

# Electric Vehicle Local Incentives and Funding Mechanisms



## Driving to Net Zero

Submitted to: Santa Clara  
County  
Submitted by: ICF

County of Santa Clara Office of Sustainability

FUNDED THROUGH A GRANT  
AWARDED BY THE CALIFORNIA  
STRATEGIC GROWTH COUNCIL

MARCH 9, 2018



## Acknowledgements



The work upon which this publication is based was funded in whole or in part through a grant awarded by the California Strategic Growth Council.

Santa Clara County would like to acknowledge the cities of Cupertino, Morgan Hill, Mountain View, Palo Alto, San Jose, and Sunnyvale for their contributions and support as partners in the Driving to Net Zero Project.

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# Table of Contents

<b>1. Purpose and Content of this Guide</b>	<b>4</b>
<b>2. Financial Incentives</b>	<b>4</b>
Purchasing Incentives for PEVs	4
Charging Station Purchasing Incentives	5
Parking Incentives	6
<b>3. Non-Financial Incentives</b>	<b>6</b>
Developer Density Bonus	6
Parking Requirements	7
<b>4. Available Funding Sources</b>	<b>8</b>
Bay Area Air Quality Management District (BAAQMD)	8
California Energy Commission (CEC)	9
Electrify America	9
Pacific Gas and Electric (PG&E)	10

# 1. Purpose and Content of this Guide

This guide provides an overview of some of the ways local governments are incentivizing plug-in electric vehicle (PEV) adoption. In addition to national and state incentives, local incentives for PEVs further reduce the incremental cost between PEVs and conventional vehicles and can help make driving electric an easier choice for their residents. Local incentives are able to target specific local barriers to PEV deployment, as well as signal a government's commitment to its community's environmental and air quality goals. This document classifies incentives as either financial or non-financial, and includes information about state and national funding sources for residents, businesses, and local governments. The information included in this guide is intended to inform local governments of mechanisms through which they may support PEV deployment and PEV charging infrastructure installation; while examples are given of each incentive type, listed examples are not meant to be exhaustive. The guide presents a number of incentive options, with varying levels of financial commitment, to allow municipalities to determine which, if any, are appropriate for their communities.

- **Financial Incentives.** Outlines the financial incentives local governments may offer their communities, including funding for the purchases of PEVs, funding for PEV charging equipment, and parking incentives for PEV drivers.
- **Non-Financial Incentives.** Describes non-financial incentives to promote PEV adoption, including density bonuses for developers and parking requirement exemptions.
- **Funding Sources.** Lists a variety of sources for PEV and electric vehicle supply equipment (EVSE) funding.

## 2. Financial Incentives

One of the most straightforward ways to support PEV adoption is through offering financial incentives for the purchase of PEVs and PEV charging stations. Rebates lower the initial costs for owners, and parking incentives provide value and convenience to PEV drivers.

### Purchasing Incentives for PEVs

Local jurisdictions may provide financial incentives for the purchase or lease of PEVs, thereby reducing the incremental cost of purchasing a PEV over a conventional vehicle. Municipally sponsored rebate programs support local PEV adoption by residents and local businesses and can help achieve regional environmental and air quality goals. Rebate programs can also be designed to target specific audiences or demographics. For example, if a local government wanted to target disadvantaged communities through a rebate, then income levels should be included in the eligibility requirements of the program.

#### Incentive Examples

- The **City of Riverside** offers a rebate of \$500 for the purchase or lease of a new PEV. Eligible applicants must be residents of Riverside and submit rebate applications within 30 days of vehicle purchase. Eligible vehicles include vehicles exclusively powered by electricity purchased from an auto dealership in the City. Electric motorcycles and

neighborhood PEVs are eligible for a \$250 rebate.<sup>1</sup> The program uses AB 2766 program funds; AB 2766, passed in September 1990, provides for the collection of an additional \$6 in motor vehicle registration fees to fund various air pollution abatement efforts. A portion of these funds are distributed to cities, based on population, to be used to reduce motor vehicle air pollution.<sup>2</sup>

- The **County of El Dorado** offers a \$1,000 incentive for the purchase or lease of a new Air Resources Board (ARB) White or Green stick eligible vehicle. Eligible applicants must reside in El Dorado County and agree to own or lease the vehicle for three years within El Dorado County. Incentive recipients must submit a pre-approval appellation before the purchase or lease of the vehicle; previous vehicle purchases are not eligible for the incentive. To receive the incentive, pre-approved applicants must also file a claim after the purchase or lease of the vehicle. The program uses AB 2766 program funds (see above).<sup>3</sup>

## Charging Station Purchasing Incentives

Jurisdictions may also support regional PEV adoption by incentivizing the installation of charging infrastructure. Although cities may provide the funding for EVSE, most local government sponsored EVSE rebate programs in California are administered by municipal utilities.

### Incentive Examples

- The **Chicago** Department of Transportation's (CDOT) Drive Clean Chicago program provides rebates for up to 30% of the capital cost to develop compressed natural gas fueling stations and DC fast charge EVSE. CDOT partners with CALSTART (which is supported by Tetra Tech, Inc. and Legacy Environmental Services) to implement Drive Clean Chicago. Funds for this program are provided by the U.S. Department of Transportation's Federal Highway Administration's Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The total cost of the station does not include ongoing operational cost, and stations must meet Buy America requirements. Applicants may use other grants for matching funds, as long as they are not from a federal source.<sup>4</sup>
- The **City of Burbank Water and Power** offers residential and commercial customers a rebate for the installation of a Level 2 charging station. Single-family residential customers may receive a rebate of up to \$500 and multi-family residential buildings may receive a rebate of up to \$1,000. Commercial locations may receive a rebate of up to \$2,000. Rebate recipients must also use Burbank Water and Power's time of use electric rate.<sup>5</sup>

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<sup>1</sup> City of Riverside Alternative Fuel Vehicle Rebate Program. <http://riversideca.gov/publicworks/air/alternativefuel.asp>.

<sup>2</sup> South Coast Air Quality Management District. AB 2766 Subvention Fund Program Resource Guide. March 2013. <http://www.aqmd.gov/docs/default-source/transportation/ab2766-motor-vehicle-subvention-fund-program/ab2766-resource-guide.pdf?sfvrsn=2>.

<sup>3</sup> County of El Dorado Air Quality Management District. [https://www.edcgov.us/Government/AirQualityManagement/Pages/grants\\_and\\_incentive\\_refunds.aspx](https://www.edcgov.us/Government/AirQualityManagement/Pages/grants_and_incentive_refunds.aspx).

<sup>4</sup> Drive Clean Chicago. <http://www.drivecleanchicago.com/>.

<sup>5</sup> City of Burbank Water and Power. <https://www.burbankwaterandpower.com/electric-vehicles>.

## Parking Incentives

Some local governments offer PEV drivers free parking at city facilities. This type of incentive increases the convenience of driving electric and demonstrates a city's support of its PEV drivers.

### Incentive Examples

- The **City of New Haven** provides free parking on all city streets for hybrid electric vehicles (HEVs) and alternative fuel vehicles (AFVs) registered in New Haven. HEV and AFV owners must obtain a non-transferable pass from the Department of Traffic and Parking to place on the vehicle's dashboard or hang from the rearview mirror. AFVs and HEVs are subject to all time and other posted parking restrictions.<sup>6</sup>
- The **City of San Jose** provides free parking at City parking meters, Parks and Recreation facilities, and participating garages for vehicles that display a valid Clean Air Permit. Permits are available to vehicles that are eligible for the ARB Green or White State of California carpool lane stickers. Application for a Clean Air Permit includes a \$30 administrative fee. The free parking program will continue at least until June 30, 2018.<sup>7</sup>

## 3. Non-Financial Incentives

In addition to financial incentives, there are a number of non-financial incentives that local governments can implement to encourage PEV adoption and the support the regional charging network. These incentives generally target property developers and encourage them to include electric vehicle charging stations in their building plans. Non-financial incentives for developers can increase public access to charging stations. Unlike regulations, such as mandated percentages of PEV ready parking spaces, these types of incentives encourage developers to consider the value of adding public-serving amenities such as PEV charging.

### Developer Density Bonus

Local governments specify how much parking should be provided at different locations; by allowing developers additional floor area in return for providing electric vehicle charging stations, local governments can provide a tangible but non-financial incentive that increases public access to charging.

### Incentive Examples

- The **City of San Carlos** provides developers with a density bonus for providing parking with EVSE. Under the City's Municipal Code, developers are allowed to exceed the maximum allowable floor area ratio by 10% if they provide additional environmental design features, including "electric car facilities".<sup>8</sup>

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<sup>6</sup> City of New Haven Code of Ordinances, Section 29-56. [https://library.municode.com/CT/New\\_Haven](https://library.municode.com/CT/New_Haven).

<sup>7</sup> City of San Jose Clean Air Program. <http://parksj.org/parking-programs-services/clean-air-program/>.

<sup>8</sup> City of San Carlos, Municipal Code: Development Standards for Mixed-Use Districts, Section 18.05.030 A. <http://www.codepublishing.com/CA/SanCarlos/#!/SanCarlos18/SanCarlos1805.html#18.05.030>

- The **City of Scottsdale**'s Zoning Code specifies Special Improvements that achieve public benefits and qualify a Development Plan for bonus development standards consideration. Electric vehicle charging is included in the list of "Special Improvements" and in order to receive a bonus, developers must install at least 5 charging stations or 5% of the total number of required spaces within the Development Plan, whichever is greater.<sup>9</sup>

## Parking Requirements

Many jurisdictions have minimum parking requirements that specify the number of spaces that must be provided in new construction. If PEV parking is not counted toward these requirements, developers may be discouraged from installing charging infrastructure, as it forces developers to either reduce the amount of developed space in order to accommodate the extra PEV parking or build more structure parking to allow the extra spaces. Some municipalities have addressed this issue by amending the zoning or parking code to allow PEV parking to count toward minimum parking requirements.

### Incentive Examples

- **Kansas City** allows PEV parking spaces in off-street parking facilities to be counted toward the off-street parking space requirements required by the City Zoning and Development Code.<sup>10</sup>
- The **City of Fremont** allows PEV parking spaces to count toward the minimum required parking spaces. Unless the zoning administrator determines that the circumstances of a particular development does not warrant installation of chargers, all PEV spaces must be provided with charging stations.<sup>11</sup>
- In 2016, the building codes of **Indianapolis** were amended to allow developers a density bonus for installing EVSE. Under the amended codes, the minimum number of required off-street parking spaces may be reduced by two for each PEV charging station provided. Each charging station counts toward the minimum number of required parking spaces. The minimum required off-street parking spaces may also be reduced by shared vehicle, carpool, or vanpool spaces, bicycle parking, proximity to public transportation, and shared parking spaces, and the cumulative reduction in required off-street parking spaces may not exceed 35% of the minimum required.<sup>12</sup>

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<sup>9</sup> City of Scottsdale, Appendix B – Basic Zoning Ordinance, Article V. – District Regulations Sec. 5.4008. - Bonus development standards.

[https://library.municode.com/az/scottsdale/codes/code\\_of\\_ordinances?nodeId=VOLII\\_APXBBAZOOOR\\_ARTVDIRE\\_S5.4008BODEST](https://library.municode.com/az/scottsdale/codes/code_of_ordinances?nodeId=VOLII_APXBBAZOOOR_ARTVDIRE_S5.4008BODEST)

<sup>10</sup> Kansas City Zoning and Development Code, Section 88-305-10. <http://online.encodeplus.com/regs/kansascity-mo/>.

<sup>11</sup> City of Fremont Municipal Code, Section 18.183.172. <http://www.codepublishing.com/CA/Fremont/>.

<sup>12</sup> City of Indianapolis Code of Ordinances, Section 744-103. [https://library.municode.com/in/indianapolis\\_-\\_marion\\_county](https://library.municode.com/in/indianapolis_-_marion_county).

## 4. Available Funding Sources

There are a variety of California and national resources for funding electric vehicle and charging station deployment. While some funding is targeted to specific audiences, such as businesses, many opportunities are available to municipalities as well.

### Bay Area Air Quality Management District (BAAQMD)

BAAQMD oversees policies and adopts regulations for the control of air pollution within the district, and it provides funding for projects that reduce pollutants and greenhouse gases (GHGs) from mobile sources. In the past, BAAQMD has offered funding for zero emission light-duty vehicles in public and private fleets and funding for heavy duty electric vehicles for public agencies and businesses. Current funding opportunities include:

- **Charge! Program:** BAAQMD currently offers funding for electric vehicle charging stations through the Charge! Program, which provides funding to public agencies and businesses to expand the public availability of charging stations at workplaces, multifamily dwelling units, and public locations. The Program provides 75% of a project cost with a minimum of \$10,000 and a maximum of \$500,000. Covered costs include charging hardware, installation, and hardware fees, and the Program provides funds in the following amounts:

Charging Station Type	Output Rating Requirement	Maximum Base Funding per Station
<b>Level 1</b>	>3.3 kW	\$750
<b>Level 2</b>	>3.3 kW	\$1,500
<b>Level 2</b>	>6.6 kW	\$3,000
<b>DC Fast</b>	>40 kW	\$18,000
Additional Funds		
<b>Multiport Level 2</b>	\$1,000 per additional connector	
<b>Solar Installations</b>	\$1 per watt of solar capacity added	

Eligible applicants include businesses, non-profits, and public agencies, and applicants must attend a pre-application webinar before submitting their application. The Program is funded through BAAQMD’s Transportation Fund for Clean Air Regional Fund (TFCA), which provides grants to improve air quality within the Bay Area by reducing emissions of criteria pollutants from on-road vehicles. The TFCA is funded by the \$4 surcharge that BAAQMD imposes on cars and trucks registered within its jurisdiction, which must be used to provide grant funding to eligible projects that reduce on-road motor vehicle emissions.<sup>13</sup>

<sup>13</sup> BAAQMD Charge Program. <http://www.baaqmd.gov/grant-funding/businesses-and-fleets/charge>.

## California Energy Commission (CEC)

CEC periodically has grants available for electric vehicles and electric vehicle charging stations. CEC funding can be available to municipalities, as well as to local businesses within their jurisdictions. Current funding opportunities include:

- **Alternative Fuel and Vehicle Incentives:** The CEC administers the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to provide financial incentives for businesses, vehicle and technology manufacturers, workforce training partners, fleet owners, consumer, and academic institutions with the goal of developing and deploying alternative and renewable fuels and advanced transportation technologies. Funded projects include:
  - Commercial alternative fuel vehicle demonstrations and deployment
  - Alternative and renewable fuel production;
  - Research and development of alternative and renewable fuels and innovative technologies;
  - AFV manufacturing
  - Workforce training; and
  - Public education, outreach, and promotion.

The program will be available until January 1, 2024. The ARFVTP has invested more than \$806 million and funded more than 543 clean transportation projects. CEC anticipates providing \$29 million of available funding for California Electric Vehicle Incentive Projects (CALeVIP) in the third quarter of 2018.<sup>14</sup>

- **PEV Charging Station Financing:** The CEC funds the PEV Charging Station Financing Program, part of the California Capital Access Program (CalCAP). The Program provides loans for the design, development, purchase, and installation of EVSE at small business locations in California. The charging stations must be accessible to the business' employees, the general public, or to tenants of a multi-unit dwelling. The Program may provide up to 100% coverage to lenders on certain loan defaults, and the maximum loan amount is \$500,000 per qualified small business.<sup>15</sup>

## Electrify America

ARB recently approved the first of four plans by Volkswagen (VW) to invest \$800 million over 10 years in zero-emission vehicle (ZEV) infrastructure, public outreach, and access to these ultra-clean vehicles for residents of disadvantaged communities. The funds will be invested by Electrify America, a subsidiary of VW created for that purpose, in four installments of \$200 million each over the next 10 years. The Cycle 1 plan will invest in ZEV infrastructure, education, and access activities to support California's effort to increase ZEV adoption in five major metropolitan areas including Los Angeles, San Francisco, San Jose, Sacramento, and Fresno. The San Jose-Sunnyvale-Santa Clara area has been prioritized for the community charging investment for the Cycle 1 Plan, for which \$45 million (total for all the cities) will be

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<sup>14</sup> CEC ARFVTP. <http://www.energy.ca.gov/drive/>.

<sup>15</sup> CalCAP EVCS Financing Program. <http://www.treasurer.ca.gov/cpcf/calcap/evcs/index.asp>.

invested in 350 or more charging stations at five major use cases including multi-unit dwellings (MUDs), workplace, commercial/retail, community centers, and municipal lots/garages.<sup>16</sup>

## Pacific Gas and Electric (PG&E)

[PG&E's Electric Vehicle Charge Network](#) program aims to install up to 7,500 PEV charging stations at MUDs and workplaces. Eligible locations have more than 10 parking spaces, and program participants have the option to own the chargers or have PG&E own the chargers. PG&E will pay for, own (if desired), maintain, and coordinate construction of infrastructure from the transformer to the parking space, which is often 60-80% of the total project cost. In addition to the infrastructure, PG&E will also pay for a portion of the charging equipment cost, depending on the customer segment served by the charger. Stations will be installed from 2018-2020.

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<sup>16</sup> Electrify America. June 29, 2017. Supplement to the California ZEV Investment Plan Cycle 1. [https://www.arb.ca.gov/msprog/vw\\_info/vsi/vw-zevinvest/documents/california\\_zev\\_investment\\_plan\\_supplement\\_062917.pdf](https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/california_zev_investment_plan_supplement_062917.pdf)