SB 1000 Implementation
Overview of SB 1000 Requirements & Best Practices

Nuin-Tara Key
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Governor’s Office of Planning and Research

Background

» 2017 General Plan Guidelines include extensive updates on health, equity, community engagement, environmental justice, and climate

» OPR is currently updating its chapter on EJ
SB 1000 Basic Requirements

» SB 1000 passed in 2016

» Gov Code Section 65302(h) (1) An environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities within the area covered by the general plan of the city, county, or city and county, if the city, county, or city and county has a disadvantaged community.

Who has to implement SB 1000?

1. Does your jurisdiction have a “disadvantaged community”?

2. Are you updating two or more elements of your General Plan?
Who has to implement SB 1000?

1. Does your jurisdiction have a “disadvantaged community”?

   » Does your jurisdiction have census tracts from CalEnviroScreen in the top 25%?

Who has to implement SB 1000?

» Does your jurisdiction have a low income area disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation?

» What is a “low income area”?
   • An area at or below statewide median income OR
   • An area at or below Department of Housing and Community Development’s (HCD’s) state income limits

» What is “disproportionately affected by environmental pollution”?
   • Look to pollution data to identify pollution burdens
     ▪ CalEnviroScreen pollution indicators
     ▪ Other data sources...
Sample Screen

CalEnviroScreen: Examine if any of the general plan catchment planning area falls in the top 25%

Area at or below statewide median income by census tract AND disproportionate burden

Area at or below Department of Housing and Community Development’s state income limits (if different from statewide median income limits) AND disproportionate burden

Initial Screen

Final screen

Incorporate granular data and examine for additional pollution burden.

What do I need to do to implement SB 1000?

» Identify disadvantaged communities in your jurisdiction, including the needs and unique or compounded health risks experienced by those communities

» Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by:
  • reducing pollution exposure, including the improvement of air quality
  • promoting public facilities
  • food access
  • safe and sanitary homes
  • physical activity . . .
What do I need to do to implement SB 1000?

» Identify objectives and policies that
  • **promote civil engagement** in the public decision making process
  • **prioritize improvements and programs** that address the needs of disadvantaged communities

Community Engagement

- Design process from beginning
- Advisory boards and novel ways to integrate partners
- Culture and equity considerations
- Data
- Tools
Community Engagement

Traditional planning engagement falls on the consult and involve spectrum.

- **Principles:**
  - Inclusion
  - Transparency
  - Democratic participation

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Process is Important

- Existing Policy Analysis
- Program and Partner Analysis
- Forthcoming additional policy language
SB 379 Implementation
Overview of SB 379 Requirements & Best Practices

SB 379/ SB 1035 Safety Element

Gov Code Section 65302(g) Climate change adaptation is now required in Safety Element or by reference in LHMP/other plan

» Does not preclude incorporation in other elements
» Encourages cross-linkages and co-benefits

Timing
» SB 379: Required upon update to LHMP, or by January 1, 2022
» SB 1035: After initial revision to incorporate climate, review and update, if necessary, upon revision to Housing Element but not less than every 8 years
What do I need to do to implement SB 379?

Some distinct actions:

» Review existing plans (gap analysis)
» Assess community vulnerability
» Create a set of goals, policies, and objectives
» Create a set of “feasible” implementation measures
» Implement measures/align other plans

SB 379 Safety Element: Resources

» Climate projection data and tools [https://cal-adapt.org/]
SB 379 Safety Element: Resources

» Adaptation Clearinghouse https://resilientca.org/

Update in progress – anticipated completion early 2020

SB 379 Safety Element: Resources

» Adaptation Planning Guide

http://resources.ca.gov/climate/safeguarding/local-action/

Update in progress – anticipated completion early 2020
Opportunities to align SB 1000 and SB 379

» Defining Vulnerable Communities

*OPR’s Integrated Climate Adaptation and Resiliency Program*

» Resource Guide for Defining Vulnerable Communities


Opportunities to align SB 1000 and SB 379

**Different Definitions:** Vulnerable Communities - *OPR’s Integrated Climate Adaptation and Resiliency Program*

Vulnerable communities experience heightened **risk** and increased **sensitivity** to climate change and have less **capacity** and fewer resources to cope with, adapt to, or recover from climate impacts.

These disproportionate effects are caused by **physical (built and environmental), social, political, and/or economic factor(s)**, which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.
Different Definitions: SB 1000, Disadvantaged Communities

(4) For purposes of this subdivision, the following terms shall apply

(A) "Disadvantaged communities" means an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.

Aligning Vulnerability Assessments:

Vulnerability Communities and SB 1000 Crosswalk

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Thank you!

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Example policies

Idea for Data and Analysis
• Prevalence child/adult obesity
• Prevalence diabetes
• Prevalence heart disease

• Map of grocery stores
• Map of community gardens
• Map of farmers markets

Potential Policy Options
• Establish a food policy council
• Facilitate use of unused land for community gardens
• Increase access to healthy food retail environments
• Preserve agricultural land
Example policies

Ideas for Data and Analysis

• Prevalence child/adult obesity
• Prevalence diabetes
• Prevalence heart disease

~

• Land use mix
• Park access
• Commute patterns

Potential Policy Options

• Increase proximity to parks and recreation
• Build connected trail ways to jobs/amenities
• Pursue urban greening programs

Active Living & Recreation

Series of Case Studies
The Challenge:
Regional EV adoption is outpacing infrastructure investment. The San Diego region has a 2025 projected gap of thousands of public chargers.
Growth of the San Diego County EV Market

<table>
<thead>
<tr>
<th>Year (Q1-Q3)</th>
<th>EV registrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>16</td>
</tr>
<tr>
<td>2011</td>
<td>1,185</td>
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<tr>
<td>2012</td>
<td>1,421</td>
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<tr>
<td>2013</td>
<td>3,051</td>
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<tr>
<td>2014</td>
<td>4,382</td>
</tr>
<tr>
<td>2015</td>
<td>4,376</td>
</tr>
<tr>
<td>2016</td>
<td>5,563</td>
</tr>
<tr>
<td>2017</td>
<td>6,914</td>
</tr>
<tr>
<td>2018</td>
<td>7,928</td>
</tr>
<tr>
<td>Total</td>
<td>34,836</td>
</tr>
</tbody>
</table>

From Q4 2017–Q3 2018, EVs were 6.1% of new light-duty vehicle sales

2025 Target: 110,000 zero-emission vehicles (ZEVs)

2030 Target: 410,000 ZEVs

Sources:
1. CSE: Clean Vehicle Rebate Project, Includes content supplied by R.L. Polk & Co, © 2018
2. Regional targets based on hypothetical “fair share” of state zero emission vehicle targets.

Electric Vehicle Chargers

**Home, Public and Workplace Chargers**
- “Level 2” chargers
- All EVs can use
- ~8-24 miles/hour of charge

**Quick Stop and Corridor Charging**
- “DC Fast” Chargers or DCFC
- Some EVs can use
- 80% charge < 30 minutes
Growth in Number of Level 2 EV Chargers and Estimated Need in 2025 for San Diego County

Level 2 EV Charge Ports in San Diego County

Previously Installed Charge Ports
New Charge Ports

Source: US Department of Energy, AFDC (May 2019) and CEC EV Infrastructure Projection Tool (March 2018)

Growth in Number of DC Fast Chargers and Estimated Need in 2025 for San Diego County

DCFC EV Charge Ports in San Diego County

Previously Installed Charge Ports
New Charge Ports

Source: US Department of Energy, AFDC (May 2019) and CEC EV Infrastructure Projection Tool (March 2018)
Plug-in San Diego Mapping Tool

- EV Charging Stations
- EV Registrations
- Regional Travel Model
- Gaps in Charging Network
- Benefits to Disadvantaged Communities
- Other overlays

evcs.sandag.org

SANDAG Charging Program

2015 Regional Plan Actions

- Establish incentive program for EV chargers
- Commit $30 million from 2020-2050
- Support future Regional Plan development
- Reduce GHG emissions from passenger vehicles

Caltrans SB1 Planning Grant

- $600,000 grant over 2018-2020
- Phase 1 – best practices and program coordination (2018)
- Phase 2 – design program framework (2019)
- Phase 3 – program build out (2019-2020)

sandag.org/EVChargingProgram
APCD EV Infrastructure Incentives

- San Diego County Climate Action Plan
  - Establish EV Charger Incentive with target of 2,040 L2 chargers in unincorporated area by 2030
  - Support GHG and criteria pollutant reductions
  - $500,000 per year
  - Partnerships with other agencies

Opportunity: California EV Infrastructure Project

- CALeVIP is a mechanism to provide targeted EV charging infrastructure incentives in California
  - Regional EV infrastructure investment
  - Expert program implementation and administration at a reduced cost
  - Projects are designed to be responsive to regional and customer needs
  - Assures full implementation and reporting through online application and tools
Overview: Program Design Considerations

- CALeVIP pillars, implementation manuals and EVCP research
- Administration, budget, program type
- Eligible technologies and site types
- Rebate amounts
- Definition/Treatment of Communities of Concern
- Metrics and tracking
- Education, Outreach and workforce development
- Tools and resources

Model Program: Sacramento CALeVIP

- Sacramento County total budget: $14M
  - Separate budgets for Level 2 and DCFC
  - 25% minimum funds for disadvantaged communities (DAC)*
- First come, first served rebate program
- Online application and resource pages hosted by CSE at www.calevip.org

*Region can recommend definition used for DAC/communities of concern and minimum allocation.
Sacramento CALeVIP: DCFC Rebate Amounts

- **New:**
  - $70K per charger or 75% total project cost, whichever is less. $80K per charger or 80% of total project cost in DACs*
- **Replacement or use of make-ready**
  - $40K per charger of 75% of total project cost, whichever is less
- **San Diego EVCP recommendation**
  - Consistent with CALeVIP requirements

*Region can recommend definition used for DAC/communities of concern and minimum allocation.

Level 2 CALeVIP Rebate Amounts

- **Sacramento CALeVIP Level 2**
  - $5K per port base rebate
  - Additional $1K for MUD site
  - Additional $500 for DAC site
- **San Diego EVCP recommendation:**
  - $6K per port base rebate
  - Additional $500-$1K for MUD site
  - Additional $500-$1K for Community of Concern site
  - CalEnviroScreen DAC and/or AB1550 Low Income Community

*Region can recommend definition used for DAC/communities of concern and minimum allocation.
Communities of Concern Recommendation for San Diego EVCP: Include DAC and LIC

Sacramento CALeVIP: Program Design Criteria

- Rebate cap limits
  - $640K per applicant for active applications in one county
  - Up to 10 Level 2 chargers per application
  - Up to 4 DC Fast Chargers or combo

- Eligible Applicants
  - Private Companies (business owner, EVCS manufacturer, EV service provider, contractor, not-for-profits, etc.)
  - Public Agencies
  - Valid CA Business License
### Sacramento: Eligible Site Locations

#### DCFC Site Locations
- Urban/suburban retail core and/or Retail shopping centers
- Restaurants
- Gas stations
- Hospitals
- Sheriff/police station
- Airports
- Colleges/universities
- Hotels
- City or county owned parking garages and surface lots

- Charger(s) must be available to the public 24 hours a day, 365 days a year
- Be well-lit, secure and in compliance with all federal, state and municipal laws, ordinances, rules, codes, etc.

#### L2 Site Locations
- Commercial
  - Public
- Workplace
  - Public or private
  - Must be shared use
- MUD
  - Public or private
  - Must be shared use
- Fleet
  - Public or private
  - Must be shared use

Single family residence and assigned parking installations are excluded.

### San Diego Regional Program: Outreach, Education and Workforce Development Considerations

#### Education and Outreach
- About CALeVIP/EVCP to stakeholder groups, CBOs, chambers, local governments, etc.
- Permit streamlining/best practices for local governments and contractors (GO-Biz and PISD)

#### Workforce Development
- Support continuing education trainings for electricians and contractors
- Best practice EVITP
- Collaborate with SDG&E, IBEW, community colleges, small business development programs, social equity training programs
San Diego Regional EVCP: Estimated Partner Budgets and Scope

- Implement 2015 Regional Plan and SCS
- Level 2 chargers
- Budget est. $1 million/year until 2050

- Implement County Climate Action Plan
- Level 2 chargers
- Budget est. $500,000/year up until 2030

- Implement Executive Order B-48-18 targets for EV chargers
- Level 2 and DC fast chargers
- Budget est. ranges from $10-23 million total allocation

Next Steps

- CEC selects 2020 CALeVIP regions this summer
  ▫ If yes, public workshop 8/27
- Electrify America Workshop 7/24
- Seek additional co-funding opportunities
- Prepare partner agreements in 2019
### Draft Metrics: Site Host Applications

<table>
<thead>
<tr>
<th>Site Host Type</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Host Application Date</td>
<td></td>
</tr>
<tr>
<td>Site Host Parking Configuration</td>
<td></td>
</tr>
<tr>
<td>Level of Accessibility</td>
<td></td>
</tr>
<tr>
<td>Site Host Location and Census Tract</td>
<td></td>
</tr>
<tr>
<td>Site Host SANDAG sub-region</td>
<td></td>
</tr>
<tr>
<td>Site Host Low-Income Community Designation (Yes/No)</td>
<td></td>
</tr>
<tr>
<td>Site Host Disadvantaged Community Designation (Yes/No)</td>
<td></td>
</tr>
<tr>
<td>Charging Port Deployment Type</td>
<td></td>
</tr>
<tr>
<td>Charging Port Count Eligible for Incentive</td>
<td></td>
</tr>
<tr>
<td>Total Charging Port Count</td>
<td></td>
</tr>
<tr>
<td>Rebate Amount Requested</td>
<td></td>
</tr>
<tr>
<td>Charging Station Hardware Provider</td>
<td></td>
</tr>
<tr>
<td>Charging Station Network Provider</td>
<td></td>
</tr>
<tr>
<td>Duration of Network Services Agreement</td>
<td></td>
</tr>
<tr>
<td>Duration of Hardware Maintenance Agreement</td>
<td></td>
</tr>
<tr>
<td>Hours of Station Operation</td>
<td></td>
</tr>
<tr>
<td>Forms of Payment Accepted (if applicable)</td>
<td></td>
</tr>
<tr>
<td>Schedule of Intended Pricing for Charging Services (if applicable)</td>
<td></td>
</tr>
<tr>
<td>Maximum charging station electrical demand per site</td>
<td></td>
</tr>
<tr>
<td>Co-location with On-Site Energy Storage (Yes/No)</td>
<td></td>
</tr>
<tr>
<td>Co-location with On-Site Solar Generation (Yes/No)</td>
<td></td>
</tr>
</tbody>
</table>

### Draft Metrics: Project Implementation

| Site and Port Approval Count                           |                                                                      |
| Sites and Ports Rejection Count                        |                                                                      |
| Rebate Amount Reserved                                 |                                                                      |
| Rebate Amount Issued                                   |                                                                      |
| Time to Secure Permits for Installation                |                                                                      |
| Port Installations in Progress                         |                                                                      |
| Port Installations Completed                           |                                                                      |
| Charging Station Hardware Costs                        |                                                                      |
| Site Preparation Costs                                  |                                                                      |
| Make-Ready Costs                                       |                                                                      |
| Total Project Cost                                     |                                                                      |
| Total Project Cost per Port                            |                                                                      |
| Estimated Network Fees                                  |                                                                      |
| Estimated Maintenance Fees                             |                                                                      |
| Rebate Contribution to Project Cost                    |                                                                      |
| Other Incentive Contributions                          |                                                                      |
| Site Host Satisfaction with Application Process/Program |                                                                      |

### Charging Station Metrics

<table>
<thead>
<tr>
<th>(In operation)</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Energy Dispensed</td>
<td>Kilowatt-hours (kWh) over a given period</td>
</tr>
<tr>
<td>Average Charging Sessions per Port</td>
<td>Averaging number of charging events across ports at a given site</td>
</tr>
<tr>
<td>Hourly Load Profiles</td>
<td>Average kWh dispensed per hour over a given period (between one month and one year)</td>
</tr>
<tr>
<td>On-peak vs. Off-peak consumption</td>
<td>Percent of kWh dispensed during on-peak hours (4pm-9pm daily) and percent of kWh dispensed off-peak (all other times)</td>
</tr>
<tr>
<td>Utilization</td>
<td>Percentage of time station is in use for EV charging (daily hours spent dispensing electricity divided by 24)</td>
</tr>
<tr>
<td>Downtime</td>
<td>Amount of time station is not operational due to maintenance or operational issues (hours, days, etc.)</td>
</tr>
<tr>
<td>Updated Schedule of Pricing for Charging Services</td>
<td>Include all access fees, time-based fees, energy fees, and other fees on a regular basis</td>
</tr>
<tr>
<td>Site Host Satisfaction with EVSE</td>
<td>Any information the site host can share about the ongoing operation and maintenance of the EVSE</td>
</tr>
<tr>
<td>GHG and Air Pollution Reduction equivalents</td>
<td>Based on SANDAG Off-Model Calculator for EVs and EVCS reviewed by CARB.</td>
</tr>
</tbody>
</table>
Sacramento: Station Minimums and Limits

- **DCFC = 1-4 chargers**
  - Must have both CHAdeMO and SAE CCS Combo connectors
  - Must be networked
  - Capable of usage data collection
  - National Lab certified
  - Minimum 5 year networking agreement, eligible towards total project cost

- **Level 2 = 1-10 connectors**
  - Must have the J1772 connector
  - Must be networked
  - Capable of usage data collection
  - Minimum 1 year networking agreement, eligible towards total project cost
  - National Lab certified
  - Must be ENERGY STAR® Certified*

- *Additional stations may be installed, but will not be eligible for funding from CALeVIP*