

TRANSPORTATION ELECTRIFICATION & PROGRAMS FOR EV RELATED REBATES USING LOW CARBON FUEL STANDARD REVENUE

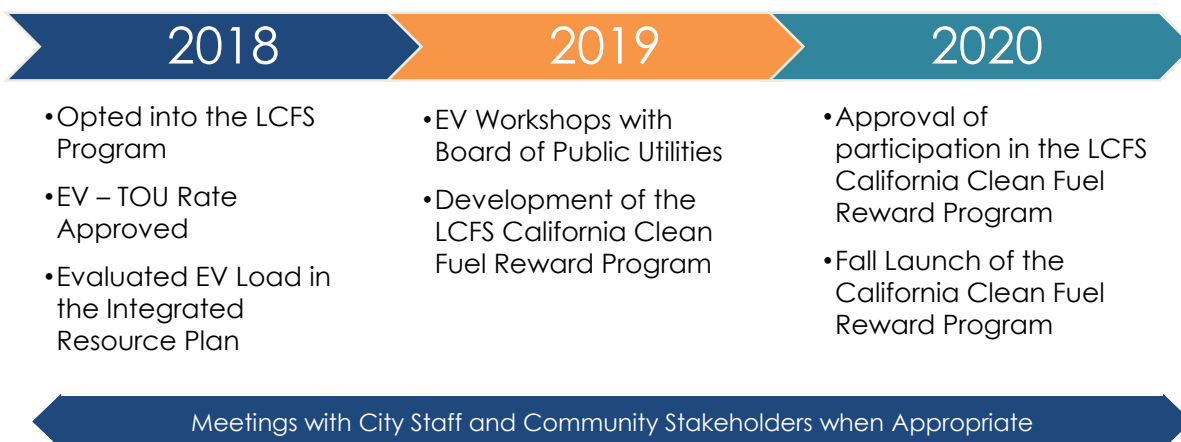
Riverside Public Utilities

Public Utilities Electric Committee
July 14, 2021

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TIMELINE



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LCFS BACKGROUND

1. RPU was authorized to opt into the Low Carbon Fuel Standard (LCFS) Program by the City Council on March 13, 2018 and authorized to participate in the required point-of-purchase program named the California Clean Fuel Reward (CCFR) on April 7, 2020
2. RPU is allocated LCFS Credits for the charging of the approximately 2,500 electric vehicles registered in the City of Riverside
3. Total credit sales to date is \$2.7 million (revenue of about \$1 million per year is anticipated)

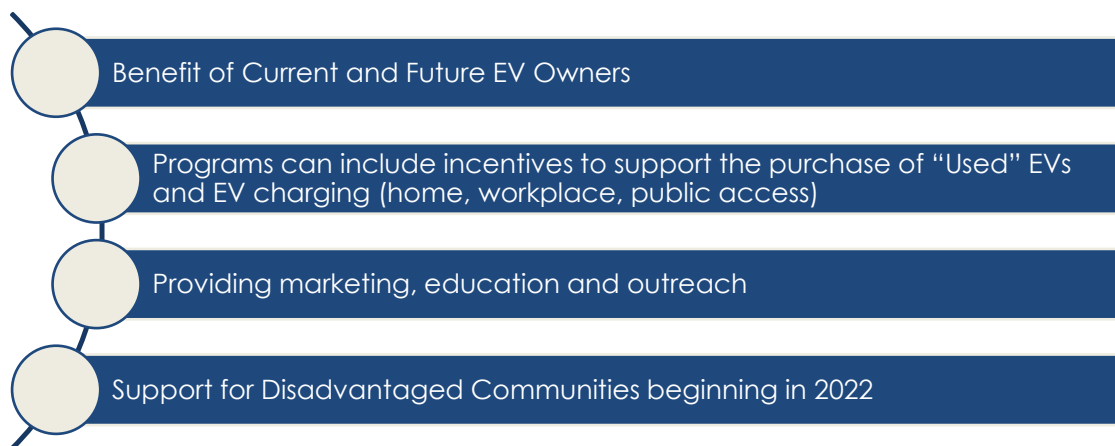


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SPENDING REQUIREMENTS FOR LCFS REVENUE



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WHY EVS AND WHY NOW?

1. Climate Change

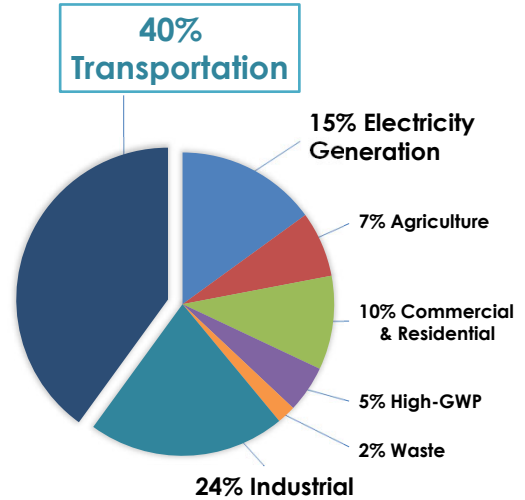
- A. In California, transportation accounts for ~40% of greenhouse gas emissions

2. State of California Goals

- A. 1.5 million EVs on the road by 2025
- B. 5 million EVs on the road by 2030
- C. All new vehicles sold in California to be zero-emissions by 2035
- D. Transition all fleets to zero emissions vehicles by 2045

3. City and RPU Commitment

- A. Utility 2.0 – Commitment to Sustainability
- B. 2025 Strategic Plan
 - a. Carbon-neutrality by 2040



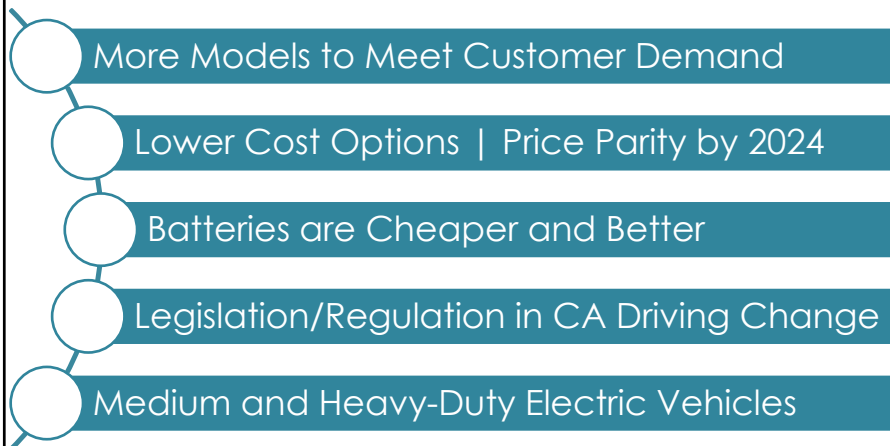
2018 GHG Emissions by Scoping Plan Sector (California): California Air Resources Board



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EV TECHNOLOGY READY FOR CONSUMERS



400

Electric Vehicle
Models
by 2025

Includes sedans,
minivans, pickups, and
sport utility vehicles



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AUTOMAKERS COMMITMENT TO ELECTRIFICATION

1. **Stellantis:** From Dodge to Maserati, every new model the company launches from now until 2025 will offer an "electrified" variant
2. **GM:** Plans to be carbon neutral by 2040 for its global products and operations / Eliminate tailpipe emissions from all new light-duty vehicles by 2035 / has committed to the Business Ambition Pledge for 1.5°C
3. **Toyota:** By 2025, Toyota's goal is to have 40% of new vehicle sales be electrified models, and by 2030 expects that to increase to nearly 70%.
4. **Nissan:** All of its "new vehicle offerings" in key markets would be electrified by the early 2030s, as part of the automaker's efforts to achieve carbon neutrality by 2050
5. **Kia:** Company is transitioning to all electric vehicles with 7 models planned by 2027 and announcement that it changed their company name from Kia Motors to Kia to reflect their push to electrification
6. **Jeep Brand:** States it is committed to becoming one of the most environmentally conscious SUV brands on the planet (2021)



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WHAT WE HEARD FROM THE AUTO DEALERS

1. Automakers are committed to EVs
2. New technology and charging
3. What we saw in the past is not what will be in the future
4. Data and information for them is helpful
5. Continue the conversation



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CALIFORNIA ELECTRIC VEHICLE REBATES

By Manufacturer and EV Type

Received by Riverside
Residents and Businesses
January 2011 through March 2021

~\$3.2Million
in CVRP

Not Including Tax Credits or City Rebates

Over 50% Generated
Between 2018-2021



Manufacturer	BEV	FCEV	PHEV	Other	Total # of Vehicles	Total Amount of Rebates
Audi	2		3		5	\$11,500
BMW	31		10		41	\$97,500
Cadillac			1		1	\$1,500
Chevrolet	86		214		300	\$568,333
Chrysler			7		7	\$11,500
FIAT	63				63	\$169,000
Ford	10		145		155	\$245,473
Honda	11	4	53		68	\$144,000
Hyundai	29	2	10		41	\$102,000
Kia	8		18		26	\$47,500
Mercedes-Benz	3	1			4	\$10,000
Mitsubishi	1		4		5	\$10,500
Nissan	98				98	\$258,584
Smart	11				11	\$29,500
Tesla	400				400	\$1,036,500
Toyota	5	15	170		190	\$374,500
Volkswagen	12				12	\$32,000
Jaguar	2				2	\$5,000
Nissan	2				2	\$4,500
Zero				1	1	\$900
Total	774	22	635	1	1,432	\$3,160,290

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SAVING MONEY AND CLEANING THE AIR

Battery EV compared to Conventional Gas Engine Vehicle

Traveling an average of 20,000 miles per year

Vehicle Type	Fuel Economy	Fuel Requirements	Estimated Annual Cost	Greenhouse Gas Emissions
Battery Electric	3.43 miles/kWh	5,831 kWh/year	\$1,096 for electricity	2.3 metric tons
Conventional Gas	22 miles / gallon	909 gallons / year	\$3,391 for gasoline	8.1 metric tons

Benefits of Electric

\$2,295
Savings

5.8 metric
tons reduced



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WHAT SHOULD RPU BE CONSIDERING?

Utility Side

How is RPU planning and preparing for the new EV load?

- ✓ 1. IRP for EV forecasting
- ✓ 2. Power supply & peak load
- ✓ 3. Where is charging occurring
- ✓ 4. Type of charging
- 5. Infrastructure improvements

Customer Side

How does RPU support our new EV customers?

- ✓ 1. Rates to support EVs
- 2. Rebates
- 3. Education
- 4. EV charging locations
- 5. Ensuring all customers can benefit



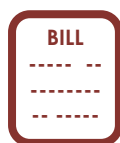
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PROGRAM OPTIONS


**Rebates for
the Customer**



Rebates for
EVs and EV
Chargers

Making It
Easy for the
Customer

Rate Options
and Waived
Costs

Install and
Support
Public,
Shared, and
Workplace EV
Charging



**Actions for
the Utilities**



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BEST PRACTICES IN PROGRAMS

1. Residential incentives come in the form of rebates for the charging station itself (charging hardware) and average \$500 with an additional incentive for TOU meter
 - a) Rebates will usually cover only a Level 2 EV charging station
2. Used EV purchase rebates range from \$250 up to \$1,500, which includes additional incentives for low-income customers
3. For the installation of a smart Level 2 (240V) charging station for non-residential and multi-family housing, rebates range between \$3,000-\$5,000.



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CALIFORNIA CLEAN FUEL REWARD PROGRAM



**CALIFORNIA
CLEAN FUEL
REWARDSM**

1. Program launched in late 2020
2. Provides electric utility customers who purchase a new electric vehicle with a rebate at the time the vehicle is purchased
 - a. Customers may purchase an EV at any auto dealer in the State of California who opts to participate in the program
 - b. Up to \$1,500 off the purchase of a new EV
3. Funded solely by the revenue generated from the proceeds resulting from the sale of LCFS residential charging credits



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PROPOSED CUSTOMER EV REBATE PROGRAMS



RESIDENTIAL USED EV REBATE PROGRAM

- \$500 rebate; additional \$1000 for low-income customers
- Estimated 150 rebates or \$150,000 for FY 2021/22

RESIDENTIAL HOME CHARGING EV CHARGER REBATE

- \$500 rebate for a Level 2 home charger
- One-time \$805 rebate for installation of TOU meter (if qualified)
- 260 charger rebates & 25 TOU meter rebates; total of \$150,000 for FY 2021/22

NON-RESIDENTIAL & MULTIFAMILY EV CHARGER REBATE PROGRAM

- \$3,500 per charging station; additional \$1,000 for installation at a qualified affordable housing development
- Up to 100 rebates per year, for a total of \$400,000 for FY 2021/22



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RESIDENTIAL USED EV REBATE PROGRAM

Residential rebate program for the purchase of a used electric vehicles from a commercial, California based, used vehicles auto seller

1. \$500 rebate for the purchase of a used battery or plug-in hybrid electric vehicle
2. Additional \$1000 for qualified low-income customers
 - a. RPU's customers will qualify for the rebate regardless of where in California they purchase a used electric vehicle.
 - b. Applicant must be a Riverside Public Utilities residential customer and the EV must be registered to a residence serviced under Riverside Public Utilities territory
3. Estimated 150 rebates or \$150,000 for FY 2021/22



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RESIDENTIAL HOME CHARGING EV CHARGER REBATE

Rebate for a Level 2 home EV charger for use at a customer's residence

1. \$500 with a one-time additional \$805 for installation of TOU meter for customers that opt into the EV-TOU rate
 - a. Applicant must be a Riverside Public Utilities customer and the EV charger must be installed within Riverside Public Utilities service territory at the customers residence
 - b. Applicant is responsible for obtaining all required permits from the City of Riverside
 - c. Maximum of one EV charger rebate per household annually
2. For 260 charger rebates and 25 TOU meters, \$150,000 for FY 2021/22



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NON-RESIDENTIAL & MULTIFAMILY EV CHARGER REBATE PROGRAM

Provide rebates to non-residential and multi-family customers that install either wall mounted or pedestal, level 2 or higher capacity EV charging equipment that exceeds building code standards

1. Up to \$3,500 per charging station (maximum of 5 per location); additional \$1,000 for charging station installed at a qualified affordable housing development
 - a. One (1) EV charger rebate is available to commercial customers who have a minimum of three (3) parking spaces available to employees, customers, visitors, and/or tenants. One (1) additional EV charger rebate is available for each additional 10 parking spaces.
2. Up to 100 rebates per year, for a maximum of \$400,000 for FY 2021/22



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OUTREACH AND EDUCATION

**Launch a focused outreach and education program
to inform the public on the benefits of EV transportation**

1. Updated website page and information
2. Social media campaign
3. Two EV Ride and Drive events in October and April coinciding with Clean Air Day and Earth Day respectively
4. Additional outreach events as possible
5. Marketing materials
6. Funding for programming = \$30,000 for FY 2021/22



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ONGOING & FUTURE PROGRAMS

1. Develop and install public charging stations throughout the City
 - a. Completion of a study to identify locations of additional public access EV charging opportunities throughout the City
 - b. Identify locations and install DC chargers where needed dependent on funding availability (e.g. Corp Yard, Plaza, etc.)
2. Develop and update one or more EV charging rates that incorporates all costs for City owned EV charging, including O&M, to cover cost of equipment and maintenance
3. Enhanced communication with stakeholders and representatives of disadvantaged and low-income communities to further enhance programs and offerings



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RECOMMENDATIONS

That the Electric Committee recommends that the Board of Public Utilities forward a recommendation to the City Council to:

1. Approve the Residential Used Electric Vehicle Rebate, the Residential Home Charging Electric Vehicle Charging Rebate, and the Non-Residential/Multifamily Electric Vehicle Charger Rebate Programs, using proceeds from the sale of Low Carbon Fuel Standard credits in the amount of \$730,000 for Fiscal Year 2021/22;
2. Authorize the City Manager, or designee, to execute the Rebate Programs and take all necessary actions required, or advisable to implement, administer, fund, and carry out the City of Riverside's responsibilities under the Rebate Programs; including the ability to make non-substantive changes, as well as to execute future amendments to the Rebate Programs under substantially similar terms and conditions;

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RECOMMENDATIONS (CONT.)

3. Authorize a supplemental appropriation, fully offset by proceeds from the sale of Low Carbon Fuel Standard credits, in the total amount of \$730,000 and appropriate expenditures as follows: 1) \$150,000 to the Residential Used EV Rebate Account; 2) \$150,000 to the Residential Home Charging EV Charging Rebate Account; 3) \$400,000 to the Non-Residential/Multifamily EV Charger Rebate Account; and 4) \$30,000 to the Marketing/Education/Outreach Account from the Electric Fund Low Carbon Fuel Reserve Account;
4. Direct staff to provide an annual report on program results to the Board of Public Utilities; and
5. Direct staff to bring forward a proposed plan for the deployment of EV charging infrastructure by December 31, 2021.

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