the financial and/or administrative capacity to fund and/or implement a TE program, IOUs should pass through managerial and execution monies to it.

In the case of financing, LGs have the means to access monies at a lower cost than utilities. This could particularly be the case if revenue bonds could be backed by associated charging revenues that flow through the IOUs’ distribution system. In this context, blended ratepayer/LG funding should be actively cultivated.

In cases where the PA role is *not* filled by an LG, the IOUs should bid out all non-make-

⁴ Following the same concept/ naming conventions as used in the energy efficiency arena, a “program administrator” is the entity that oversees budget and big picture program guidance and "design."

ready activities, giving LGs first priority to propose to undertake TE projects. Likewise, IOU PAs should develop and implement LGPs, modeled after the capacity building pathways that were offered to local governments in energy efficiency.

- (6) *The Commission should grant non-IOU PAs access to distribution funds.* Such an approach would mirror similar treatment of the Center for Sustainable Energy related to the California Solar Initiative and Self-Generation Incentive Program. As discussed above, distribution-related TE revenue could anchor low-cost LG revenue bonds, thereby reducing financing costs.
- (7) *Locational attributes should guide the TEF.* Every aspect of the TEF should be sifted through locational characteristics and focused appropriately. For example, marginal costs vary by location. As a means to manage grid costs, to the extent prudent and where transparent benefits are created, the IOUs should site TE infrastructure at low-marginal cost circuits, feeders, and substations, or at places that create specific grid benefits. TE-associated tariffs should similarly be location-specific. Such a strategy would enable place-based ESJ tariffs, in which charging could be provided at low- or no cost.

6.1 Equity Barriers

LGSEC recommends the following related to advancing TEF equity:

- (8) *Capacity-building support and funds should be provided to ESJ communities.* As discussed above, PAs should bolster capacity-building in ESJ communities, with a

continuum of funding provided to meet communities' specific needs and help them advance towards TE. Similar efforts related to energy efficiency should be used as a model.

- (9) *Equity must be considered in multiple dimensions.* In its 2019 Environmental Agency Assessment, the California Environmental Justice Alliance (CEJA) recommended that the “CPUC prioritize meaningful engagement with environmental justice communities in critical proceedings that will ultimately significantly impact their lives. It can do so by creating more pathways for communities’ participation in proceeding discussions and ensuring that environmental justice principles lead its policy implementation, especially in transitioning away from the demand and supply of fossil fuels.”⁵

Historically and still today, the most CPUC-authorized ‘equity’ funding is implemented by carving out specific monies dedicated to low-income or Disadvantaged Communities (DAC), reflecting distributional equity. PAs should also consider the extent to which low-income customers and people of color are less likely to own their homes, forming a kind of TE “split incentive,” and/or have little or no capital to invest in TE or an EV; examples of structural equity issues. Communities of color and non-English speaking people are less likely to engage with large institutions that they feel do not represent them. PAs should develop TEPs through inclusive planning with community stakeholders and community-based organizations (CBOs), going beyond drafting a TEP and then seeking tokenistic feedback from stakeholders, thereby addressing procedural equity. The PAs should be evaluated on how access to and ownership of electric vehicles is advanced

⁵ <https://caleja.org/resources/reports/>.

specifically for communities of color.

- (10) *The ED's recommendation to "3. Partner with planning agencies, local governments, communities, and environmental justice groups to ensure equitable distribution of TE investments and should include discussion of this within their TEPs"² should be strengthened and expanded.* As suggested in (4), IOUs should not be authorized to proceed with TE investments unless they have a demonstrated collaboration with another party, particularly an LG. So as to not "punish" LGs that do not have an agreeable relationship with an IOU, there should be a process to enable LGs to directly petition the CPUC for TE funding, by becoming a PA or applying for specific program support. PAs should be required to support capacity building efforts, as discussed previously.⁶ PAs should also be directed to work with LGs to develop partnerships with entities that have a natural geographic affinity with low-income families, such as CBOs, affordable housing developers, laundromats, schools, and discount grocery stores, particularly to enable associated parking spaces to be used for charging sites and EV car share pods, with attendant marketing efforts. Preference should be given to collaborations that result in a reduction in the number of vehicles on the road (e.g., shared/micro-mobility options).
- (11) *PAs should advance community electric mobility planning.* As part of capacity building efforts, PA's should assess historical planning efforts to advance all-electric mobility throughout a community. In cases where little or no planning has been done, the PAs should offer 'non-resource' strategic planning funds to support advancement of

⁶ The *Energy Efficiency Strategic Plan* offers ways for IOUs to work LGs and community-based organizations.

electrification planning. These activities should be coordinated with the California Air Resources Board's (CARB) Clean Mobility Options (CMO) program and Sustainable Transportation Equity Program (STEP), which provide funds to support need assessments, capacity building efforts and project implementation in DACs. PAs and the CPUC should review distribution of these monies and activities and support low-income communities and customers that did not receive funds or are outside of CARB's eligibility criteria.

9. Transportation Electrification and Customer Rates

LGSEC provides the following responses to ED's queries,

1. "To what extent should investor-owned utilities (IOU) collaborate on rate designs and related customer education efforts across service territories? Could one IOU take the lead in providing guidance on future electric vehicle (EV) rate designs, or should each IOU file separate plans that comply with the guidance below?"

As discussed in (7), although IOUs should be encouraged to share best practices and insights, rate designs and customer education should be tailored, to the extent possible, to be location specific, both in terms of tariff structures and partnerships. Each IOU should file separate guidance-compliant plans that fully reflect locational considerations.

2. "What aspects of rate design and related outreach are most important to improve the customer experience and advance widespread transportation electrification?"³

a. How can IOUs help reduce confusion and enhance understanding of the delivery of electricity as a fuel as well as the need to vary prices based on time and location?

LGSEC recommends the following rate design modifications:

- Principle “4. Rates should encourage conservation and energy efficiency”⁴ should be modified, as it does not reflect evolving conditions in which electricity consumption to soak up excess renewable generation is desirable at certain times and locations. Instead, this principle could be recrafted to state, “Rates should match with location- and time-specific service costs, advance grid resiliency, reliability and/or affordability, and encourage economic and equitable outcomes.
- Streetlight-EV charging rates should be developed to enable streetlight charging. The current structure of shifting streetlights on the same circuit from the LS to the GS rate if a charger is added to a light pole prevents utility-dependent LGs from taking advantage of the low-cost rate option when streetlights are upgraded. A friendly rate approach to streetlight charging would significantly expand access to EV charging in commercial and multi-family residential neighborhoods that presently lack charging infrastructure.⁷
- LGSEC agrees that “The EVREVs should also address locational pricing that accounts for residential customers in hot climate zones that are more reliant on air conditioning and reflects the conditions on different systems and circuits.”⁵ However, as indicated in (7), locational characteristics should be broadly and consistently reflected in TEPs.

⁷ The City of Los Angeles offers more than 430 streetlight chargers.

- LGSEC supports “Subscriptions-based charging models that provide unlimited or high amounts of “free” charging within or across service territories during off-peak or super off-peak time periods.”⁶ In addition, the Commission should encourage development of tariffs that encourage wholesale purchase of electricity and grid access, by private companies and LGs, which can then manage TE and overall demand characteristics as a whole as part of campuses, new developments, microgrids, and land use plans. Such tariffs should offer discounts tied to grid benefits induced by the purchaser, including associated with accelerating clean transportation.

3. How could the CPUC coordinate internally to ensure that CPUC rate design efforts are better aligned with grid conditions and consistently provide meaningful price signals?

LGSEC has the following responses to this question:

- LGSEC disagrees that “Further, new EV-specific rates should continue to be considered outside the GRC process in the near-term, to encourage the full participation of stakeholders that are most knowledgeable about TE without requiring them to become parties in utilities overarching rate cases.”⁷ GRC’s are the appropriate forum in which marginal costs and rates are considered. Parties engaged in these proceedings represent the customer classes responsible for paying for TE, many of whom are only intermittently engaged in EV-related proceedings. Rates that impact specific customer groups are often the subject of separate GRC workshops and settlement conversations, enabling

stakeholders who are “most knowledgeable about TE” to participate in GRCs alongside other parties without requiring them to fully engage in the rate case.

- LGSEC agrees that “LCFS holdback funds could be used to create an incentive for non-single-family residents to utilize public charging in the form of a bill credit, gift card, free charging, network subscription, discounted electricity at IOU-owned/operated charging stations, or other rebates.”⁸

10. Partnerships

1. Should the investor-owned utilities (IOU) be required to identify partnerships as part program design before filing program applications, or should they have the flexibility to pursue partnerships after an application is approved by the California Public Utilities Commission (CPUC).

As discussed in (4), PAs should be required to identify specific primary partners for each of their programs, through letter of support, explicit collaborations, or funding, with priority given to LG-led initiatives, particularly those associated with ESJ communities. This approach bolsters Energy Division’s recommendation that the IOUs “Demonstrate in their program applications and pilot advice letters that the IOUs have created Public Private Partnerships (P3) that take the best practices from national and international models, including cost sharing, market benefits, data sharing, clearly defined P3 goals, outreach and education, and leveraging grant opportunities.”⁹

2. What role should the IOU have if they were to pursue partnership with other stakeholders (i.e., program administrator, program financier, supporting role).

IOUs should generally follow the same partnership script outlined in the *California Energy Efficiency Strategic Plan*.⁸ In cases where LGs have demonstrated the capacity and willingness to effectively lead TE efforts, the IOUs should serve as passthrough financiers of ratepayer funds, as well as support collaborators, providing services related to data sharing and make-ready activities. However, other than CCAs, local governments' capacity to support TE is generally at an early stage. Given the centrality of LGs to TE's long-term success, the Commission should replicate the energy efficiency advancements made through LGPs, deploying a similar model to further TE.

3. How much autonomy should the other entity or entities in the partnership have in administering a CPUC -approved program?

LGs should be authorized to serve as fully autonomous program administrators, as exemplified by RENs and the City of Santa Monica's multifamily rebate program. Likewise, CPUC-approved programs should allow for similar levels of autonomy as are provided by RENs, CCAs, and LGs to design and implement energy efficiency and conservation initiatives.

10.2 CALGreen Building Code Enhancements

⁸ <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=5308>

1. Should one investor owned utility (IOU) propose a specific budget within their Transportation Electrification Plan to support updates and implementation of the California Green Building Standards, including research, stakeholder coordination and advocacy, or do existing IOU energy efficiency business plans provide sufficient resources for IOU support of State building codes.

Advancement of California Green Building Standards (CalGreen) codes could serve to avoid ratepayer expenditures that would otherwise be spent on TE expansion associated with buildings. Funding to support CalGreen research should be directed to the California Energy Commission, while a specific budget for stakeholder coordination should be provided to the Local Government Commission . LGs are closest to emerging building activities, including the more than 100,000 new residential units expected to be constructed over the next several years, and as a result in the best position to manage CalGreen related activities.¹⁰

3. How should potential IOU CalGreen activities be coordinated with other IOU TE program activities.

PAs should maintain awareness of CalGreen activities and consider partnering with LGs that are advancing CalGreen as part of TE program activities.

4. Do the metrics or targets in the Scorecard adequately address potential CalGreen building code activities or are additional metrics and/or targets needed.

As previously discussed, advancement of CalGreen building codes by a primary partner should be considered to serve as a (necessary) match in PA program applications.

10.3 Regional Coordination

1. Should the investor-owned utilities (IOU) prioritize sites that will achieve the greatest ambient air quality improvements and greenhouse gas (GHG) emission reductions that help regions in their service territories meet the state implementation plan targets, or should they prioritize sites that can achieve the installations of transportation electrification (TE) infrastructure at lowest cost?
 - a. How should the IOUs balance these two efforts?

Low cost TE installation, on its own, should not be a determining factor in selecting sites. The TEF's role, as it was with early solar and energy efficiency programs, should be to foster means to reduce installation costs, particularly in ESJ communities, until incentives are no longer needed. For example, PAs could create different incentive levels attached to specific geographic characteristics and installation elements (e.g., conduit, trenching, panel upgrades, EVSE). In its recent TE order, the New York Public Service Commission allocated \$206 million toward "equitable access and benefits for lower-socio-economic and disadvantaged communities." Those communities will also be eligible for higher incentives, supporting up to 100 percent of the costs to make a site ready for EV charging. Other make-ready work will be matched at either 50 percent or 90 percent, depending on whether stations utilize standardized plug types and meet

accessibility requirements.⁹

2. Should the IOUs make additional efforts to prioritize sites based on the budget limitations of the local/regional municipalities? If so, how should this be done?

Budgets should appropriately play a role in site prioritization, but other metrics should also be considered, including EV and EVSE adoption levels, EV planning and permitting capacity, socio-economic characteristics, and average age of building stock.

- 3 What IOU resources would help local agencies implement Plug-In Electric Vehicle Readiness activities and/or adopt stricter requirements for local building codes?

As stated by the Energy Division, “The CEC has funded “PEV Readiness Plans” for most regions, but lack of local funding and limited staff availability have limited implementation by the local governments that are responsible for on the ground implementation.”¹¹ Neither the CPUC nor the CEC appear to maintain a centralized repository of local readiness plans. Such a “one-stop” resource should be created, preferably by the CEC, the air districts, or RENs. Similarly, funding to implement Plug-In Vehicle Readiness plans and activities should be directed towards meeting a minimum set of activities that are implemented uniformly across the state, again as managed by the CEC, RENs, or other appropriate non-IOU entities.

10.4 Coordination with Community Choice Aggregators

⁹ See <https://www.utilitydive.com/news/new-york-investor-owned-utilities-to-fund-701m-make-ready-ev-infrastructur/581975/>

1. Should the California Public Utilities Commission (CPUC) consider applications from community choice aggregators (CCA) for approval to develop their own programs, or administer a portion of the investor-owned utilities' (IOU) authorized transportation electrification (TE) programs using budgets that are recovered through IOU customer rates.

a If yes, what is the appropriate role for the CCAs in accelerating TE (i.e., IOU TE program administrator, designer, and administrator of their own programs, etc.)?

CCAs have proven themselves to be equal to or better than IOUs in crafting and implementing TE programs. As stated by Energy Division, “Currently, five CCAs have established TE programs. As seen in SCE’s stocktake, some CCAs are currently offering programs that are similar to those that the local IOUs offer.”¹² In this respect, CCAs – as well as other LG entities – should be eligible to serve as PAs, designers, and administrators of their own programs. That is, CCAs, and LGs in general, should be authorized to serve as fully independent PAs for TE programs and pilots, adhering to all TEF requirements (e.g., file TEPs, program applications, advice letters for pilots).

11.2 Marketing, Education, & Outreach Issues

1. Should the investor-owned utilities’ funds for transportation electrification (TE) marketing, education, and outreach efforts be capped at a specific percentage for each TE program or as a single budget across all their programs? If yes, please justify why and

propose methodology.

LGSEC opposes generalized IOU spending on marketing, which is unlikely to advance TE goals. Instead, similar to overall TE program spending, PA expenditures on marketing, education, and outreach should be tied to primary partner activities. For example, PAs could: collaborate with air quality districts to bundle vehicle retirement programs with clean transportation alternatives, including programs related to micro-mobility; partner with EV manufacturers on marketing efforts narrowly directed at car buyers; work with EV and solar distributors to establish “clean energy” showrooms that display a wide array of technologies. And, as stated by the Energy Division, “The IOUs should work with CBOs, EJ groups, and local governments to development ESJ outreach plans.”¹⁴

Related to “Communication about rates, charging, and using electricity as a transportation fuel”,¹⁰ ESJ CBOs could be offered funds to conduct outreach and education focusing on building community capacity and understanding of EVs as a means to promote broader equity impacts.

11.3 Investor-Owned Utilities’ Low Carbon Fuel Standard (LCFS) Programs

LGSEC agrees with Energy Division that the IOUs should collaborate “... with local municipalities and environmental justice advocates to develop pilot programs or EV plans to support further development of EVs”¹⁵

¹⁰ Page 142,

11.3 Use of Holdback Credit Funds and Forklift Credit Revenue

LGSEC agrees with Energy Division that the IOUs should “Develop a used EV rebate program, as included in CARB’s list of pre-approved holdback equity projects. However, since one of the goals of the CFR program was to create consistency across the state, the IOUs should also coordinate any second-hand EV rebate.”¹⁶

12. Emerging Transportation Trends

1. Should the California Public Utilities Commission (CPUC) establish a requirement for a minimum transportation network company (TNC) contribution to any investor-owned utility (IOU) transportation program designed to directly benefit their drivers?

LGSEC strongly agrees with Energy Division’s statement, “City and regional governments have a vested interest in how TNC operations evolve and how those changes may affect their community or region. Before, during, and after any collaboration between the IOUs and TNCs, the IOUs should ensure that in addition to securing financing contributions from the TNCs, they have also consulted with city and regional governments. Energy Division staff wants to ensure that IOUs and TNCs consider city and regional governments’ goals and planning efforts prior to any investment.”¹⁷

The Staff Proposal somewhat dismissively acknowledges the presence of micro-mobility devices as related to the grid and relegates micro-mobility operators to outsiders that should be subject to guidance. Local governments are actively deploying micro-mobility solutions to reduce vehicle miles traveled (VMT), improve air quality and quality of life. Transitioning a bike

share system to electric could result in significant increases in adoption rates, with associated reductions in vehicle ownership. Additionally, micro-mobility devices offer a no- or low-cost option for low-income communities where car ownership may be a luxury.

PAs should assess current micro-mobility offerings and develop goals and programs to electrify and expand this fleet of devices.

Proposed Scorecard Additions

LGSEC recommends the following additions to the TEF scorecard:

- Number and percentage of local government, transportation network company, rental, package, and trucking fleets that are electrified, by vehicle type and VMT.
- Number of car-sharing hubs, shipping ports, and truck depots electrified.
- Number and percentage of local jurisdictions that have adopted or are offering

Streamlined TE permitting.

Direct or website promotion of PA TE educational and technical resources.

Reach codes for EV-ready or available construction or retrofits.

Local and/or regional EV Readiness Plans or Action Plans, as well as the percent of plans that have been implemented.

- Supplier, fuel source, amount, and percent of kilowatt/hours (kWh) EV charging, as well as kWh charged by battery storage and associated number of storage sites.

- Number of non-vehicular electric mobility device charging stations. VMTs reduced as a result of micro-mobility electrification investment, as compiled through data submitted by micro-mobility providers.
- EV ownership, compared with total vehicle ownership, as compiled with California Department of Motor Vehicle data.
- Engagement with and funding of CBOs as part of TE educational and marketing initiatives

Many scorecard elements would be tracked through LG data sources. In this context, PA's funding submissions should include a monitoring and evaluation plan that offers support and incentives for data collection, standardization and public reporting; or to create a platform that can be activated to collect necessary information, which in turn should be included within the California Analysis Tool for Locational Energy Assessment.

^[1] Page 114.

^[2] Page 71

^[3] Page 96

^[4] Page 98

^[5] Page 100

^[6] Page 104

^[7] Page 102

^[8] Page 104

^[9] Page 118.

^[10] Page 121. The public health crises, and resulting economic fallout has reduced expected construction activity, at least in the short-term. See <https://constructioncoverage.com/research/drop-in-construction-covid-19>.

^[11] Pages 126 and 127.

^[12] Page 131.

^[13] Page 133.

^[14] Page 143

^[15] Page 146.

^[16] Page 146.

^[17] Page 150.

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