Customer Communications Evolution & Approach

Don Bray & Pamela Leonard
Messaging Evolution

CCE Launch  
(2016 – 2018)

- Focus on selling
  CCE throughout
  enrollment period,
  soft messaging
  (i.e. customer
  choice, lower rates,
  local control)
- Customer retention
  and education

Electrification & Decarbonization  
(2019 – )

- Focus on
  community
  benefits and value
  proposition
- Draw interest in
  programs and
  Customer Resource
  Center
- Longer-term
  transformation
- Customer retention
  and education
Communicating How It Works


• Focus on mechanics of Community Choice Energy
• Enrollment-driven messages
  • Emphasis on choice and opt out
2017 – 2018 Key Messages

**GHG Reduction**
Single most effective and large-scale action our communities can take to curb emissions and reduce climate impacts.

**A True Choice**
Now have a choice of more than one electricity provider.

**Competition**
Redefining the local energy market with new and competitive clean energy services.

**Local Investment**
Reinvest revenues to keep rates low, provide energy efficiency programs and promote local clean energy infrastructure.
Value Proposition Going Forward

**Fighting climate change by cutting carbon emissions**
We are helping our communities lead the fight against climate change by reducing the use of fossil fuels for energy, transportation and buildings, and building new renewable energy projects.

**Accelerating adoption of innovative electric technologies**
As the electricity industry undergoes unparalleled changes, SVCE encourages the advancement of new technologies to help our community meet its climate goals.

**Benefitting our community by reinvesting locally**
SVCE returns value to our customers through competitive rates, clean energy programs, projects, scholarships, grants, and improved access and education.
Implementing New Messages

- Updated brochures, website sliders & presentations

Electricity That's Good for Your Business

Clean & Carbon-Free
Competitive Rates
Community-Owned

Benefits
Returning Value to Our Community
Silicon Valley Clean Energy (SVCE) is dedicated to providing benefits to our customers:

Fighting climate change: We are reducing the use of fossil fuels for energy, transportation and buildings, and building new renewable energy projects.

Accelerating electric technologies: As the electricity industry undergoes unparalleled changes, SVCE encourages the advancement of new technologies to help our community meet its climate goals.

Reinvesting locally: SVCE returns value to our customers through competitive rates, clean energy programs, projects, rebates, grants, and improved access and location.

HELPING YOU FIGHT CLIMATE CHANGE

INVESTING IN A CLEAN ENERGY FUTURE

ADVANCING ELECTRIC BUILDING TECHNOLOGIES
Customer Resource Center

Goal
• Create a mechanism to engage customers on electrification and decarbonization

Objectives
• Program approved with Decarb Roadmap
• Online educational resource for customers to learn about electrification and take action
Focus Areas & Outcomes

Focus Areas
• Energy and Emissions
• Mobility
• Built Environment

Enabling Outcomes
## Focus Areas & Outcomes

<table>
<thead>
<tr>
<th>Energy &amp; Emissions</th>
<th>Energy Use</th>
<th>Emissions &amp; Carbon Footprint</th>
<th>Energy Efficiency</th>
<th>Grid Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>Electric Vehicles</td>
<td>Electric Vehicle Charging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built Environment</td>
<td>Space Heating/Cooling</td>
<td>Water Heating</td>
<td>Solar PV</td>
<td>Battery Storage</td>
</tr>
<tr>
<td></td>
<td>Smart Thermostats &amp; Controls</td>
<td>Cooking &amp; Other Appliances</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Draft RFP
Structure & Support

• Engaging SMUD
• Teaming with Monterey Bay Community Power and Sonoma Clean Power

Tier 1
- What will make customers want to learn more?
- High-level, easy to understand
- Website navigation, general marketing

Tier 2
- Understanding Energy Use
- EVs
- Building Electrification
- Solar
- Marketplace and/or Concierge Service

Task A
Awareness & Inspiration
Marketing Firm

Task B
Action & Implementation
Online solution providers
Customer Resource Center – as an Engagement Mechanism

Driving users to the resource
• Email marketing
• Newsletters
• Direct outreach
• Advertising - mass awareness opportunity
• Utilize partner outreach channels

Equity and Access
• Meaningful resource for all customer segments
Proposed Timeline

- **Develop RFP**
- **Post RFP (4 weeks)**
- **Start work**
- **Award and Contracting (3 weeks)**
- **Internal launch and testing**
- **Soft launch**
- **Launch with big Earth Month & 3rd anniversary splash**

Timeline:
- July (Jul): Develop RFP
- August (Aug): Post RFP (4 weeks)
- September (Sept): Start work
- October (Oct): Award and Contracting (3 weeks)
- November (Nov): Internal launch and testing
- December (Dec): Soft launch
- January (Jan): Launch with big Earth Month & 3rd anniversary splash
- February (Feb)
- March (Mar)
- April 2020
Questions?
Workforce Development Progress Update

August 23, 2019
Mission Review

In April, the SVCE Board approved dedicating $200,000 from the program budget over FY 19 and FY 20 to Workforce Development and Training Programs.

➢ **Phase 1:** Stakeholder outreach & background research (Spring/Summer 2019)

➢ **Phase 2:** Finalize program design, update to Exec. Committee/BOD & program implementation (Estimated: Summer/Fall 2019)
Workforce Development is the Crucial Link

A well-trained workforce accelerates decarbonization

Decarbonization creates local workforce opportunities accessible through training
SVCE Workforce Development Efforts Should Be:

- **Grounded in listening to workforce needs.** As with the development of the Roadmap itself, SVCE’s efforts should begin with seeking stakeholder input on where and how we can participate most effectively.

- **Additive, not duplicative.** SVCE efforts should leverage and synergize with existing workforce training and development organizations in SVCE’s communities.

- **Inclusive.** SVCE efforts should consider how the opportunities in decarbonization can be made available to all segments of the relevant workforce.
Basic Program Design Needs

Defining the Problem

• What are the mechanisms by which workforce development affects low-carbon technology adoption?
• Where are the gaps in existing workforce development resources?

Defining the Solution

• Whom should we partner with?
• Which technologies do we focus on?
• What program structures are effective?
• What principles should guide choice between program design options?
Defining the Problem: The Value of the Customer Perspective

• **Customer experience** is a crucial link between workforce development and the adoption of low-carbon technologies.

• SVCE has the opportunity to play a unique role as a **customer advocate** within the low-carbon technology supply and service chain.

• Identifying **concrete mechanisms** through which workforce issues impact consumer adoption decisions increases program effectiveness.

• Early adopters often have to function as “**system integrators**,” identifying the skills necessary for installation and seeking out appropriate professionals.
Defining the Solution: Mapping the Workforce Landscape

- **Stakeholder interviews**: Conversations with key stakeholders to establish relationships, understand how workforce development happens currently, and track what goes into fulfilling a customer request for technology installation:
  - Unions
  - Community workforce development organizations
  - Educational institutions
  - Contractors
What goes into the customer experience?

- Customers
- Contractors
- Professionals
- Local Unions
- Community WD Centers
- Colleges
- Technology Manufacturers
- National Union Organizations
- CA State Government
- Curriculum Development and Certification Requirements

Increasing Time Horizon
How can we improve the system?

- **Change who interacts with the customer by forging new relationships**: Work with contractors and unions to bring together types of professionals who may not customarily work together to ensure that all the necessary services can be delivered seamlessly to the customer.

- **Supplement existing professional education**: Work with unions, workforce development centers, and colleges to supplement existing curricula with cross-disciplinary training that increases familiarity with low-carbon technologies.

- **Help customers find existing resources more easily**: Create standards or databases that help customers interested in low-carbon technologies connect with professionals qualified to install them.
Next Steps

• Additional upcoming interviews with workforce development stakeholders – recommendations welcome
• Continued investigation into where and how workforce issues are impacting customer technology adoption decisions
• Transition from landscape mapping to more concrete program design
• Review of workforce development program structures related to low-carbon technology in other regions
• Selection of final program structure
• Increased focus on planning program logistics
EV Infrastructure Joint Action Plan

Executive Committee
August 23, 2019
EVI Joint Action Plan - Purpose

• Create a “snapshot” of current EVSE, critical needs and approaches
• Develop detailed program concepts
• Define implementation plans to allow for rapid launch of programs
• Jump-start efforts to engage with outside funding sources (e.g. CALeVIP)
CALeVIP Overview

- Peninsula-Silicon Valley project will have $60 million in combined funding
- CEC plans to commit $6M to SVCE territory to max out SVCE’s offered match
- CALeVIP broadly targets public DCFC and public/private L2
- EVI Plan process gathered stakeholder input used to inform CALeVIP requirements
GHG Emissions Reduction Goals

Achieving CA’s 2050 GHG goal will require an additional 61-74% reduction below forecasted 2030 level.

This reduction will require an unprecedented shift away from natural gas in commercial and residential buildings, and gasoline vehicles.

- **SVCE’s 2021 Target**: 30% below 2015 levels (2.82 MMT CO2E)
- **Proposed 2025 Target**: 40% below 2015 levels (2.42 MMT CO2E)
- **Proposed 2030 Target**: 50% below 2015 levels (2.01 MMT CO2E)
- **California 2030 Target**: 40% below 1990 levels
- **California 2050 Target**: 80% below 1990 levels

**Presentations**

- **Electricity (SVCE, PG&E, Direct Access)**
- **Natural Gas**
- **Transportation**

**Proposed GHG Goal**

**Current GHG Goal**

**GHG: Business-as-Usual**

**GHG: With Programs**

**CA 2030 Goal**

**CA 2050 Goal**
Transportation in SVCE Territory

Annual Transportation GHG Emissions (2018)
Total = ~ 2 Million MT CO2e

- Passenger Cars: 36%
- Light-Duty Trucks: 17%
- Medium-Duty Vehicles: 10%
- Heavy-Duty Trucks: 20%
- Off-Road: 17%
- Other: 0%

- Current EV adoption is ~26,000 EVs*
- SVCE’s BAU assumes 7x overall growth in non-commercial EVs by 2025; 5% penetration in commercial
- Need substantial growth beyond BAU to reach SVCE’s target

* predominantly non-commercial: Passenger Cars and Light-Duty Trucks
Deployment and Challenges By Use Case

Community Survey Results from ~650 SVCE customers.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Existing Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor</td>
<td>Low</td>
</tr>
<tr>
<td>Destination/Retail</td>
<td>Med</td>
</tr>
<tr>
<td>Fleet</td>
<td>Low</td>
</tr>
<tr>
<td>Large Workplace</td>
<td>Med/High</td>
</tr>
<tr>
<td>Small/Med Workplace</td>
<td>Low</td>
</tr>
<tr>
<td>MUD</td>
<td>Very Low</td>
</tr>
<tr>
<td>Single Family</td>
<td>High</td>
</tr>
</tbody>
</table>

% Stating Charging Need is Significant+

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Single Family</th>
<th>Workplace</th>
<th>MUD</th>
<th>Corridor</th>
<th>Fleet</th>
<th>Retail</th>
<th>Grocery Store</th>
<th>Tourism &amp; Rec</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Stating</td>
<td>80%</td>
<td>75%</td>
<td>68%</td>
<td>59%</td>
<td>54%</td>
<td>48%</td>
<td>29%</td>
<td>26%</td>
</tr>
<tr>
<td>SVCE Focus</td>
<td>68%</td>
<td>65%</td>
<td>61%</td>
<td>56%</td>
<td>51%</td>
<td>46%</td>
<td>30%</td>
<td>25%</td>
</tr>
</tbody>
</table>

% Stating Need for SVCE Support is Significant+

<table>
<thead>
<tr>
<th>Use Case</th>
<th>MUD</th>
<th>Fleet</th>
<th>Corridor</th>
<th>Retail</th>
<th>Grocery Store</th>
<th>Tourism &amp; Rec</th>
<th>Single Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Stating</td>
<td>76%</td>
<td>58%</td>
<td>48%</td>
<td>43%</td>
<td>42%</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td>SVCE Focus</td>
<td>45%</td>
<td>43%</td>
<td>38%</td>
<td>34%</td>
<td>33%</td>
<td>27%</td>
<td>22%</td>
</tr>
</tbody>
</table>
SVCE EVI Enabling Practices

Different ways for SVCE to engage to support EVI deployment

- Regional Coordination
- Funding Support and Incentives
- Education and Outreach
- Building Codes
- Permit Streamlining
- Planning, Land Use & Zoning
- Electric Rates
- Vehicle Grid Integration
SVCE’s EVI Matrix - Current View

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Regional Coordination</th>
<th>Funding Support and Incentives</th>
<th>Education and Outreach</th>
<th>Building Codes</th>
<th>Parking Enforcement or Signage Requirements</th>
<th>Permitting</th>
<th>Planning, Land Use, &amp; Zoning</th>
<th>Electric Rates</th>
<th>VGI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet - Public/Private Transit (Buses, shuttles, etc.)</td>
<td>Ad Hoc Coordination</td>
<td>No local incentives</td>
<td>No permanent program</td>
<td>NA</td>
<td>NA</td>
<td>No relevant language</td>
<td>NA</td>
<td>NA</td>
<td>No Specialized Rates</td>
</tr>
<tr>
<td>Fleet- TNC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleet- public/private vehicles (City Fleets, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridor</td>
<td>Drive the ARC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destination/Retail</td>
<td>Ad Hoc Coordination</td>
<td>No local incentives</td>
<td>No permanent program</td>
<td>Low Adoption of EV Supportive Building Code</td>
<td>Low adoption</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>No Specialized Rates</td>
<td>No Program</td>
</tr>
<tr>
<td>Workplace - large</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workplace - small/medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUD</td>
<td>Ad Hoc Coordination</td>
<td>No local incentives</td>
<td>No permanent program</td>
<td>Low Adoption of EV Supportive Building Code</td>
<td>Low adoption</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>No Specialized Rates</td>
<td>No Program</td>
</tr>
<tr>
<td>SF Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EV Rates in place</td>
<td></td>
</tr>
</tbody>
</table>

Jurisdiction-specific matrices were also created.
Ongoing EVI Efforts and Recommended Programs
Ongoing SVCE EVI Initiatives

- EV Reach Codes (including affordable housing support, ongoing)
- EV Rates (match PG&E, ongoing)
- Customer Resource Center (currently working on RFP)
- Virtual Power Plant (currently scoping)
- Permit Streamlining (identified in Decarb Roadmap for 2020)
Two Ecosystem-Focused Programs

A. SVTEC – Silicon Valley Transportation Electrification Clearinghouse

- Regional group focused on transportation electrification
- Bring in key stakeholders in EV/EVSE industry, public agencies, employers, and local organizations
- Collaborate and share info
- Pursue external funding opportunities using professional grant writing firm
- SVCE to interface with regional and state groups to streamline processes (e.g. with PG&E to ease interconnection)
Two Ecosystem-Focused Programs

A. SVTEC – Silicon Valley Transportation Electrification Clearinghouse
   - Regional group focused on transportation electrification
   - Bring in key stakeholders in EV/EVSE industry, public agencies, employers, and local organizations
   - Collaborate and share info
   - Pursue external funding opportunities using professional grant writing firm
   - SVCE to interface with regional and state groups to streamline processes (e.g. with PG&E to ease interconnection)

B. Regional Recognition
   - Recurring recognition for best practices and info sharing
   - Electrification Pledge
   - Tie to SVCE funding and support
   - Focus on large commercial
Four *Infrastructure-Focused Programs*

**C. Priority Zone DCFC**
- Competitive RFP for incentives for DCFC deployment in SVCE-defined priority areas
- Focus on areas to support MUD and corridor use cases
- Identify zones in collaboration with local governments’ transportation plans
### Joint Action Plan - Recommended Programs

#### Four Infrastructure-Focused Programs

<table>
<thead>
<tr>
<th>C. Priority Zone DCFC</th>
<th>D. MUD Technical Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Competitive RFP for incentives for DCFC deployment in SVCE-defined priority areas</td>
<td>• Prioritize garden-style apartments due to shared spaces</td>
</tr>
<tr>
<td>• Focus on areas to support MUD and corridor use cases</td>
<td>• Includes site visits and electrification plans</td>
</tr>
<tr>
<td>• Identify zones in collaboration with local governments’ transportation plans</td>
<td>• Top garden style property owners represent many units</td>
</tr>
<tr>
<td></td>
<td>• Provide rebates at nearly 100% of cost</td>
</tr>
</tbody>
</table>
Four *Infrastructure-Focused* Programs

**C. Priority Zone DCFC**
- Competitive RFP for incentives for DCFC deployment in SVCE-defined priority areas
- Focus on areas to support MUD and corridor use cases
- Identify zones in collaboration with local governments’ transportation plans

**D. MUD Technical Assistance**
- Prioritize garden-style apartments due to shared spaces
- Includes site visits and electrification plans
- Top garden style property owners represent many units
- Provide rebates at nearly 100% of cost

**E. Workplace Rebates**
- Rebates for workplace deployment
- Focus on small/medium businesses
- Include some level of technical assistance
# Joint Action Plan - Recommended Programs

## Four Infrastructure-Focused Programs

<table>
<thead>
<tr>
<th>C. Priority Zone DCFC</th>
<th>D. MUD Technical Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Competitive RFP for incentives for DCFC deployment in SVCE-defined priority areas</td>
<td>• Prioritize garden-style apartments due to shared spaces</td>
</tr>
<tr>
<td>• Focus on areas to support MUD and corridor use cases</td>
<td>• Includes site visits and electrification plans</td>
</tr>
<tr>
<td>• Identify zones in collaboration with local governments’ transportation plans</td>
<td>• Top garden style property owners represent many units</td>
</tr>
<tr>
<td></td>
<td>• Provide rebates at nearly 100% of cost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Workplace Rebates</th>
<th>F. Fleet Electrification Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rebates for workplace deployment</td>
<td>• Competitive grants for planning and site upgrades</td>
</tr>
<tr>
<td>• Focus on small/medium businesses</td>
<td>• Focus on visible fleets, school buses, and public agencies</td>
</tr>
<tr>
<td>• Include some level of technical assistance</td>
<td>• Light- to heavy-duty vehicles all eligible</td>
</tr>
<tr>
<td></td>
<td>• Provide examples for others to follow</td>
</tr>
</tbody>
</table>
CALeVIP Impacts

• CALeVIP incentives line up well with SVCE’s recommended programs

• SVCE’s approach is more targeted and includes more custom support than the typical state design

• Opportunity for SVCE to run its own “wrap-around” programs that send participants to CALeVIP for incentives

• Strategy depends on final CALeVIP requirements
Prioritized Programs for 2019 Launch

- SVTEC
- Regional Recognition
- Priority Zone DCFC
### SVCE’s EVI Matrix – 2022 View

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Regional Coordination</th>
<th>Funding Support and Incentives</th>
<th>Education and Outreach</th>
<th>Building Codes</th>
<th>Parking Enforcement or Signage</th>
<th>Permitting</th>
<th>Planning, Land Use, &amp; Zoning</th>
<th>Electric Rates</th>
<th>VGI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet - Public/Private Transit (Buses, shuttles, etc.)</td>
<td>SVTEC</td>
<td>Competitive Grant</td>
<td>Regional Recognition Program</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Pending CPUC/PG&amp;E</td>
<td>VPP Program</td>
</tr>
<tr>
<td>Fleet - TNC</td>
<td>SVTEC</td>
<td>Competitive Grant</td>
<td>Regional Recognition Program</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Pending CPUC/PG&amp;E</td>
<td>VPP Program</td>
</tr>
<tr>
<td>Fleet - public/private vehicles (City Fleets, etc.)</td>
<td>SVTEC</td>
<td>Competitive Grant</td>
<td>Regional Recognition Program</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Pending CPUC/PG&amp;E</td>
<td>VPP Program</td>
</tr>
<tr>
<td>Corridor</td>
<td>SVTEC</td>
<td>DCFC Solicitation, CalEVip</td>
<td>Regional Recognition Program</td>
<td>SVCE Working group</td>
<td>No relevant lang</td>
<td>NA</td>
<td>NA</td>
<td>Pending CPUC/PG&amp;E</td>
<td>VPP Program</td>
</tr>
<tr>
<td>Destination/Retail</td>
<td>SVTEC</td>
<td>DCFC Solicitation, CalEVip</td>
<td>Regional Recognition Program</td>
<td>SVCE Working group</td>
<td>Low adoption</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>VPP Program</td>
<td></td>
</tr>
<tr>
<td>Workplace - large</td>
<td>SVTEC</td>
<td>EVSE Rebate</td>
<td>Regional Recognition Program</td>
<td>Low adoption</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>VPP Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workplace - small/medium</td>
<td>SVTEC</td>
<td>EVSE Rebate</td>
<td>Regional Recognition Program</td>
<td>Low adoption</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>VPP Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUD</td>
<td>SVTEC</td>
<td>Garden Apartment TA and incentives</td>
<td>Customer Resource Center, Regional Recognition</td>
<td>SVCE Working group</td>
<td>NA</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>VPP Program</td>
<td></td>
</tr>
<tr>
<td>SF Res</td>
<td></td>
<td></td>
<td>Customer Resource Center</td>
<td>SVCE Working group</td>
<td>NA</td>
<td>More than 50% of communities have permitting in place</td>
<td>No relevant language</td>
<td>VPP Program</td>
<td></td>
</tr>
</tbody>
</table>

**Enabling Practice:**
- NA: Not Applicable
- VPP Program: Vehicle Purchase Program
Discussion
Appendix
## EVI Joint Action Plan - Process

<table>
<thead>
<tr>
<th>2019</th>
<th>EVI Plan Activity</th>
<th>CALeVIP Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>Issue RFP</td>
<td>Submit joint LOI to CEC</td>
</tr>
<tr>
<td>March</td>
<td>Select EMG (led by Richard Schorske)</td>
<td>Receive CEC draft requirements</td>
</tr>
<tr>
<td>April</td>
<td>Customer survey, stakeholder survey, and stakeholder workshop on key challenges</td>
<td>Submit request for edits to the CEC’s requirements</td>
</tr>
<tr>
<td>May</td>
<td>Stakeholder workshop on draft program designs</td>
<td>Discuss requirements and edits with CEC</td>
</tr>
<tr>
<td>June</td>
<td>Finalize program designs</td>
<td>Provide SVCE-specific LOI to CEC</td>
</tr>
<tr>
<td>July</td>
<td>Write report</td>
<td>Selection by CEC and finalize requirements for workshop</td>
</tr>
<tr>
<td>August</td>
<td>Write report</td>
<td>Public workshop on project and requirements</td>
</tr>
</tbody>
</table>
Pyramid reflects the current vehicle charging technology demand, based on number of charging events.
## Existing Public EV Infrastructure

<table>
<thead>
<tr>
<th>City</th>
<th>Public Level 2</th>
<th>Tesla Level 2</th>
<th>Public DC Fast</th>
<th>Tesla DC Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campbell</td>
<td>56</td>
<td>0</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Cupertino</td>
<td>76</td>
<td>2</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Gilroy</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Los Altos</td>
<td>41</td>
<td>8</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Los Altos Hills</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Los Gatos</td>
<td>23</td>
<td>14</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Milpitas</td>
<td>92</td>
<td>0</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Morgan Hill</td>
<td>12</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mountain View</td>
<td>177</td>
<td>3</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>Saratoga</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>86</td>
<td>0</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>580</strong></td>
<td><strong>35</strong></td>
<td><strong>75</strong></td>
<td><strong>76</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Department of Energy’s Alternative Fuels Data Center

- Public EVI corresponds to several Use Cases: Corridor, Destination/Retail, and Small/Medium Workplace
- Must expand deployment to support EV growth
## Equity Integrated in Program Design

**A. SVTEC**
- Focus portion of funding support on underserved residents
- Ensure that stakeholders keep in mind underserved communities
- Involve organizations that work with these communities to ensure their voice is heard

**B. Regional Recognition**
- Track flow of benefits across communities and reward larger underserved benefits

**C. Priority Zone DCFC**
- Establish zones near MUD clusters to serve renters
- Establish zones in underserved areas
- Ensure that zones serve the nearby communities, not just located in them

**D. MUD Technical Assistance**
- Major need for MUD deployment
- Often overlap between MUD and underserved residents
- Focus outreach on affordable housing MUD properties and those in underserved communities

**E. Workplace Rebates**
- Focus on supporting the smaller businesses that have not been able to deploy charging

**F. Fleet Electrification Planning**
- When scoring applicants, include criteria on benefits to underserved residents
- Bus routes (school and transit) often overlap with underserved communities
# Representative EVI Program Costs and Impacts

<table>
<thead>
<tr>
<th>A. SVTEC</th>
<th>B. Regional Recognition Program</th>
<th>C. Priority Zone DCFC</th>
<th>D. MUD Program</th>
<th>E. Workplace EVSE rebates</th>
<th>F. Fleet</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a combined cost to launch and operate of approximately...</td>
<td>$250,000</td>
<td>$150,000</td>
<td>$300,000</td>
<td>$300,000</td>
<td>$150,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Assuming the program lasts...</td>
<td>4 years</td>
<td>4 years</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>With associated SVCE incentives of...</td>
<td>$0</td>
<td>$0</td>
<td>$2.5M</td>
<td>$2M</td>
<td>$1M</td>
<td>$1M</td>
</tr>
<tr>
<td>The program could achieve roughly...</td>
<td>$20-$30 million in unlocked funding</td>
<td>400 participating organizations</td>
<td>30 DCFC ports</td>
<td>450 shared L2 ports</td>
<td>325 L2 ports at small and medium businesses</td>
<td>12 electrification plans</td>
</tr>
<tr>
<td>Will this program be enhanced by CALeVIP?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**SILICON VALLEY CLEAN ENERGY**

26
## MUD Program Overview

**GOAL:** Increase Cost-Efficient EV Charging in Garden Apartments  
**2025 TARGET:** Deploy 400+ EVSE ports in 40+ complexes

<table>
<thead>
<tr>
<th>Situation</th>
<th>Program Strategies &amp; Tactics</th>
<th>Participants</th>
<th>Outcomes</th>
<th>Costs &amp; Operating Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market &amp; Customer Needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| ▪ Only 15 SVCE properties have onsite EVSE in SVCE territories, yet ~42% of customers live in apartments | S1. Provide basic site planning for property owners to determine best fit EVSE for site, including analysis of electrical requirements, use of load management, solar, and energy storage, & optimization of site specific business models & use cases | Customers  
  - Up to 40 owners with 10,084 units  
  - Up to 25K+ residents  

**Partners**
- EV Charging Pros  
- MUD Ownership Groups  

**Funders**
- SVCE  
- CEC (eVIP + upcoming MUD solicitation)  
- PG&E  
- BAAQMD | By 12/20  
  - Site planning process 75% completed (30 of 40 parcels have completed EVSE deployment plan)  
  - Scale of incentives clarified based on site planning & load studies | By 12/25  
  - Up to 400+ shared EVSE deployed at 40+ garden properties (assuming least cost configuration of $4500/port and feasibility of sharing) | Launch Cost  
  - $225K for site planning in 2020/21  

**Operating Cost**
- $68,000/year Program Manager/SVCE: 48,000/year + Consultant program developer $20,000/yr  

**Unit Cost**
- **Low End:** $4,500 per port (based on least cost site profiles)  
  - **High End:** Up to $15K per port if major power upgrades needed  

**Equipment & Install Costs**
- $1.8 million to deploy 400 ports at $4.5K/port  
- $6M to deploy 400 ports at $15K/port if major power upgrades needed |

| Resources to Build On | | | | |
|-----------------------|--------------|----------|-------------------------|
| A proven program @ PCE with strong process templates, and qualified/available T.A. providers | S2. Focus first tranche of technical assistance on 40 large Garden properties comprising 10,084 units with parking to unit ratios greater than 2.0. (Larger parking to unit ratios will enable shared charging solutions to be deployed at some properties, thereby lowering costs per vehicle enabled for charging) |  
**Assumptions**
- Garden apartments represent the best opportunity for shared charging  
- Technical assistance is needed to ensure project completion by owners  
- EVI @ Garden MUDs is efficient vs. workplace EVI & enables more EV sales | Theory of Action  
By providing hands-on technical assistance and an incentive that helps cover 100% of costs, owners are most likely to install EVSE. Once charging is in place, EV adoption will increase. EV-ready apartments will progressively be expected by renters, leading to more owner participation and a “virtuous circle” of greater EVSE and EV adoption |

| Assumptions | | | | |
|-------------|--------------|----------|-------------------------|
| Item 5  
PRESENTATION | | | | |