



# APPENDIX F

## Outreach Plan

Prepared by  
**Center for Sustainable Energy**

As part of the  
**Central Sierra Zero Emission Vehicle Readiness Plan**

**AUGUST 2019**

# Appendix F

## Outreach Plan

### What do we need to accomplish?

The first goal of the outreach plan is to identify target audiences that represent the Regional EVI community. Based on engagement to date, the following include five primary target audiences:

- Public Agencies (e.g. RTPA Member Agencies, TPPA Members, CPPA Members, Municipal Governments)
- Workplaces/Businesses (e.g. Employers, Chambers of Commerce, Business Associations)
- Destinations/Tourism (e.g. Visitors Bureaus, Resorts, Tourist Attractions)
- Residents
- Fleets (e.g. Municipal Fleets, Private Fleets)

Reaching people involves understanding and speaking to their specific needs. The primary motivators for each audience identified for this project are presented in Table 1: Target AudiencesTable 1. These primary motivators help inform key messaging that will be used in unique materials developed for each audience.

Table 1: Target Audiences

AUDIENCE	WHAT DO THEY DO?	PROJECT BENEFITS
<b>Working Group</b>	Work in transportation, work in Region	EV infrastructure for their residents
<b>Public Agencies</b> (e.g., Cities, School Districts)	Work in regional planning agencies or government	EV infrastructure for employees and the public
<b>Workplace</b> (e.g., employers, Chambers of Commerce)	Employ residents	Boost employer attractiveness and serve their employees
<b>Destinations/Tourism</b> (e.g., Visitor Centers, short/long dwell)	Facilitate recreation activities in Region	EV information for people traveling to destinations
<b>Residents</b> (e.g., owners & operators)	Provide housing options for residents	Advisory for adding EV charging amenities for residents
<b>Fleet</b> (e.g., Public & Private Fleet Managers)	Work in transportation managing fleets	EV infrastructure to maintain compliance and optimize fleet

### Working Group

As part of the project scope, CSE partnered with the Central Sierra Region’s Regional Transportation Planning Agencies (RTPA) to create the Working Group. Working group members guide the creation and development of the plan, and provide critical local insight to the Central Sierra Region.

Table 2: Working Group Members

<b>Project Leads</b>
Tuolumne County Transportation Council
Center for Sustainable Energy
<b>RTPA Members</b>
Alpine County Community Development
Amador County Transportation Commission
Calaveras Council of Governments
Tuolumne County Transportation Council

### Public Agencies

Public agencies include the RTPA members, local municipal agencies, and Authority Having Jurisdictions (AHJs).

### Workplace/Businesses

CSE conducted a regional Business Survey to gauge the interest of regional employers in implementing EVCS at their workplaces and regional destinations.

### Destinations/Tourism

The Central Sierra Region is unique in its demand for EVCS due to the high rate of tourism. Regional destinations not only include retail and commercial locations, but also a vast array of recreation and tourism destinations that attract visitors outside of the Region.

### Residents

Residents guide the demand for EVCS in the Region. Increased ZEV education and Plan awareness can help guide the adoption of ZEVs in the Region.

### Fleet

Fleet managers are stakeholders within public agencies. CSE has developed resources for replacing municipal fleets with zero-emission vehicles (ZEVs). These materials are to be distributed to all managers of publicly-operated fleets.

### Audience Engagement Strategy and Tactics (How)

The following table provides a high-level overview of the channels that will be used to reach each target audience. Tactics are outlined further below.

Table 3: Engagement Channels

	Working Group	Public Agencies	Workplaces	Destinations	Residents	Fleet
<b>Channel</b>						
Meetings	X					
Webpage		X	X	X	X	X
Webinar	X	X	X	X	X	X
Email	X	X	X	X	X	X
<b>Outreach Materials</b>						
Toolkits	X	X	X	X	X	X
Guidebooks		X	X	X	X	X

## Who are we talking to?

CSE has identified >180 potential candidates for electric vehicle infrastructure within 16 municipalities within the Central Sierra region, based on a combination of factors, including available parking, proximity to the municipality’s city center, and/or the site’s estimated attractiveness to a large portion of the resident or visitor population. Municipalities are shown below as Table 4.

Table 4: Municipalities with recommended sites.

Municipality	County
Amador City	Amador
Angels Camp	Calaveras
Columbia	Tuolumne
East Sonora	Tuolumne
Groveland	Tuolumne
Ione	Amador
Jackson	Amador
Jamestown	Tuolumne
Markleeville	Alpine
Murphys	Calaveras
Plymouth	Amador
San Andreas	Calaveras
Sonora	Tuolumne
Sutter Creek	Amador
Twain Harte	Tuolumne
Valley Springs	Calaveras

These sites represent a wide range of property sizes and categories, including commercial institutions, educational and public facilities, hotels and inns, and public parking lots. This document focuses specifically on engaging businesses within each county, leveraging the ability of chambers of commerce and other professional organizations as a method of improving engagement with the larger business

community. The sites identified as potential candidates in the blueprint document are intended to serve as starting points.

These sites are classified into five categories that overlap the more general classifications outlined in the toolkits: parking lots, commercial sites, lodging, public institutions, and schools. Each site type comes with its own characteristics and unique considerations, which are outlined below.

### Parking

Public and semi-public parking lots are excellent locations for EV charging. These locations tend to be centralized, and in close proximity to a wide variety of commercial, natural, and/or municipal destinations. A large transformer will likely be needed, as within the Central Sierra region, these sites typically do not have large power demands, and thus may be unlikely to have an existing transformer unless required by the site associated with the lot. For further information, please see the “Workplaces” toolkit.

### Commercial

The suitability of a commercial site is extremely dependent on the site’s usage patterns and clientele. As with parking, a larger transformer may be required, based on the site’s electrical usage. If a business requires high rates of turnover, a Level 2 charger may limit parking lot usage, as it may encourage drivers to stay for long periods of time in order to obtain a satisfactory charge. Observing local and customer demand for electric vehicle charging is highly recommended. For further information, please see the “Workplaces” toolkit.

### Lodging

In the Central Sierra region, lodging serves as a primary destination for many visitors. Long dwell times, coupled with the ample parking lots required for overnight lodging, may position lodging as one of the most attractive prospects for electric vehicle charging installations within the Central Sierra region. For more information, please see the “Destinations” toolkit.

### Public Institutions

Public institutions frequently see high levels of visitor traffic, often alongside a mixture of short and long dwell times. The category encompasses locations including parks, libraries, civic centers, and post offices. Parking lot sizes can vary considerably between sites, as can available electrical infrastructure. For further information, please see the “Public Institutions” toolkit.

### Schools

Due to their long dwell times, public-facing nature, high rates of visitation, and potential educational benefits, schools can serve as excellent hosts for EV charging stations. Electrical infrastructure may need to be upgraded, depending on the site requirements. Additional information on schools can be found in the “Public Institutions” toolkit.

## What do we want them to know/do?

As discussed in the main body of the document, a survey of 23 business owners found several primary barriers to installing EV infrastructure within the Central Sierra region. Installation and procurement cost and business models were top concerns, with a confusing permitting process mentioned as an additional barrier. Table 5 details each of the responses received, and provides solutions and additional resources to alleviate each concern.

Table 5: Reported barriers to EVCS installation within the Central Sierra region

Barrier	Solution
Cost of Installing Equipment (8)	Improve awareness/outreach to help pursue funding opportunities
Cost of Purchasing Equipment (7)	Improve awareness/outreach to help pursue funding opportunities
Figuring out how to bill station users for their electricity usage (7)	Present common options for billing, along with pros and cons for each method.
Unclear/Lengthy permitting process (6)	Standardize permitting within the region, as suggested/modeled by GO-Biz.
Figuring out how much the stations would be used (2)	Survey employees and customers for interest in electric vehicles. Observe latent demand (ex. number of EVs in lot over a month)
Finding an installer I wanted to work with (1)	A list of potential installers in each county can be accessed by visiting <a href="https://calevip.org/calevip-connects">https://calevip.org/calevip-connects</a> .
Finding an equipment supplier I wanted to work with (1)	A list of potential equipment suppliers in each county can be accessed by visiting <a href="https://calevip.org/calevip-connects">https://calevip.org/calevip-connects</a> .
Figuring out a plan for station maintenance (1)	Supply common maintenance situations and solutions, including: maintenance requirements under different ownership structures, common issues and their solutions, etc.

### Cost of Installing/Purchasing Equipment

One method of reducing installation costs and burdens is to offer incentives and funding programs that help pay for the installation of EV charging. Several state and local programs exist to reduce the upfront cost associated with new installations.

**Alternative Fuel Vehicle Refueling Property Credit:** Offers a 30% tax credit for any qualified alternative fuel vehicle refueling property. Maximum incentive dependent on site type; incentives for principal residences capped at \$1,000 per location, and incentives for businesses capped at \$30,000 per location.

**County Air Pollution Control Districts:** Through the Carl Moyer Program, local air districts are able to offer incentives for electric vehicle fueling infrastructure. All projects are eligible for a maximum of 50% eligible cost coverage, with additional incentives available for projects that are publicly accessible and/or installed alongside solar or wind power. For more information, please see [https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\\_gl\\_chapter\\_10.pdf](https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_chapter_10.pdf)

#### **Pacific Gas and Electric (PG&E):**

PG&E administers three funding programs for electric vehicle infrastructure. These programs include the FleetReady Program, Fast Charge Program, and EV Charge Network Program.

- EV Fleet Program – Starting in May 2019, PG&E received \$236 million in eligible funds from the California Public Utilities Commission (CPUC) for infrastructure supporting fleet vehicle

charging. PG&E is working with fleet managers that request funding across Northern and Central California to install EVCS at 700 sites (EV Fleet Program, 2019)

- Fast Charge Program – Starting in Summer 2019, PG&E will fund and build infrastructure for public DCFCs, including 25% located within DACs. Furthermore, PG&E will offer rebates for customers in DACs who wish to purchase DCFCs (CPUC Approves New PG&E Projects to Help Accelerate Electric Vehicle Adoption in California, 2018).
- EV Charge Network Program - Starting in 2016, the CPUC approved the PG&E EV Charge Network Program to install 7,500 Level 2 EVCS at MUDs and workplaces. Within the service territory, PG&E will install the infrastructure at qualified locations with at least ten parking spaces available for charging (About the Program, 2018).

### **Liberty Utilities:**

Liberty Utilities is currently seeking California Public Utilities Commission (CPUC) approval to offer incentives of up to \$2,500 to small commercial customers for installing electric vehicle charging stations at their place of business. For more information, please see

[https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\\_gl\\_chapter\\_10.pdf](https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_chapter_10.pdf)

### Determining how to bill users

While the most common options for non-networked charging stations are to dispense electricity either free or at a flat fee, networked chargers allow for a wider variety of billing options.

- Per-time unit: Typically a standard fee paid on a per-minute or per-hour basis. Should be designed to cover electricity costs and incentivize turnover. If on a per-hour basis, ensure that driver dwell time is approximately an hour, or pro-rate. Ensures that drivers pay for the time they use occupying the spot, both charging and not charging. Can be paired with per-kWh pricing.
- Per-kWh: A standard fee paid for each kilowatt-hour of electricity consumed. In its simplest form, drivers do not pay for any time they spend plugged in but not charging. Can be paired with time-unit pricing to incentivize turnover.
- Flat fee: A standard fee paid without regard to the length of time or amount of electricity consumed. Typically one of two options for non-networked chargers.
- Time-of-use: A per-time-unit or per-kWh fee that changes based on the time of consumption. Incentivizes charging while rates are low, disincentivizes when rates are high, potentially reducing electricity costs to site host.
- Subscription: A fixed rate may be charged to the driver for an unlimited number of connections or time connected at a publicly available EVCS.
- Free: No cost EV charging. May be provided as an amenity. Typically one of two options for non-networked chargers.

### Overcoming an unclear/lengthy permitting process

The permitting and installation process for electric vehicle charging stations often varies between jurisdictions. Legislation (California Assembly Bill 1236) has been passed mandating communities to adopt ordinances that streamline and expedite permitting processes for EV charging stations. As part of an effort to set consistent expectations for this process, the Governor's Office of Business and Economic Development has published a statewide Electric Vehicle Charging Station Permitting Guidebook, available at <http://businessportal.ca.gov/wp-content/uploads/2019/07/GoBIZ-EVCharging-Guidebook.pdf>. Local governments are required to publish a permitting checklist outlining the

requirements for expedited review of charging stations. To ease the compliance process, many municipalities have opted to adopt the California Community Readiness Guidebook “Plug-In Electric Vehicle Infrastructure Permitting Checklist” rather than develop their own. These basic standards are exhibited at [http://opr.ca.gov/docs/ZEV\\_Guidebook.pdf](http://opr.ca.gov/docs/ZEV_Guidebook.pdf), page 112.

### How much usage will these stations get?

For many businesses, there are several distinct groups that may make use of chargers, each with distinct considerations and methods of assessing latent demand.

#### Employees

- Consult with your employees to determine if they have interest in or need for electric vehicle charging.
  - Results of this survey can help inform the need for and/or required charging speed of infrastructure.
- Providing workplace EV charging can help to recruit and retain employees, and can help to contribute to an environmentally conscious corporate image.
- If the business owns a vehicle fleet, are many of the vehicles old enough to require replacement? If so, investing in EVs may reduce operating expenses and ensure that EV chargers have heavy usage.

#### Customers

- Consider the driving habits of the business’s customers, as well as the business’s workplace needs. The site may benefit from the increased customer dwell time that EV charging can provide (especially with retail sites). EV charging may provide both an increased motivation for EV drivers to visit your site and improve EV driver dwell time.
  - However, if turnover is more important than dwell time, different considerations may apply.
- Examine the vehicle makeup of the business’s customer base: how many of them own or are considering purchasing an electric vehicle?

#### Travelers

- The presence of EV charging may be able to bring additional business to business sites, turning passersby into customers by giving them a highly visible reason to visit.
- Is the potential site located on a major thoroughfare? Are EVs a common sight in the region? Are EV chargers relatively rare in the area surrounding this business? If so, an EV charger at this business site may prove to be a heavily utilized amenity.

### Determining a plan for station maintenance

Normally there are relatively few EVCS maintenance requirements.

1. The charging cord should be stored securely so it is not damaged, and the accessible EVCS parts should be checked periodically for wear or vandalism.
2. The system should be kept clean using a damp cloth and detergent to wipe surfaces.
3. A qualified electrician should conduct periodic inspections, testing, and preventative maintenance. Annual maintenance costs range from \$25 to \$50 per EVCS unit. Manufacturers also provide extended warranties to help reduce long-term maintenance and repair costs. Warranties may also be available for the labor. Level 1 and 2 EVCS have an expected useful life of approximately ten years. See the EVCS manufacturer’s guidelines for specific requirements.

The Plug-In Electric Vehicle (PEV) Handbook for Public Charging Station Hosts offers details on maintenance requirements (US DOE Clean Cities Technical Response).

4. Despite the relative simplicity of EV charging stations, some equipment components have a defined lifespan.
  - a. For Level 1 EVCS, the commercial grade electrical outlet may need to be replaced periodically. This should cost no more than \$100 for equipment and professional installation.
  - b. Level 2 EVCS are modular and components can be replaced, if necessary, without installing a whole new unit.
  - c. Networked EVCS with communications systems for data or payment may need more frequent maintenance that a local electrician should be able to perform. Technical troubleshooting may be covered in network subscription fees.
  - d. DC fast charging units require more maintenance due to cooling systems, filters, and other components not found in Level 1 and 2 chargers. The chosen warranty and service plan should reflect expected usage and site-specific needs.

Some charging station hosts purchase, install and operate stations themselves. They receive all revenue from the unit and can contract regular maintenance to a third party. In other ownership models, a third party pays for station equipment, installation and maintenance costs, and manages logistics in return for lease payments or a share of the station's revenue. This model minimizes a host's upfront costs and administrative responsibilities.

### How and where do we tell them?

Due to the inherent characteristics and considerations with each site type, a one-size-fits-all approach is unable to capture the variations between sites. To this end, Center for Sustainable Energy is reaching out to local organizations with deep understandings of the communities they serve. These organizations – chambers of commerce, business associations, visitor's bureaus, and other industry groups – will be integral in communicating information to potential EV charging station sites in their communities, answering questions, and alleviating concerns using the information outlined above.

In combination with the toolkits, this outreach plan should serve as a basic outline for reaching out to community businesses, providing education, and addressing concerns.

There are several mechanisms that can be leveraged to conduct outreach. Perhaps the most relevant and important is to utilize existing and established social media channels.

Firstly, CSE's in-house social media can serve as a tool to engage stakeholders and raise awareness of the existence of the business plan, and specifically target certain sectors and/or individual stakeholders. Developing outreach content for publication through Twitter can provide near-real-time updates to the programs being implemented, and engage potential stakeholders from a wide variety of roles and projects. Data gathered through Facebook and Google campaigns can provide valuable initial insights into public visibility, engagement, and response.

To increase reach, CSE's language can either be reshared by or copied onto partner agency social media accounts, broadening the audience by leveraging the existing relationship between agency media and its followers. Media and materials can both be distributed through informal communication, and questions can be answered in a low-pressure environment.

Secondly, hosting workshops and distributing physical toolkits to interested businesses through targeted outreach preemptively provides the highest-priority businesses with the collateral and answer the questions needed to begin making an informed decision.

As a third lever, partner agencies (chambers of commerce, business associations, etc.) can leverage existing relationships with the business community and conduct outreach on behalf of CSE to the entire sector of businesses. The primary goal of this is to gauge business interest, provide valuable context for the potential project, and suggest next steps in the event of existing interest.

#### How do we tell how effective it was?

Conducting pre- and post-outreach surveys may provide information on the direct impact of educational workshops on potential site host attitudes.

Another simple metric for determining outreach effectiveness is the number of chargers and/or charging ports installed. Effectiveness can additionally be assessed by examining the ability of installed chargers to meet the existing demand in the area. Feedback from EV drivers, station site hosts, and community members will be integral in determining how well EVCS are serving local demand.

Developing and conducting a survey of site hosts who decided to install chargers in order to assess station utilization, changes in customer and host attitudes, and overall satisfaction may provide additional data useful in quantifying outreach effectiveness.

## Sample Letter Draft

Dear (Business Owner Name),

A recent funding opportunity has been released by (funding organization) that is intended to support the installation of new (Direct Current Fast/Level 2) electric vehicle charging stations in your region. We are writing to you to gauge your interest in placing a station at (site name here). Your site was identified as having good potential for hosting EV charging, given its (criteria here: ex. location on a popular highway corridor, long driver dwell times, proximity to attractions, etc.)

[If DCFC]: In compliance with (funding organization) regulations, this station will be equipped with two different types of charging ports (CHAdeMO and SAE CCS) in order to serve a wide range of vehicle makes and models.

[If Level 2]: These stations will be (single/dual) port stations, equipped with standard J1772 plugs to serve all currently produced electric vehicles.

The deadline for the funding opportunity is (month, day, year).

We are working with several regional collaborators, including the Tuolumne County Transportation Council (TCTC), Our objective is to support the buildout of the electric vehicle charging infrastructure within (region name), leveraging funding from grants and other funding opportunities in order to improve EV charging convenience while minimizing cost. If interested, please let us know and we will add your site name to a list of potential charging sites in (region name) and contact you in the near future with additional information on your options for charging stations.

If you have questions about this opportunity, our work in (region name), or more general inquiries, please contact Derek Ichien at (858) 634-4739, or by email at [derek.ichien@energycenter.org](mailto:derek.ichien@energycenter.org).

Thank you for your time, and we hope to hear from you soon!