The Electric Vehicle Charger Installation Process

Insights from Service Providers and Site Hosts

Special thanks to Brian Jones, Derek Ichien, Andy Hoskinson, and Daniel Flores
Introduction

• The California Electric Vehicle Infrastructure Project (CALeVIP) provides rebates for electric vehicle chargers installed at multi-unit dwellings, workplaces, and public locations

• The Center for Sustainable Energy implements CALeVIP on behalf of the California Energy Commission
More publicly located chargers are needed to support California’s goal of 5M ZEVs on the road.

The electric vehicle infrastructure market is changing rapidly and awareness is still very low.

Site hosts (property managers) have limited time to research a technology that is new to them.
Current Solution

CALeVIP Connects
Locate partners to help you with your EV charging needs.

- **EQUIPMENT MANUFACTURERS**
  Manufacturers of electric vehicle chargers

- **INSTALLERS & ELECTRICIANS**
  Contractors that install electric vehicle chargers

- **NETWORK PROVIDERS**
  Businesses that provide network services for electric vehicle chargers

- **ELECTRICITY PROVIDERS**
  Electric load serving entities like utilities and community choice aggregators

- **EQUIPMENT DISTRIBUTORS & RE-SELLERS**
  Businesses that sell equipment manufactured by others
CALeVIP Connects

Find
Equipment Manufacturers

For a Project In
County

ABB Inc.
EQUIPMENT MANUFACTURERS
ABB is a global electrification leader and has been developing and deploying electric vehicle charging technology for nearly a decade. With more than 10,000 DC fast-chargers (DCFC) deployed worldwide, ABB has the largest installed base of high power EV chargers.

Blink Network LLC
EQUIPMENT MANUFACTURERS, NETWORK PROVIDERS
Blink Charging is a leader in nationwide public electric vehicle (EV) charging equipment and software, enabling EV drivers to easily recharge at locations throughout the United States and select countries.

AVAILABLE CALeVIP INCENTIVES
- Central Coast Incentive Project
- Fresno County Incentive Project (FCIP)
- Northern California Incentive Project
- Sacramento County Incentive Project
- Southern California Incentive Project (SCIP)

GET STARTED
- Electric Vehicle Charging 101
  Learn more about different charging options for EVs.
Objectives and Methods
Research Question

• How can we make this tool more useful for potential site hosts?
## Interviews

<table>
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<th>Category</th>
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<tr>
<td>Site Hosts</td>
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</tr>
<tr>
<td>Electric Vehicle Service Providers (EVSPs)</td>
<td>9</td>
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<tr>
<td><strong>Total</strong></td>
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BECC 2019
Findings
CEO bought a Tesla

Aligns with values

Tenants want EV charging

Desire to add EVs to fleet

Site Host Motivations
How Site Hosts Found Information

• Found EV charger incentive program online
• Searched on Amazon - contacted equipment manufacturer
• Previous interaction with contractor
Decision Points

Equipment type
Networked or non-networked

Number of chargers
Site hosts need to estimate demand

Location
Desired location may not be the least expensive option
COMMON BARRIERS

Unexpected costs
- Trenching, electrical upgrades, networking fees

Inexperienced contractors
- Many EVSPs prefer to use their own network of contractors

Revenue expectations
- Site hosts may expect to make more money off chargers than is realistic

Codes and permitting
- Americans with Disability Act (ADA) requirements can be seen as onerous
Recommendations
Provide Different Levels of Support

**Full Directory**
Similar to current tool, user can browse through each category

- E.g. user already has a contractor, looking for equipment

**Walk-through experience**
Series of questions aimed at narrowing down what the user needs

- E.g. does the user need a networked solution?
Key Takeaways

Focus educational materials on costs rather than technical support

Awareness of EVI is still low - more outreach is needed
“Many businesses are not aware of the market evolving”

- EV charging contractor
Thank You