



**CALIFORNIA
ENERGY COMMISSION**



California Energy Commission

STAFF REPORT

Localized Health Impacts Report

**Projects Awarded Funding Under Solicitation
GFO-22-610 Convenient, High-Visibility, Low-
Cost, Level 2 Charging (CHiLL-2)**

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California Energy Commission

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PREFACE

This Localized Health Impacts Report (LHI Report) assesses the local health impacts from projects proposed to receive Clean Transportation Program (CTP) funding. Preventing or minimizing health risks from pollution is vital in any community, but especially in those that are at high-risk due to preexisting poor air quality and other factors. Environmental justice (EJ) communities, low-income communities, and minority communities are considered the most impacted by any project that could increase air pollution. Therefore, they are considered “high-risk communities.” This LHI Report:

- Identifies proposed projects located in high-risk communities.
- Analyzes the potential health impacts to communities from project-related emissions or pollution, based on information submitted by the project awardees.
- Describes the plans for community outreach for each project.

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007), which created the CTP, also directed the California Air Resources Board (CARB) to develop guidelines to ensure the CTP improves air quality. CARB’s *AB 118 Air Quality Guidelines*, approved in 2008, are published in the California Code of Regulations (CCR), Title 13, Motor Vehicles, Chapter 8.1. Those guidelines require the CEC to issue LHI Reports (13 CCR Section 2343):

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

“(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

“(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

The CEC publishes this LHI Report at least 30 days before approving projects at a publicly noticed meeting. This report includes projects that may require a conditional-use permit, discretionary permit, or California Environmental Quality Act (CEQA) review. The CEC interprets “permits” to suggest discretionary and conditional-use permits, because they require a review of potential impacts to communities and the environment before issuance. Since ministerial-level permits do not review public health–related pollutants, CEC staff does not assess projects requiring only ministerial-level permits in this report.

ABSTRACT

This Localized Health Impacts Report describes the potential health impacts to communities from projects seeking California Energy Commission (CEC) funding under Grant Solicitation GFO-22-610. This grant initiative seeks to:

1. Demonstrate replicable and scalable business and technology models to deploy Level 2 electric vehicle chargers.
2. Improve public awareness of and confidence in Level 2 charging access through high-density, high-visibility installations.
3. Provide Level 2 charging access in disadvantaged and/or low-income communities.
4. Provide reliable and readily accessible chargers.

Under California Code of Regulations Title 13, Section 2343, this report is available for public comment for 30 days before projects can be approved at a publicly noticed business meeting.

CEC staff has proposed five projects for Clean Transportation Program grant funding awards under Solicitation GFO-22-610. Each of these projects has several locations. Based on project site information provided by the awardees, three of the seven communities where these projects are located are considered high-risk communities. Staff does not anticipate a net increase in the pollution burden for the communities where these projects are located.

Keywords: Air pollution, California Air Resources Board (CARB), Assembly Bill (AB) 118, California Environmental Quality Act (CEQA), electric vehicles (EVs), electric vehicle supply equipment (EVSE), environmental justice (EJ) indicators, Environmental Justice Screening Method (EJSM), localized health impacts (LHI)

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EXECUTIVE SUMMARY

The California Energy Commission's (CEC's) Clean Transportation Program provides funding to support innovation and accelerate the development and implementation of advanced transportation and fuel technologies.

Under California Code of Regulations Title 13, Section 2343, this Localized Health Impacts Report describes the electric vehicle charger projects proposed for funding that may require certain kinds of permits or environmental review. The CEC is required to assess the local health impacts of projects proposed for Clean Transportation Program funding.

This report focuses on how project-related emissions or pollution could affect community health. Environmental justice communities, low-income communities, and minority communities are at higher risk of harm from pollution. Project locations in these communities are considered "high-risk community project locations." CEC staff identifies high-risk communities using a combination of demographic and environmental data. Environmental data for air quality come from the California Air Resources Board. Demographic data are from the U.S. Census Bureau and the California Employment Development Department.

CEC staff proposes five projects for Clean Transportation Program grant funding awards under Solicitation GFO-22-610, titled "Convenient, High-Visibility, Low-Cost, Level 2 Charging (CHILL-2)." This initiative seeks to:

1. Demonstrate replicable and scalable business and technology models to deploy Level 2 electric vehicle (EV) chargers.
2. Improve public awareness of and confidence in Level 2 charging access through high-density, high-visibility installations.
3. Provide Level 2 charging access in disadvantaged and/or low-income communities.
4. Provide reliable and readily accessible chargers.

Staff analyzed localized health impact information submitted by the project awardees. Based on project site information provided by the awardees, three of the seven communities where proposed projects are located are considered high-risk. Community members near the proposed project sites may be at a higher risk of negative health impacts from pollution. However, staff does not anticipate a net increase in the pollution burden for the communities where these projects are located. Instead, staff expects the projects to reduce pollution levels.

CHAPTER 1:

Projects Proposed for Funding

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007) created the Clean Transportation Program (CTP). AB 118, amended by AB 109 (Núñez, Chapter 313, Statutes of 2008), authorizes the California Energy Commission (CEC) to “develop and deploy innovative technologies that transform California’s fuel and vehicle types to help attain the state’s climate change policies.” AB 8 (Perea, Chapter 401, Statutes of 2013) reauthorized funding for the CTP through January 1, 2024. AB 126 (Reyes, Chapter 319, Statutes of 2023) reauthorized the CTP through July 1, 2035.

On March 23, 2023, the CEC released a competitive grant solicitation titled “Convenient, High-Visibility, Low-Cost, Level 2 Charging (CHILL-2)” (GFO-22-610). GFO-22-610 offered CTP grant funding for projects to install a minimum number of Level 2 (L2) electric vehicle (EV) chargers based on the award category within a 1.5-mile radius of the project area central point. Award categories are “Larger Cities” (minimum of 300 chargers), “Smaller Cities” (minimum of 15 chargers per every 10,000 people), and “Tribal Land” (minimum of 50 chargers). The solicitation requires that at least 50 percent of chargers be located in low-income or disadvantaged communities or both.

Please Note: This report has been revised. Added language appears in bold underline (**example**) and deletions appear in strikethrough (~~example~~). To effectively include access to the marked-up language for all users, please refer to the following key codes:

- “(bbu)” means begin bold underline text.

“(ebu)” means end bold underline text.

“(bst)” means begin strikethrough text.

“(est)” means end strikethrough text.

Items marked with an asterisk in parentheses (*) were updated after the original version of this LHI Report was published, but it is not practical to show the changes in this revised report. See Addendum 1 for these previous changes.¹

1 Addendums and Revisions are located at: Localized Health Impacts Report: GFO-21-604 — Rural Electric Vehicle (REV) Charging. California Energy Commission. Accessed June 8, 2023. Available at <https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/localized-health-impacts-reports>.

Projects Selected

On August 29, 2023, the CEC posted a notice of proposed awards (NOPA)² identifying the five projects awarded grant funding under GFO-22-610. This LHI Report assesses the locations of each of those projects. Table 1 lists the proposed project location(s) for each of the awardees and corresponding environmental justice (EJ) indicators. EJ indicator definitions are in Chapter 3 of this LHI Report, and EJ indicator analysis is in Table 2. In some cases, the city listed in the postal address for a project may differ from the geographic entity assigned by the U.S. Census Bureau. In these cases, the Census location (county, place, or Census Designated Place) used for EJ indicator analysis is listed in parentheses following the project location address.

Table 1: Project Details With EJ Indicators

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
County of Los Angeles	Take Charge: EV Charging for Los Angeles County	1081 Britannia St, Los Angeles, CA 90033	Minority, Poverty, Unemployment
County of Los Angeles	Take Charge: EV Charging for Los Angeles County	1237 N Mission Rd, Los Angeles, CA 90033	Minority, Poverty, Unemployment
County of Los Angeles	Take Charge: EV Charging for Los Angeles County	1126 N Hazard Ave, Los Angeles, CA 90063 (East Los Angeles CDP)	Minority, Poverty
County of Los Angeles	Take Charge: EV Charging for Los Angeles County	2830 Lancaster Ave, Los Angeles, CA 90032	Minority, Poverty, Unemployment
County of Los Angeles(*)	Take Charge: EV Charging for Los Angeles County(*)	4017 City Terrace Dr, City Terrace, CA 90063 (East Los Angeles CDP) (*)	Minority, Poverty(*)
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	15616 Valley Oak Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	15635 Alton Pkwy, Irvine, CA 92618	Minority

² Cary, Eilene. 2023. "[Notice Of Proposed Awards and Results Table](https://www.energy.ca.gov/sites/default/files/2023-08/GFO-22-610_NOPA_Cover_Letter_and_Results_Table_2023-08-29_ada.docx)." California Energy Commission. Accessed November 30, 2023. Available at https://www.energy.ca.gov/sites/default/files/2023-08/GFO-22-610_NOPA_Cover_Letter_and_Results_Table_2023-08-29_ada.docx.

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	15975 Alton Pkwy, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	300 Spectrum Center Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	670 Spectrum Center Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	100 Spectrum Center Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	101 Alfonso, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	8000 Great Park Blvd, Lot #1, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	8000 Great Park Blvd, Lot #7, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	25B Technology Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	60 Technology Dr W, Irvine, CA 92618	Minority

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	15215 Barranca Pkwy, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	123 Technology Dr, Irvine, CA 92618	Minority
Eneridge Inc.	High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing	51–107 Technology Dr W, Irvine, CA 92618	Minority
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	2335 Broadway, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	820 Washington St, Oakland, CA 94607	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	385 14th St, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	1721 Webster St, Oakland, CA 94612	Poverty

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	524 16th St, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	1000 Broadway, Oakland, CA 94607	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	438 W Grand Ave, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	1000 Oak St, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	288 9th Ave, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	2353 Webster St, Oakland, CA 94612	Poverty

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	180 Grand Ave, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	420 13th St, Oakland, CA 94612	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	1611 Telegraph Ave, Oakland, CA 95662	Poverty
FlashParking, Inc.	Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland	525 14th St, Oakland, CA 94612	Poverty
San Francisco Bay Area Rapid Transit District	EV Charging at Daly City and Colma BART Stations	500 John Daly Blvd, Daly City, CA 94014	Age, Minority
San Francisco Bay Area Rapid Transit District	EV Charging at Daly City and Colma BART Stations	365 D St, Colma, CA 94015 (San Mateo County)	none
The Regents of the University of California; University of California, San Diego	Postcard from 2030	9800 Hopkins Dr, La Jolla, CA 92037 (San Diego)	Minority
The Regents of the University of California; University of California, San Diego	Postcard from 2030	3101 Biomedical Sciences Wy, La Jolla, CA 92093 (San Diego)	Minority

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
The Regents of the University of California; University of California, San Diego	Postcard from 2030	9417 Medical Center Dr E, La Jolla, CA 92037 (San Diego)	Minority
The Regents of the University of California; University of California, San Diego	Postcard from 2030	9655 Scholars Dr North, La Jolla, CA 92093 (San Diego)	Minority
(bbu) <u>The Regents of the University of California; University of California, San Diego</u>	<u>Postcard from 2030</u>	<u>9834 Scholars Dr North, La Jolla, San Diego CA 92093 (San Diego)</u>	<u>Minority</u> (ebu)
(bbu) <u>The Regents of the University of California; University of California, San Diego</u>	<u>Postcard from 2030</u>	<u>9135 Scholars Dr South, La Jolla, San Diego CA, 92037 (San Diego)</u>	<u>Minority</u> (ebu)
(bbu) <u>The Regents of the University of California; University of California, San Diego</u>	<u>Postcard from 2030</u>	<u>9335 Athena Cir, La Jolla, San Diego CA, 92037 (San Diego)</u>	<u>Minority</u> (ebu)
(bbu) <u>The Regents of the University of California; University of California, San Diego</u>	<u>Postcard from 2030</u>	<u>9451 Medical Center Dr, La Jolla, San Diego CA, 92037 (San Diego)</u>	<u>Minority</u> (ebu)
(bbu) <u>The Regents of the University of California; University of California, San Diego</u>	<u>Postcard from 2030</u>	<u>9375 Russel Ln, La Jolla, San Diego CA, 92093 (San Diego)</u>	<u>Minority</u> (ebu)

Source: CEC staff

Funding for these projects is contingent upon approval at a publicly noticed CEC business meeting and execution of a grant agreement.

Public Comment

As provided by Title 13 of the CCR, Section 2343, a 30-day public review period applies to this LHI Report from the date it is posted on the CEC website. The [original posting date for this](#)

[report](https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/localized-health-impacts-reports) is at <https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/localized-health-impacts-reports>.

The CEC encourages comments by email. Please include your name or your organization's name in the name of the file. Send comments in either Microsoft® Word format (.doc) or Adobe® Acrobat® format (.pdf) to FTD@energy.ca.gov.

A hard copy can be mailed to:

California Energy Commission
Fuels and Transportation Division
715 P Street, MS-44
Sacramento, CA 95814-5512

All written comments will become part of the public record and may be posted to the Internet. News media should direct inquiries to the Media and Public Communications Office at 916-654-4989 or by email at mediaoffice@energy.ca.gov.

CHAPTER 2:

Project Descriptions

As part of the GFO-22-610 process for selecting projects, applicants must provide LHI information for their proposed project and location. This information includes the expected impact of the project on local communities and the outreach efforts the applicant has made to engage disadvantaged communities or other local communities. This chapter summarizes that information submitted by the awardees. The awardees identify disadvantaged communities using the CalEnviroScreen³ screening tool developed by the Office of Environmental Health Hazard Assessment.

Staff notes that applicants use different methods for estimating emissions reductions, so estimates may vary significantly between similar projects.

County of Los Angeles

The County of Los Angeles's proposed project, titled "Take Charge: EV Charging for Los Angeles County," will deploy 300 publicly accessible L2 chargers in East Los Angeles at five project sites centered within a 1.5-mile area around the Ramona Gardens Public Housing Development. No significant project-generated emissions are expected as a result of this project.

Outreach and education efforts include partnering with Grid Alternatives and the Library Foundation of Los Angeles to engage the community directly through equity assessments. Equity assessments may consist of:

- In-person surveys either door to door, via mailer, via email, or at an event.
- Educational programming at community centers, local events, or charging sites, in addition to existing programming opportunities.
- Presentations and webinars online, in-person, at town halls, or at other speaking engagements.
- Participating in or establishing local events to integrate the benefits of the project into the communities they serve.

Eneridge Inc.

Eneridge's proposed project, titled "High Density & High-speed Level 2 Chargers Installation with Dynamic Load Balancing and Power Sharing," will install 400 L2 chargers at community parks, business centers, retail centers, and long-term parking structures in Irvine (Orange

³ This tool ranks U.S. Census tracts based on geographic, socioeconomic, public health and environmental hazard criteria. See "[CalEnviroScreen](https://oehha.ca.gov/calenviroscreen)." Office of Environmental Health Hazard Assessment. Accessed November 30, 2023. Available at <https://oehha.ca.gov/calenviroscreen>.

County). Site preparation for charger installation may include grading and installing new meters, breakers, and conduits when necessary. No air pollutants will be produced directly from the operation of the L2 EV chargers.

Outreach efforts include engaging with local property owners such as Irvine Company to disseminate project information to tenants, residents, and businesses in the community. Eneridge will also collaborate with the City of Irvine to improve public awareness of and confidence in L2 charging through city websites, social media platforms, and community events. The effectiveness of outreach will be evaluated by monitoring the uptake of L2 charging station usage, conducting surveys and feedback sessions to gauge user satisfaction and awareness levels, and analyzing EV adoption data within the community.

FlashParking, Inc.

FlashParking's (FLASH's) proposed project, titled "Bridging the EV Charging Gap: a Scalable Model for Convenient, Affordable, and Reliable Level 2 Charger Deployment in Downtown Oakland," will install 446 L2 EV charging stations across 14 parking sites in Oakland. Two of the proposed project sites will also include integrated battery energy storage systems (BESS). FLASH estimates that project installation will generate 0.995 metric tons of carbon dioxide (CO₂) by local contractors driving to project sites during project installation. However, once the project is implemented, EV charging will reduce CO₂ emissions by 39,390 metric tons over six years.

Outreach methods include launching a project awareness campaign to traditional news media outlets and using social media to engage the community and improve public awareness and confidence in L2 charging. Signage at the project site and the project website will provide progress updates, project costs, and comparisons between EV charging and fueling gas vehicles.

San Francisco Bay Area Rapid Transit District

San Francisco Bay Area Rapid Transit District's (BART's) proposed project, titled "EV Charging at Daly City and Colma BART Stations," will install 172 L2 charging stations and use lessons learned from this project to replicate large-scale L2 EV charging stations at other parking facilities. BART plans to release a request for proposal in the third quarter of 2023 to engage a third-party contractor to design, install, own, and maintain the EV chargers on BART property. BART estimates 5,407.8 grams (g) of particulate matter 2.5 microns in diameter or smaller (PM_{2.5}) will be emitted by maintenance vehicles and EV passenger vehicles because of braking, tire wear, road surface wear, and road dust suspension during the six-year project duration. This project will enable riders to drive EVs to the stations, preventing about 4,748 g PM_{2.5} and other criteria air pollutants from internal combustion vehicles from being emitted.

Outreach efforts include holding public events to inform the community of the availability of EV charging infrastructure at BART stations. BART has been in discussions with sustainability staff members at Daly City and the city of Colma, additional outreach methods will be developed as part of the tasks funded by this grant.

The Regents of the University of California; University of California, San Diego

Regents of the University of California San Diego's (UCSD's) proposed project, titled "Postcard From 2030," will install 653 L2 chargers featuring adaptive load management and ISO 15118 technologies at four existing parking structures on the UCSD campus. Project operation will not generate any direct emissions, and no increase in traffic is expected, as chargers will be installed in existing parking stalls. Chargers installed for this project will use 100 percent renewable energy, resulting in 38,791 million tons of CO₂ savings.

Outreach efforts include using student docents to inform campus communities and affiliates about federal, state, local, and utility incentives available to lower the net price of EV ownership. UCSD also proposes establishing a four-year undergraduate intern program. Interns would encourage campus communities, families, and stakeholders to transition to EVs for their commutes and postgraduation purchases.

CHAPTER 3:

Location Analysis

This LHI Report identifies projects located in high-risk communities, using staff's adaptation of the Environmental Justice Screening Method (EJSM).⁴ *High-risk communities* are those with social vulnerability indicators, high exposure to pollution, and greater health risks. This LHI Report is not intended to be a detailed pollution analysis of proposed projects, nor is it intended to substitute for the environmental review conducted as part of the California Environmental Quality Act (CEQA).

CEC staff identifies high-risk community project locations using data from the California Air Resources Board (CARB), the U.S. Census Bureau, and other public agencies. CEC staff analyzes the data to assign EJ indicators for each project location specified in the LHI Report. The proposed project location must meet a two-part environmental and demographic standard to be considered in a "high-risk community."

Part 1: Environmental Standard

Communities meet the environmental standard if they have a high concentration of air pollutants. These pollutants include ozone, PM_{2.5}, or particulate matter 10 microns in diameter or smaller (PM₁₀). The environmental standard uses CARB air quality monitoring data on nonattainment⁵ status for these pollutants.

Using 2022 data,⁶ all projects are in communities that meet the environmental standard since they are within a nonattainment zone for ozone, PM_{2.5}, or PM₁₀. This finding indicates that there may be existing poor air quality where the proposed projects are located.

Part 2: Demographic Standard

Communities meet the demographic standard if they have two or more EJ indicators for minority, age, poverty, and unemployment. Staff defines the EJ indicator thresholds as the following:

1. A minority subset represents more than 30 percent of a given city's population.

4 Pastor Jr., Manuel (University of Southern California), Rachel Morello-Frosch (University of California, Berkeley), and James Sadd (Occidental College). 2010. [Air Pollution and Environmental Justice: Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making](https://www2.arb.ca.gov/sites/default/files/classic/research/apr/past/04-308.pdf). California Air Resources Board. Accessed November 30, 2023. Available at <https://www2.arb.ca.gov/sites/default/files/classic/research/apr/past/04-308.pdf>

5 A *nonattainment* area is a geographic area that does not meet the Ambient Air Quality Standards (state, national, or both) for a given pollutant. See "[Maps of State and Federal Area Designations](https://www2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations)." California Air Resources Board. Accessed November 30, 2023. Available at <https://www2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>.

6 Ibid.

2. The percentage of people living in a city who are younger than 5 years of age, or who are 65 years of age or older, is more than 1.2 times (more than 20 percent higher than) the state average for those age categories.
3. A city's poverty rate exceeds the state average poverty rate.
4. The city (or county if city data are unavailable) unemployment rate exceeds the state average unemployment rate.

The demographic standard uses the U.S. Census Bureau's American Community Survey five-year estimates⁷ on race, ethnicity, age, and poverty, and the California Employment Development Department's monthly data⁸ on unemployment. Specifically, this LHI Report uses city-level⁹ and county-level¹⁰ unemployment data. Unemployment data are not seasonally adjusted.

Analysis Results

Staff finds that three of the seven communities where these projects are located meet the criteria for high-risk communities since they meet both the environmental and demographic standards. In Table 2, a **bold** number followed by an asterisk (*) indicates categories that exceed a given EJ indicator threshold. A city/county name in **bold**, followed by a dagger (†), indicates a high-risk community.

Table 2: EJ Indicators by Project Location City Demographic

Site Location	American Indian and Alaska Native (2021)	Asian (2021)	Black or African American (2021)	Hispanic or Latino (Any Race) (2021)	Native Hawaiian and Pacific Islander (2021)	Under 5 Years of Age (2021)	65 Years of Age and Over (2021)	Below Poverty Level (2021)	Unemployment (November 2023)
California	0.9%	14.9%	5.7%	39.5%	0.4%	6.0%	14.4%	12.3%	4.9%
EJ Indicator Threshold	30%	30%	30%	30%	30%	7.2%	17.3%	12.3%	4.9%

7 American Community Survey codes DP05 and S1701 were used to find data. See "[Explore Census Data](https://data.census.gov/cedsci/)." U.S. Census Bureau. Accessed November 30, 2023. Available at <https://data.census.gov/cedsci/>.

8 Overview page with data from most recent and previous months: "[Unemployment Rate and Labor Force](https://labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html)." Employment Development Department. Accessed November 30, 2023. Available at <https://labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html>.

9 Most recent data only: "[Monthly Labor Force Data for Cities and Census Designated Places \(CDP\)](https://labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls)." Employment Development Department. Accessed November 30, 2023. Available at <https://labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls>.

10 Most recent data only: "[Monthly Labor Force Data for Counties](https://labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf)." Employment Development Department. Accessed November 30, 2023. Available at <https://labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf>.

Site Location	American Indian and Alaska Native (2021)	Asian (2021)	Black or African American (2021)	Hispanic or Latino (Any Race) (2021)	Native Hawaiian and Pacific Islander (2021)	Under 5 Years of Age (2021)	65 Years of Age and Over (2021)	Below Poverty Level (2021)	Unemployment (November 2023)
Daly City†	0.9%	57.3%*	3.5%	23.1%	0.7%	4.3%	18.6%*	6.8%	3.0%
East Los Angeles CDP†	1.9%	1.3%	0.6%	96.2%*	0.1%	5.9%	10.6%	17.9%*	4.9%
Irvine city	0.3%	42.9%*	1.9%	11.9%	0.3%	6.7%	10.1%	12.3%	4.0%
Los Angeles city†	0.9%	11.7%	8.6%	48.4%*	0.2%	5.5%	12.9%	16.6%*	5.3%*
Oakland city	1.0%	15.7%	22.0%	27.2%	0.5%	6.0%	13.5%	13.5%*	4.8%
San Diego city	0.6%	17.2%	6.0%	30.1%*	0.5%	5.6%	13.3%	11.6%	4.1%
San Mateo County	0.7%	29.9%	2.4%	24.1%	1.2%	5.5%	16.2%	6.2%	3.2%

Sources: CEC staff, Employment Development Department, and U.S. Census Bureau

Summary

If funded, the proposed projects would result in an expanded supply of conveniently accessible L2 EV charging in disadvantaged and low-income communities and improve public awareness of, and confidence in, L2 charging access through high-density, high-visibility installations. This expansion will achieve emissions reductions by encouraging drivers to switch from gas-powered vehicles to EVs.

Based on EJSM standards, CEC staff has identified three out of seven communities where these projects are located as high-risk communities. These communities are at a higher risk of adverse health effects from pollution. However, staff found no indication that the projects identified in this LHI Report would negatively affect community health. Staff does not anticipate a significant increase in local pollutants, and the project awardees identify no major construction that would generate significant criteria emissions or pollutants. In fact, these proposed projects may create a net benefit for the surrounding communities, by reducing harmful criteria air pollutants, toxic air contaminants, and greenhouse gases (GHGs) that contribute to climate change.

GLOSSARY

Term	Definition
Battery Energy Storage System (BESS)	An electrochemical device that charges (or collects energy) from the grid or a power plant and then discharges that energy later to provide electricity or other grid services when needed.
California Code of Regulations (CCR)	The official compilation and publication of the regulations adopted, amended, or repealed by state agencies under the Administrative Procedure Act (APA). Properly adopted regulations that have been filed with the Secretary of State have the force of law.
California Environmental Quality Act (CEQA)	A statute that requires state and local agencies to identify the significant environmental impacts of their actions and avoid or reduce those impacts, if feasible.
CalEnviroScreen	A screening tool that evaluates and ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and prevalence of certain health conditions.
Carbon dioxide equivalent (CO ₂ e)	A measure used to compare the emissions from various greenhouse gases based upon the associated global warming potential.
Census designated places	A statistical entity defined by the U.S. Bureau representing closely settled, unincorporated communities that are locally recognized and identified by name. The statistical equivalents of incorporated places.
Census place	A legally bounded entity such as an incorporated city or a town with a functioning governmental structure.
Criteria air pollutant	An air pollutant for which acceptable levels of exposure can be determined and for which the U.S. Environmental Protection Agency has set an ambient air quality standard. Examples include ozone (O ₃), carbon monoxide (CO), nitrogen oxides (NO _x), sulfur oxides (SO _x), and particulate matter (PM ₁₀ and PM _{2.5}).
Disadvantaged community	A designation by the California Environmental Protection Agency used to identify areas disproportionately affected by environmental pollution or hazards, due to geographic, socioeconomic, public health, and environmental factors.

Term	Definition
Electric vehicle (EV)	A vehicle that is powered partly or completely by electricity. This often refers to battery-electric vehicles, which have no engine and store all the energy in batteries. The term can also include other vehicle types, such as plug-in hybrids.
Environmental justice (EJ)	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
Environmental Justice Screening Method (EJSM)	An approach that combines environmental and demographic indicators to inform agency outreach and engagement practices regarding environmental justice.
Grant funding opportunity (GFO)	Where the California Energy Commission offers applicants an opportunity to receive grant funding for projects meeting certain requirements.
Greenhouse gas (GHG)	Any gas that absorbs infra-red radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), halogenated fluorocarbons (HCFCs), ozone (O ₃), perfluorinated carbons (PFCs), and hydrofluorocarbons (HFCs).
ISO 15118	A standard for communication protocols between electric vehicles and charging stations. Also called "Road Vehicles - Vehicle to Grid Communication Interface."
Level 2 (L2) charger	Medium-speed charger for electric vehicles. Level 2 uses alternating current at a higher voltage (for example, 240 volts) than Level 1, providing more power.
Localized health impacts (LHI)	Potential health impacts to communities.
Metric ton	A unit of weight equal to 1,000 kilograms or 2,205 pounds.
Notice of proposed awards (NOPA)	A document identifying projects that are proposed to receive funding under a California Energy Commission funding opportunity, such as a grant funding opportunity.
Particulate matter (PM)	Any material besides pure water that exists in a solid or liquid state in the atmosphere. The size of particulate matter can vary from coarse, wind-blown dust particles to fine particles resulting from combustion.

Term	Definition
PM _{2.5}	Particulate matter with particles 2.5 microns in diameter or smaller. Also called "fine particulate matter."
PM ₁₀	Particulate matter with particles 10 microns in diameter or smaller. Also called "coarse particulate matter."
Toxic air contaminant	An air pollutant, identified in California Air Resources Board regulations, which may cause negative health effects even at very low concentrations.

Sources: California Air Resources Board, CEC Energy Glossary, National Renewable Energy Laboratory, University of Michigan School of Public Health, and U.S. Environmental Protection Agency