

The Future is Electric: Plug In and Get There!

San Juan Capistrano | November 17 | 10:30 a.m. – 1:00 p.m.

Introduction

Colin Santulli, California Center for Sustainable Energy

Introduce the topics, speakers and describe the format of the workshop

Opening Remarks

Larry Kramer, Mayor of San Juan Capistrano

PEV 101 and Benefits

Colin Santulli, CCSE

Basics of PEVs including environmental, public health and economic benefits

PEV Impact to Grid and Utility Bills

April Buldoc, San Diego Gas & Electric (SDG&E)

SDG&E's PEV programs including grid reliability, rate programs and how SDG&E can help customers prepare their homes for PEV fueling

State & Federal PEV Incentives

Colin Santulli, CCSE

Emphasis on the state rebate application process, project funding and frequently asked questions

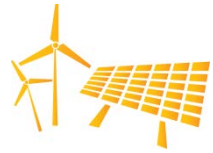
Lunch and PEV Drivers Panel

Enjoy lunch and hear about the PEV experience from your neighbors





Energy Efficiency



Renewable Energy



Green Building



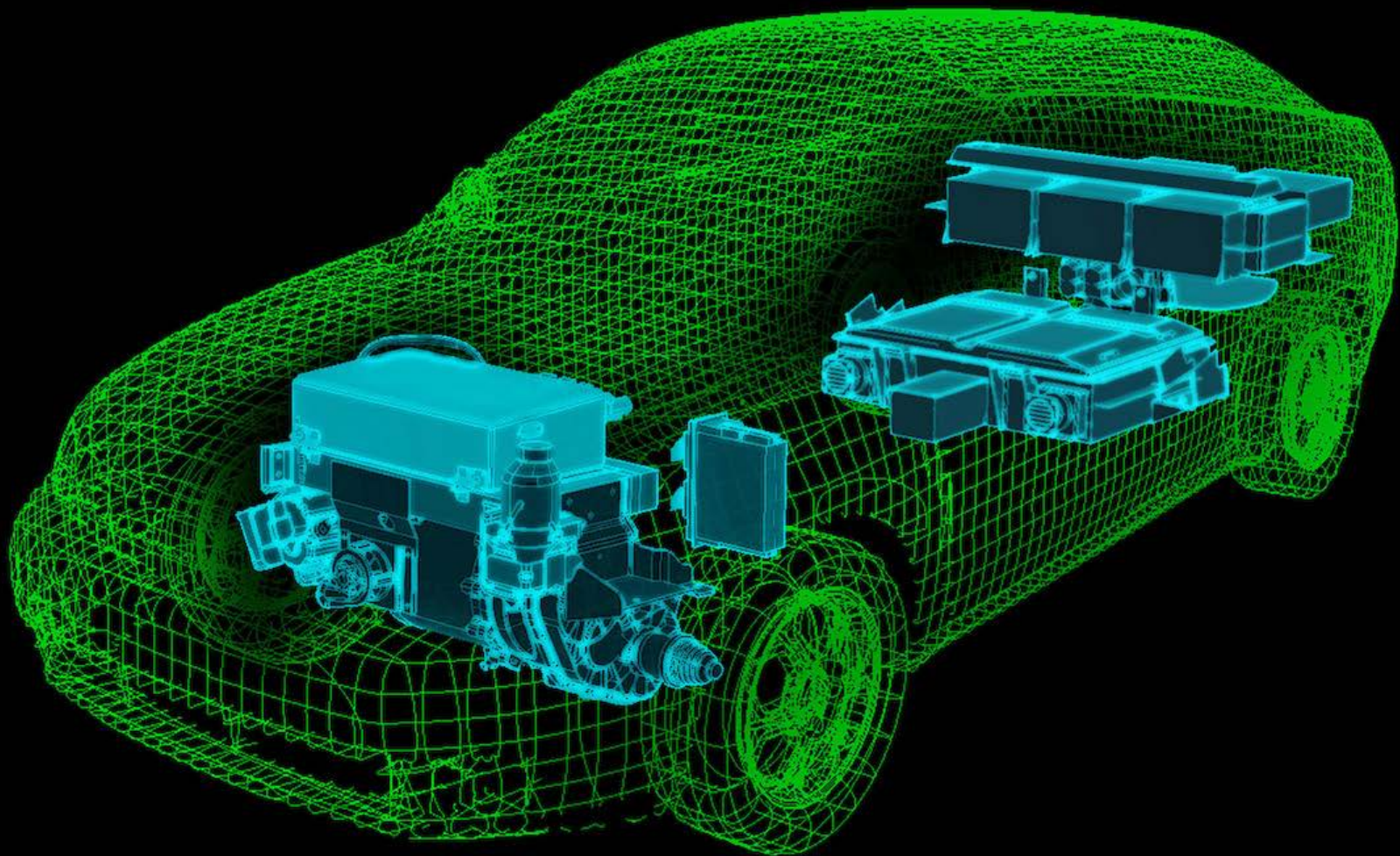
Climate Change



***Clean Vehicle Rebate Project
(ARB & CEC)***

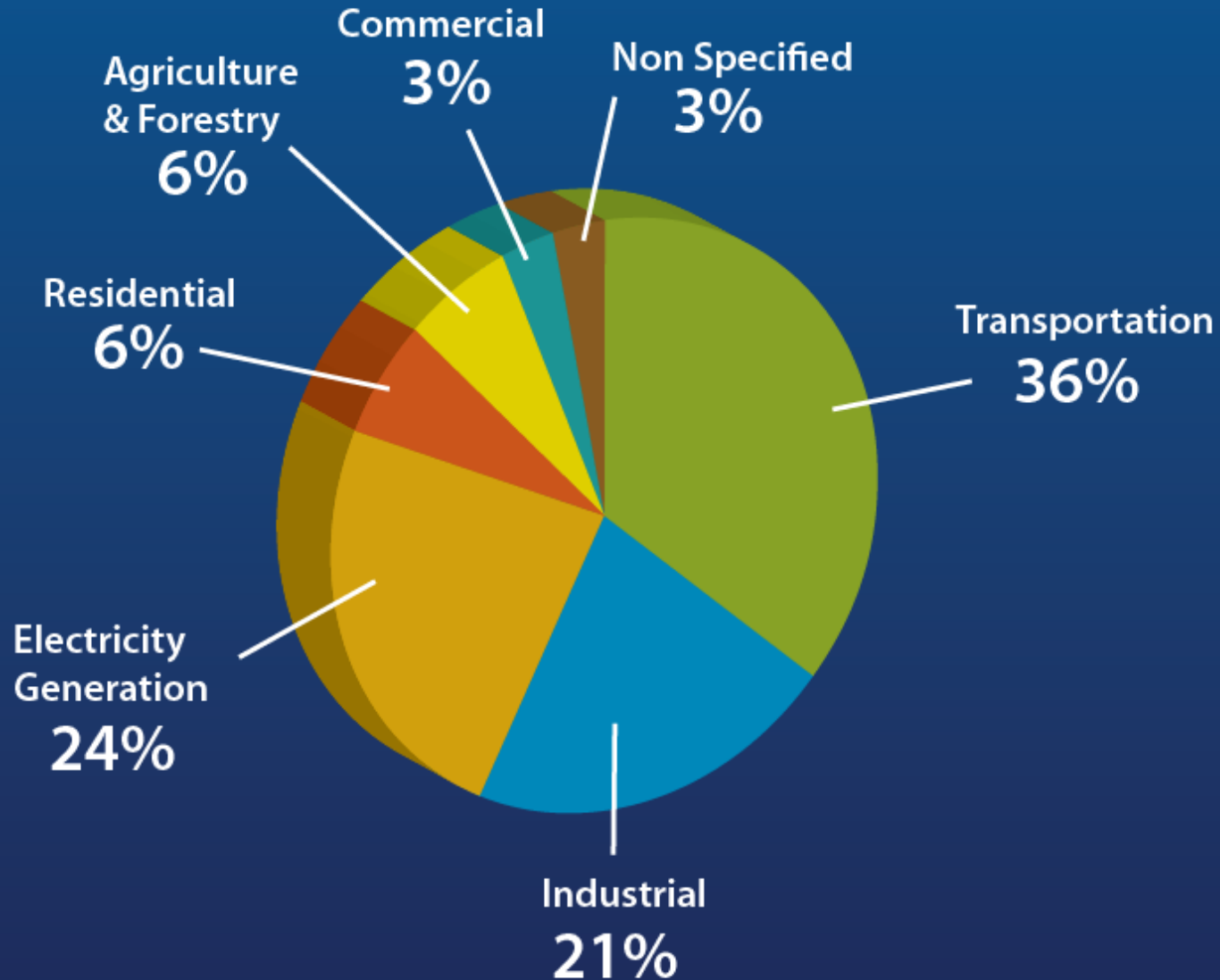


***Plug-In Electric Vehicle Readiness
Planning (CEC & DOE)***



***Plug-In Electric Vehicle Battery Research
(CEC & NREL)***

CALIFORNIA GREENHOUSE GAS EMISSIONS



Environmental



- Plug-in electric vehicles
 - ✓ Zero Tail Pipe Emissions
- CA grid cleanest in nation
 - ✓ 33% renewable by 2020
- Off peak charging
 - ✓ Lower carbon intensity → generation

Public Health



In 2008, pollution from diesel and gasoline vehicles resulted in:

- ✓ 9,000 premature deaths
- ✓ 7,700 hospitalizations
- ✓ 1,400,000 lost workdays
- ✓ 4,700,000 school absences

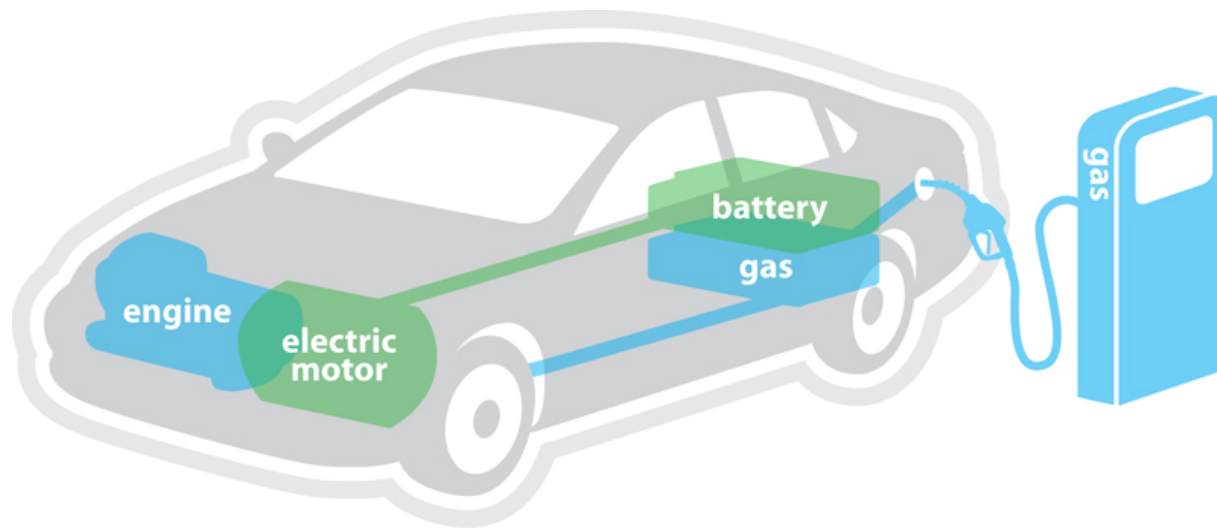
Economic



- Volatile Gas Prices
 - ✓ Reduce dependence on the pump
- Lower Fueling Costs
 - ✓ Off peak charging Time-Of-Use rates
- Lower Maintenance Costs
 - ✓ No more oil changes, reduced tune ups

Plug-In Electric Vehicle 101

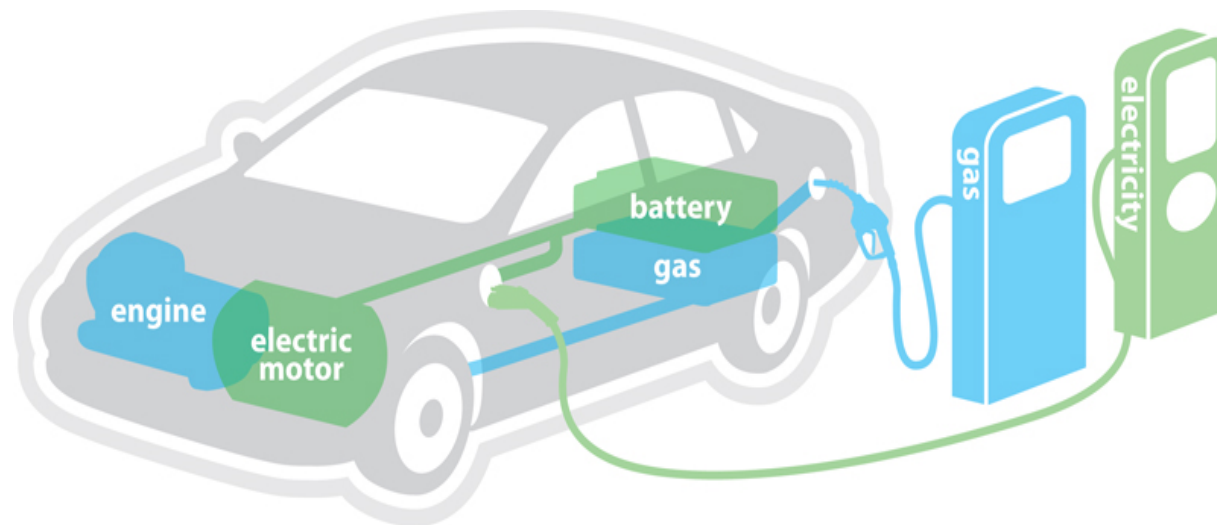
Hybrid Electric Vehicle



A vehicle that combines an internal combustion engine with a battery and electric motor.

Plug-In Electric Vehicle 101

Plug-In Hybrid Electric Vehicle (PHEV)



Hybrid vehicles that can plug in to the grid so they can operate on electricity as well as an internal combustion engine.

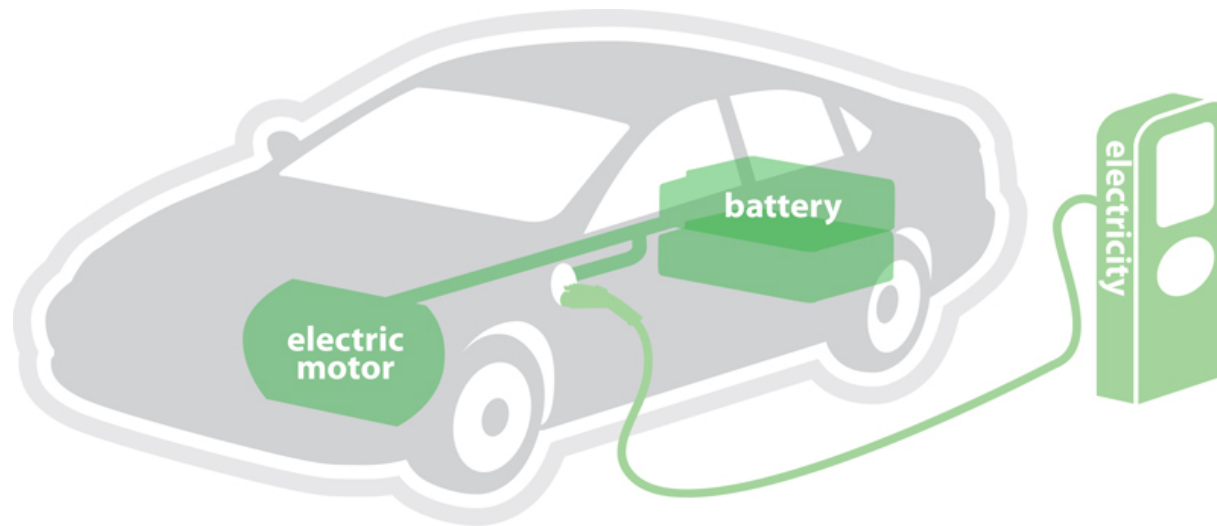






Plug-In Electric Vehicle 101

Battery Electric Vehicle (BEV)



A vehicle that runs on electricity stored in batteries and has an electric motor rather than an internal combustion engine.















Universal Plug/Port



J-1772 The universal plug/port



SAE Approved

**Universal plug for
all new PEVS - can
charge anywhere**



**Technology to
communicate
with smart
chargers**

**Designed for
eventual vehicle-
to-grid (V2G)**

EVSE-Your new fueling station



Level 1

- 120 V, 15-20 A
- \approx 5 miles/hour of charge

Level 2

- 240 V, 40 A
- \approx 10-15 miles/hour of charge

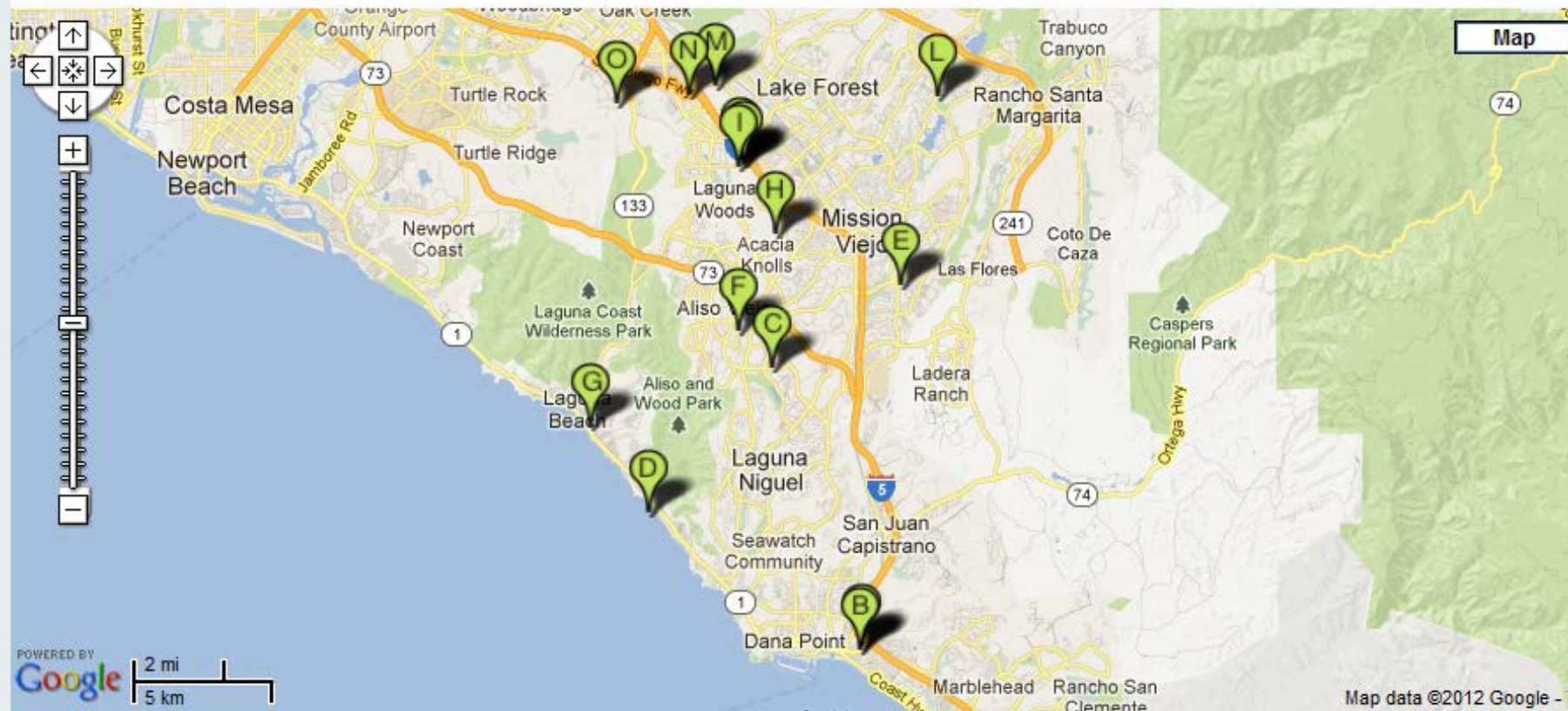
DC Fast Charge

- 480 V, 100 A
- \approx 80 miles in 30 min (24kWh battery)

San Juan Capistrano

Search

Chargers: **all**



Charging Sites nearest to: **San Juan Capistrano, CA, USA:**



Center for
Sustainable Energy[®]
CALIFORNIA

Plug-In Electric Vehicle Incentives

Colin Santulli

Colin.Santulli@energycenter.org

(858) 244-1195

[**www.energycenter.org/cvrp**](http://www.energycenter.org/cvrp)

Outline

- State Rebate - Clean Vehicle Rebate Project (CVRP)
 - Program Funding
 - Program Eligibility
 - Application Process
- Additional Vehicle Incentives
 - Federal Tax Credits
 - HOV Stickers



CLEAN VEHICLE
REBATE PROJECTSM

www.energycenter.org/cvrp



- Funded through the California Air Resources Board (ARB) and the California Energy Commission (CEC) through 2015
- Funded by vessel registration, vehicle registration and smog abatement fees



California Environmental Protection Agency

 **Air Resources Board**



CLEAN VEHICLE REBATE PROJECTSM

FY 2009-2010

- \$4.1 million from ARB

FY 2010-2011

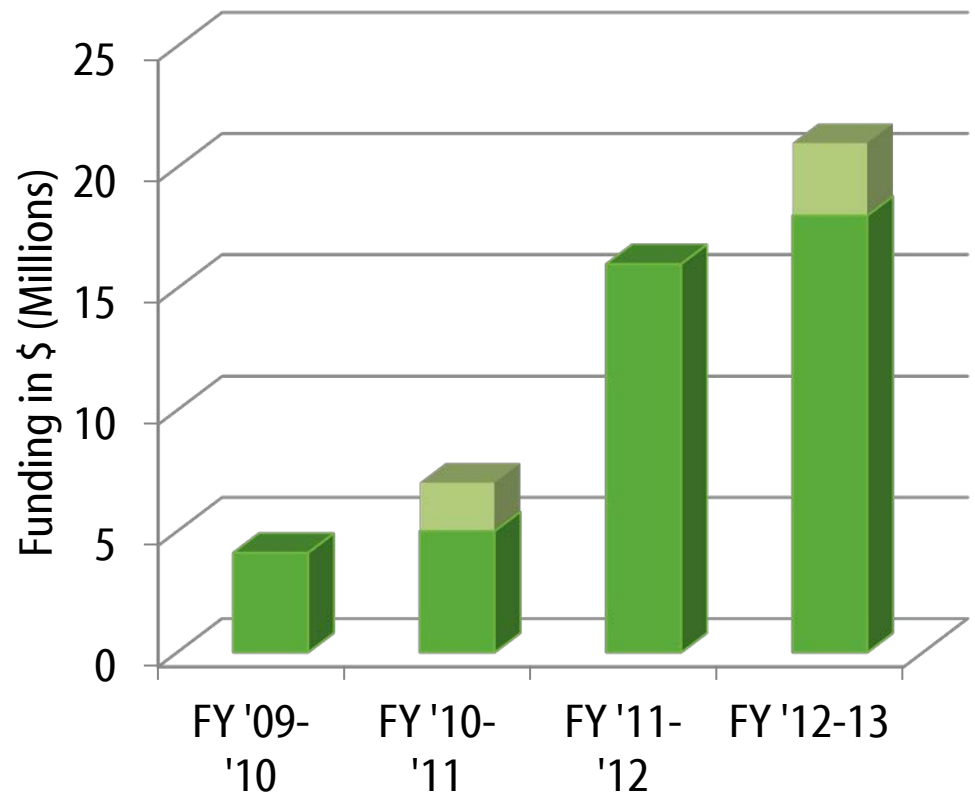
- \$5 million from ARB
- \$2 million from CEC

FY 2011-2012

- \$16 million from ARB

FY 2012-2013

- **\$18 million from ARB**
- **Up to \$3 million from CEC**





CLEAN VEHICLE REBATE PROJECTSM

The Clean Vehicle Rebate Project ([CVRP](#)) is funded by the California Environmental Protection Agency's Air Resources Board ([ARB](#)) and administered statewide by the California Center for Sustainable Energy ([CCSE](#)). A total of \$45.2 million has been appropriated for FY 2009-2013 to promote the production and use of zero-emission vehicles ([ZEV](#)), including electric, plug-in hybrid electric, and fuel cell vehicles. **Rebates of up to \$2,500** per light-duty vehicle are available for individuals and business owners who purchase or lease new eligible zero-emission or plug-in hybrid electric vehicles.

Of this \$45.2 million, \$2 million was provided by the California Energy Commission on May 26, 2011. Funding from the Energy Commission is specifically dedicated to light-duty [ZEVs](#) capable of freeway operation and certified for four or more passengers. [Click here](#) to read a press release which provides more information about this funding announcement.

Estimated Remaining [CVRP](#) Funding
\$ 10,912,979
[\(read more\)](#)

www.energycenter.org/cvrp

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- [Clean Vehicle Rebate Project Home](#)
- [About CVRP](#)
- [Eligible Vehicles](#)
- [Program Statistics](#)
- [PEV Survey Results](#)
- [FAQs](#)
- [Events](#)
- [Contact Us](#)
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CVRP RESOURCES

- [CVRP Rebate Map](#)
- [Implementation Manual](#)
- [Electric Vehicles 101](#)
- [High Performance Home for your EV](#)

[Apply for a Vehicle Rebate](#)

THE FUTURE IS ELECTRIC

Plug In and Get There



[Like](#) 2,009

ADDITIONAL INCENTIVES



Find rebates, discounts, tax breaks and other incentives available in your area.

CVRP News

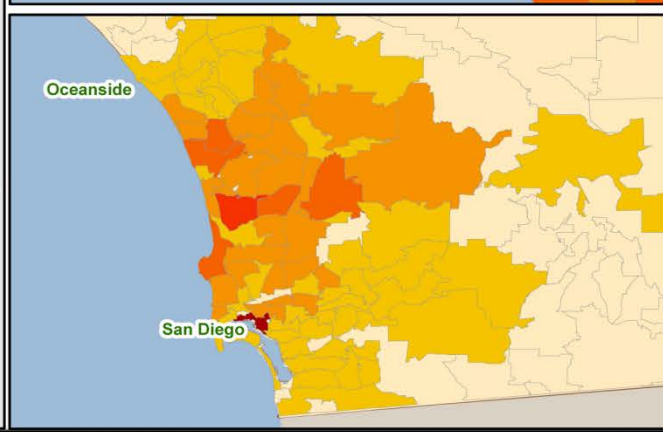
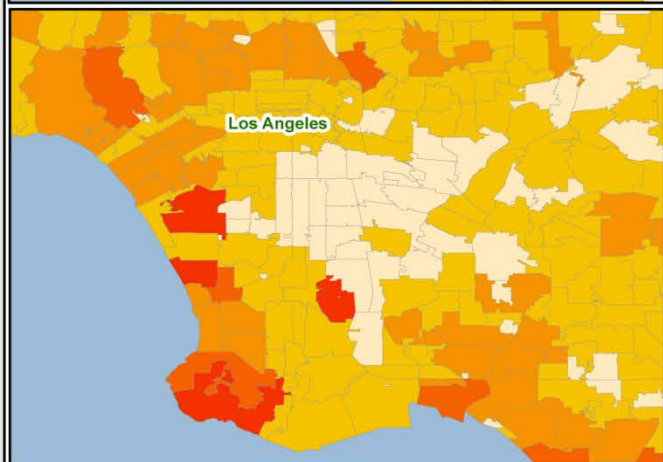
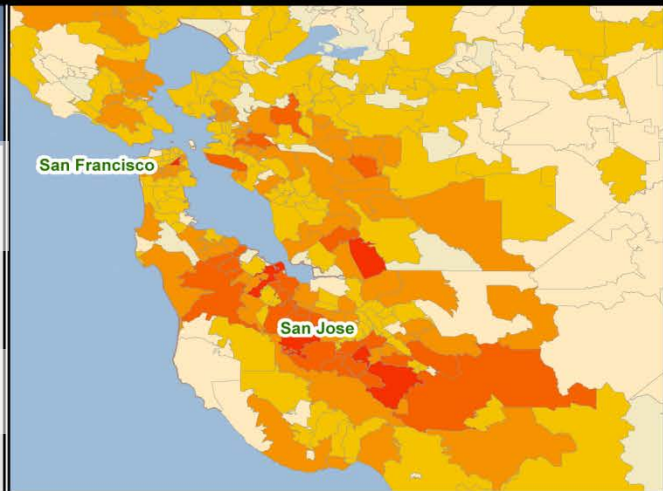
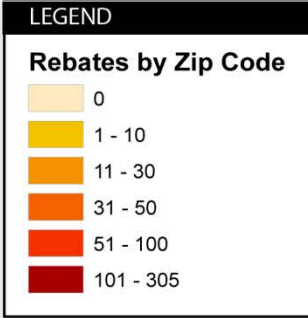
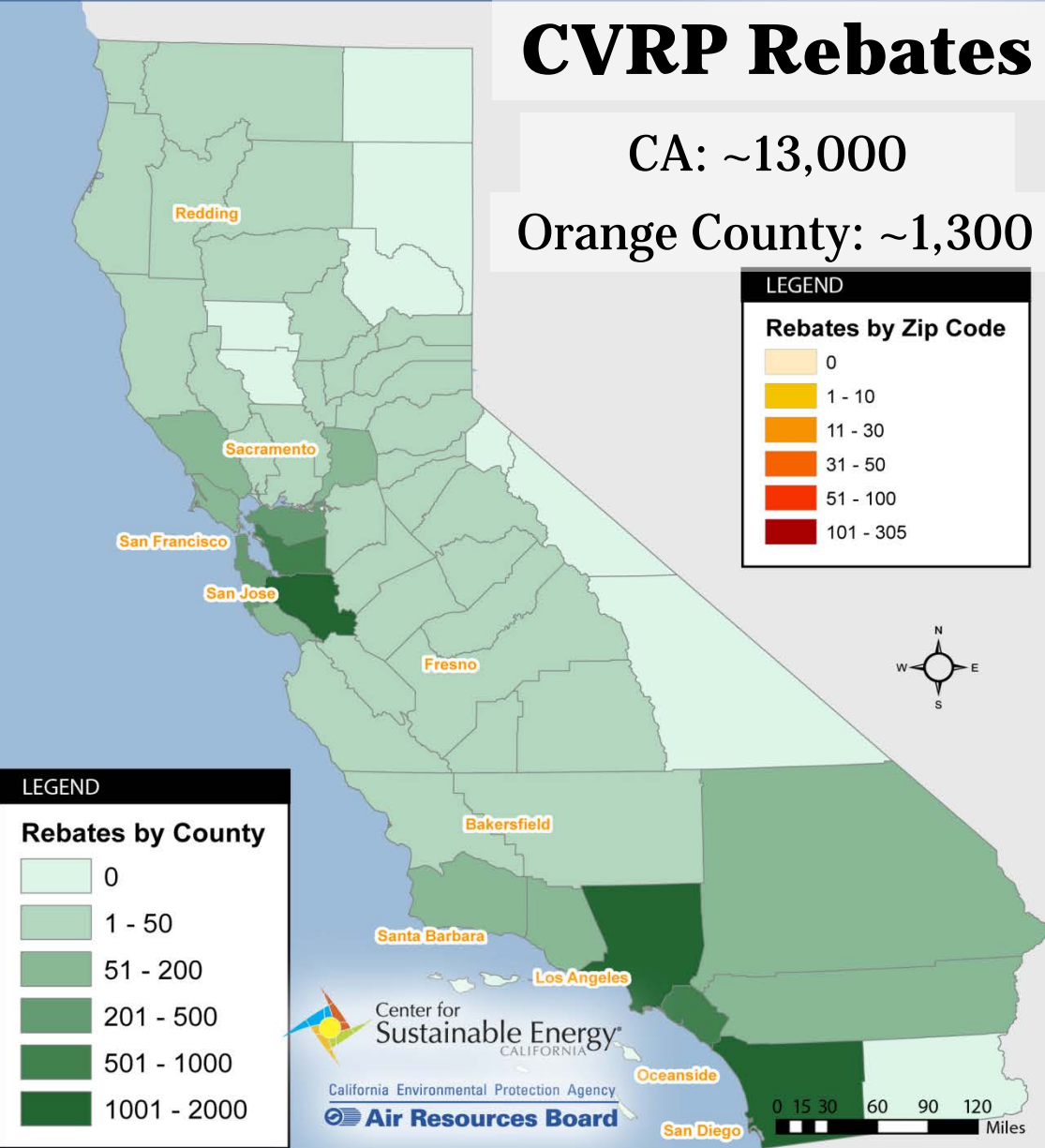
- 16 Oct** [Rebates Fund 10,000 Clean Cars](#)
- 26 Sep** [CCSE Hosts National Plug-In Day 2012](#)
- 16 Aug** [24 Month Lease Terms NOT ELIGIBLE for CVRP](#)

[more news >>](#)

CVRP Rebates

CA: ~13,000

Orange County: ~1,300



Program Eligibility – Who and How



Individual, business, nonprofit or government entity
based in California or has a California based affiliate



Purchase or Lease a NEW eligible vehicle



Vehicle must be **2010 model or NEWER**



MUST own/lease for a **MINIMUM of 36 CONSECUTIVE MONTHS**



MUST be registered with the California DMV for a **MINIMUM of 36 CONSECUTIVE MONTHS**

Program Eligibility – Vehicles



Light-Duty Zero Emission Vehicles
\$1,500-\$2,500 ←

Variation
based on
vehicle
range



Plug-in Hybrid Electric Vehicles
\$1,500



Neighborhood Electric Vehicles
\$900



Zero Emissions Motorcycles
\$900

How do I apply?

Step 1

- Go to www.energycenter.org/cvrp
- Select vehicle and complete online application

Step 2

- Mail in signed application and supporting documents within 14 calendar days

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Estimated Remaining [CVRP](#) Funding
\$ 10,912,979
[\(read more...\)](#)

Interested in applying for a rebate? Follow these three easy steps:



 Like 2,009

ADDITIONAL INCENTIVES







Find rebates, discounts, tax breaks and other incentives available in your area.

CVRP News

- 16 Oct** Rebates Fund 10,000 Clean Cars
- 26 Sep** CCSE Hosts National Plug-In Day 2012
- 16 Aug** 24 Month Lease Terms NOT ELIGIBLE for CVRP

[more news >>](#)

PHEV	<p>Chevy Volt</p>  <p>Chevy Volt 2012 - Low Emission Package (Low Emissions Package will have an E, F, G or H in the 5th position of the VIN)</p> <p></p>	\$1,500
	<p>Toyota Prius Plug-In</p>  <p>Toyota Prius Plug-In Hybrid 2012</p> <p></p>	\$1,500
	<p>EVI</p>  <p>EVI 2010/2011 eMega</p> <p></p>	\$900



Clean Vehicle Rebate Project

Applicant Requirements and Qualifying Vehicle Information

Applicants must agree to meet all the requirements as specified in the [CVRP Implementation Manual](#) as part of the rebate application. It is the responsibility of the applicant to review the [CVRP Implementation Manual](#) prior to applying for a rebate.

Eligible Applicants must meet requirements that include, but are not limited to, the following:

1. Be an individual, business, nonprofit or government entity that is based in California or has a California based-affiliate as specified in Section 3.3 of the [CVRP Implementation Manual](#).
2. Be a purchaser or lessee of a new Zero-Emission Vehicle ([ZEV](#)) or Plug-in Hybrid Electric Vehicle ([PHEV](#)) as specified in Sections 2.2 and 2.3 of the [CVRP Implementation Manual](#).
3. Be a purchaser or lessee of a new eligible vehicle after the official start date of the Clean Vehicle Rebate Project, March 15, 2010, and prior to exhaustion of available rebate funds.
4. Purchase or lease an eligible vehicle before applying for a rebate as specified in Section 2.1 and 2.7 in the [CVRP Implementation Manual](#).
5. Retain ownership of the vehicle for a minimum of 36 consecutive months* immediately after the vehicle purchase or lease date. Rebate recipients who do not retain the eligible vehicle for the full 36-month ownership or lease period will be required to reimburse [ARB](#) all or part of the original rebate amount.
6. Register the new vehicle with the California Department of Motor Vehicles (DMV) for a minimum of 36 consecutive months* for use in California. Any government owned vehicle not registered with the California DMV is still required to operate within California for 36 consecutive months immediately after the vehicle purchase or lease date.

*Note: [ARB](#) will be periodically checking vehicle identification numbers with vehicle registrations to ensure that [CVRP](#) applicants meet this requirement. If an applicant breaks this requirement, [ARB](#) or its designee reserves the right to recoup [CVRP](#) funds from the original vehicle purchaser identified on the rebate form and may pursue other remedies available under the law.

To qualify for a rebate, vehicles must meet the following requirements:

1. The vehicle must be new as defined in the California Vehicle Code (CVC) section 430 and must be manufactured by the Original Equipment Manufacturer (OEM) or its authorized licensee. Vehicles considered new vehicles solely for determination of compliance with state emissions standards are not eligible.
2. The vehicle must be on the List of Eligible Vehicles (available at www.CVRPenergycenter.org) on the date of purchase or lease.
3. Zero-Emission Motorcycles ([ZEMs](#)) and Neighborhood Electric Vehicles ([NEVs](#)) must be equipped with sealed, maintenance-free batteries and meet the warranty requirements as described in Sections 2.3.3 and 2.3.4 of the [CVRP Implementation Manual](#).

Rebates will be distributed on a strict first-come, first-served basis and issued to qualified recipients in a single allotment. Rebates will be issued no later than 60 days following receipt and verification of documentation.

Rebate funds will be immediately reserved by the Project Administrator upon receipt of a completed application. Required supporting documentation must be mailed within 14 calendar days (by U.S. mail postmark) after a completed application is received. If applicants do not submit the required documentation within that time frame, the funds will be released back to the project and a new application will need to be submitted.

Required supporting documentation will include, at a minimum, the following:

- A printed copy of the submitted application signed by the vehicle purchaser, lessee or authorized representative.
- Proof of temporary or permanent vehicle registration.
- A copy of the sales or lease contract signed by all parties with an itemization of credits, discounts and incentives received, if applicable.
- For individuals, a copy of a utility or cable bill from within the last 3 months or other valid proof of California residency as approved by the California Center for Sustainable Energy. Other forms of valid proof include a signed, dated and notarized rental agreement or a copy of a current vehicle DMV registration. A California driver license is not an acceptable proof of residency.
- For a business or nonprofit, a copy of the formation document filed with the California Secretary of State or other documentation as approved by the California Center for Sustainable Energy. Sole proprietors may submit a copy of a utility or cable bill from within the last 3 months, a current vehicle DMV registration or a notarized rental agreement.
- For [ZEMs](#) and [NEVs](#), as identified on the vehicle eligibility list, evidence of sealed maintenance-free batteries and a 24-month warranty.

Resale of a vehicle or return to a dealer is allowed within this 36-month period if necessitated by unforeseen or unavoidable circumstances and has been given prior approval by the [ARB](#). However, resale of a [CVRP](#) vehicle for financial gain within 36 months is not allowed. In these cases, [ARB](#) or its designee reserves the right to recoup [CVRP](#) funds from the original vehicle purchaser identified on the rebate form and may pursue other remedies available under the law.

Mailing Instructions

To ensure delivery of application materials, please use certified mail or priority mail with delivery confirmation.

I have read and understand the Clean Vehicle Rebate Project "Applicant Requirements and Qualifying Vehicle Information"

Submit

Exit

PHEV : Chevy Volt

CVRP online application form for the Chevy Volt 2012 - Low Emission Package (Low Emissions Package will have an E, F, G or H in the 5th position of the VIN)

Rebate Amount (Choose your model): \$ 1,500.00 Chevy Volt Low Emission package



Email Address *



Email Address

CVRP Applicant

APPLICANT INFORMATION

Individual or Authorized Representative

* Required Fields

First Name *

Middle Name

Last Name *

Phone *

Street Address *

City *

State

Zip Code *

Enter your Mailing Address below ONLY if it's different from your contact address above.

Street Address (Mailing)

City (Mailing)

State (Mailing)

Zip Code (Mailing)

- CVRP Institution *
- Private individual or sole proprietor
 - State government agency
 - Non-profit organization
 - Other
 - Federal government agency
 - Local government agency
 - California Licensed Business



Personal Information



Mailing Address

If Other Explain

Current solar system owner?

CVRP Vehicle

VEHICLE AND OWNER (LESSEE) INFORMATION

Name of Vehicle Owner / Lessee (as it appears on the vehicle title) *

← **Vehicle Owners Name**

Date of purchase or date on which lease commences *

Date of Purchase/Lease

Lease Term in Months (if applicable) *

Vehicle Year *

Vehicle Information

Vehicle Identification Number (VIN) *

Dealer Name *


Dealer Contact Person

Dealer Contact Title

Dealer Phone *

Dealer Information

CCSE CALENDAR

 Green Workshops & Events
[calendar view](#) | [list view](#)



AFFILIATE ORGANIZATION



Supporting Documents



Proof of temporary or permanent vehicle registration



Copy of the sale or lease contract signed by all parties
Itemized list of credits, discounts, and incentives received

\$1,500



Individuals: Proof of California Residency - **Utility or cable bill** from within the last 3 months or a notarized rental agreement.

NOTE: California driver license is **not** an acceptable proof of residency



Business/Nonprofits: Copy of formation document filed with the CA Secretary of State. Sole proprietors may submit a copy of a utility or cable bill from within the last 3 months, or a current vehicle DMV registration or notarized rental agreement.

Other Incentives – Electric Vehicle Tax Credit

- BEV/PHEV tax credits range from \$2,500 to \$7,500
- Based on battery capacity:
 - Minimum of 4 kWh (\$2,500)
 - In excess of 5 kWh additional \$417 per kWh
 - **Nissan LEAF** 24 kWh battery capacity (\$7,500)
 - **Chevrolet Volt** 16 kWh battery capacity (\$7,500)
 - **Toyota Plug-In Prius** 4.4kWh battery capacity (\$2,500)
- Phase out per manufacturer after 200K EV/PHEV

www.fueleconomy.gov

Other Incentives – HOV Stickers

- **White Clean Air Vehicle Stickers** are available to an unlimited number of qualifying Federal Inherently Low Emission Vehicles (ILEVs). Expires Jan 2015.
- **Green Clean Air Vehicle Stickers** available to first 40,000 applicants that purchase or lease cars that meet CA enhanced advanced technology partial zero emission vehicle (AT PZEV) requirements. Expires Jan 2015.



<http://www.arb.ca.gov/msprog/carpool/carpool.htm>



Center for
Sustainable Energy[®]
CALIFORNIA

Questions?

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Colin.Santulli@energycenter.org

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