CALIFORNIA ENERGY COMMISSION

CALIFORNIA NATURAL RESOURCES AGENCY

California Energy Commission

STAFF REPORT

Localized Health Impacts Report

Projects Awarded Funding Under Solicitation GFO-24-602 — Charging and Refueling Infrastructure for Transport in California Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0

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California Energy Commission

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PREFACE

This Localized Health Impacts (LHI) Report assesses the local health impacts from projects proposed to receive Clean Transportation Program or similar funding from the California Energy Commission (CEC). 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 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 Clean Transportation Program, also directed the California Air Resources Board (CARB) to develop guidelines to ensure the Clean Transportation Program improves air quality. CARB's *AB 118 Air Quality Guidelines*, approved in 2009, are published in the California Code of Regulations (CCR), Title 13, Motor Vehicles, Chapter 8.1. Those guidelines require that (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."

In addition, the CEC issues LHI Reports for certain projects that are similar to Clean Transportation Program projects but do not receive Clean Transportation Program funding.

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 competitive grant solicitation GFO-24-602, "Charging and Refueling Infrastructure for Transport in California Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0." This grant initiative seeks to expand publicly available medium- and heavy-duty zero-emission vehicle hydrogen refueling and charging infrastructure along designated corridors, particularly those in low-income and disadvantaged communities. 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 four projects for the Clean Transportation Program or similar grant funding awards under solicitation GFO-24-602. Each of these projects has multiple locations. Based on project site information provided by the awardees, four 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), zero-emission vehicle (ZEV), 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. The CEC also provides funding from programs that are similar to but separate from the Clean Transportation Program. An example of a similar program is the funding described in Section 77 of the Budget Act of 2021 (Senate Bill 129, Skinner, Chapter 69, Statutes of 2021).

Under California Code of Regulations Title 13, Section 2343, this Localized Health Impacts Report describes the electric vehicle charger and hydrogen refueling infrastructure projects proposed for funding that may require certain kinds of permits or environmental review. These permits include conditional-use permits, air-quality permits, wastewater permits, hazardous waste disposal permits, and other land-use entitlements. Since ministerial-level permits do not assess public health-related pollutants, staff does not assess projects requiring only ministerial-level permits in this report. 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 four projects for Clean Transportation Program or similar grant funding awards under solicitation GFO-24-602, "Charging and Refueling Infrastructure for Transport in California Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0." This initiative seeks to expand the supply of medium- and heavy-duty zero-emission vehicle hydrogen refueling and charging infrastructure along designated corridors. Staff analyzed localized health impact information submitted by the project awardees.

Based on project site information provided by the awardees, four 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

This solicitation uses the processes established under the Clean Transportation Program and Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007). AB 118, amended by Assembly Bill 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." Assembly Bill 126 (Reyes, Chapter 319, Statutes of 2023) most recently reauthorized the Clean Transportation Program through July 1, 2035. Section 77 of the Budget Act of 2021 (Senate Bill 129, Skinner, Chapter 69, Statutes of 2021) provides funding that is related to but separate from the Clean Transportation Program.

On October 16, 2024, the CEC released a competitive grant solicitation, "Charging and Refueling Infrastructure for Transport in California Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0" (GFO-24-602). GFO-24-602 offered grant funding for projects that will design, construct, and operate publicly available medium- and heavy-duty (MDHD) zero-emission vehicle (ZEV) hydrogen refueling and charging infrastructure along designated corridors in disadvantaged communities or low-income communities, collectively known as *priority populations*.

The solicitation requires that at least 50 percent of project locations directly benefit, or serve residents of, disadvantaged and low-income communities and low-income Californians. GFO-24-602 will support switching from gasoline vehicles to plug-in electric vehicles or fuel cell electric vehicles, which will reduce criteria air pollutants and greenhouse gas (GHG) emissions in disadvantaged and low-income communities.

Projects Selected

On March 28, 2025, the CEC posted a notice of proposed awards identifying the four projects awarded grant funding under GFO-24-602.[1] This report assesses the locations of each of those projects. Table 1 lists the proposed project locations for each of the awardees and the corresponding environmental justice (EJ) indicators. EJ indicator definitions are in Chapter 3 of this report, and EJ indicator analysis is in Table 5. In some cases, the city listed in the project locations postal address 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

1 Johnson, Natalie. March 2025. "Notice Of Proposed Awards." California Energy Commission. Accessed April 16, 2025. Cover letter available at https://www.energy.ca.gov/sites/default/files/2025-03/GFO-24-602_NOPA_Cover_Letter_ada.docx, and table of awardees available at https://www.energy.ca.gov/sites/default/files/2025-03/GFO-24-602_NOPA_Results_Table_ada.xlsx.

for EJ indicator analysis is listed in parentheses following the project location's postal address in the table below.

Table 1: Project Details With Indicators

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
Forum Mobility	Surf to Turf — HD Electrification of the Priority Trade Corridors From the Port of Oakland to the Livermore Valley	5051 Coliseum Wy, Oakland, CA 94551	Poverty
Forum Mobility	Surf to Turf — HD Electrification of the Priority Trade Corridors From the Port of Oakland to the Livermore Valley	151 Greenville Rd, Livermore, CA 94551 (Alameda County)	Minority
Pilot Travel Centers LLC	San Joaquin — Critical Hydrogen Infrastructure in Lodi & Ripon	1501 North Jack Tone Rd, Ripon, CA 95366	Age
Pilot Travel Centers LLC	San Joaquin - Critical Hydrogen Infrastructure in Lodi & Ripon	15100 North Thornton Rd, Lodi, CA 95242 (San Joaquin County)	Minority, Poverty, Unemployment
RAMP Charging	Southern California Highway Electrification Project	10544 Copus Rd, Bakersfield, CA 93313 (Kern County)	Age, Minority, Poverty, Unemployment
RAMP Charging	Southern California Highway Electrification Project	East SR-99, Exit 81 for Ave 184 (36.121, -119.315) (Tulare County)	Age, Minority, Poverty, Unemployment
SkyCharger, LLC	SkyCharger Charging Stations - Kettleman City and Lebec	Tulare County: APNs 255-182-30 and 255-182-31	Age, Minority, Poverty, Unemployment
SkyCharger, LLC	SkyCharger Charging Stations - Kettleman City and Lebec	Kings County: APNs 042-150-074 and 042-150-083	Age, Minority, Poverty, Unemployment

Source: CEC staff

Funding for these projects is contingent upon approval at a publicly noticed CEC business meeting and execution of the awardee 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 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-24-602 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 outreach efforts the applicant has made to engage local community groups and other interested parties. This chapter summarizes the information submitted by the awardees. Applicants use different methods for estimating emissions reductions, so estimates may vary significantly between similar projects.

Forum Mobility

Forum Mobility's proposed project, "Surf to Turf — HD Electrification of the Priority Trade Corridors from the Port of Oakland to the Livermore Valley," will install 40 direct current fast chargers (DCFCs) at the Coliseum Charging Depot in West Oakland and 18 DCFCs at the Greenville Charging Depot in Livermore. To support the needs of MDHD truck drivers, both charging depots are located on interdependent trade corridors and are within five miles of identified priority clean freight corridors. Emissions generated during the construction phase of this project will be offset by emission reductions during project operations (Table 2). The project is estimated to reduce GHG emissions by 3,304,103 short tons per year.

Table 2: Forum Mobility — Estimated Emissions Reductions

Time Period	GHG (short tons)	Carbon Monoxide (CO) (lb)	Nitrogen Oxides (NOx) (lb)	Particulate Matter (PM)10 (lb)	PM2.5 (lb)	Volatile Organic Compounds (VOC) (lb)	Sulfur Oxides (SOx)(lb)
One Year	3,304,103	28,266,568	646,733	70,812	52,202	2,778,041	12,415

Sources: Forum Mobility, AFLEET CFI Emissions Tool

Outreach efforts include engaging in the Oakland and Livermore communities by establishing relationships with the Oakland and Livermore mayor's offices, as well as the Port of Oakland and East Bay Clean Cities. Forum Mobility has regularly attended or has participated as a speaker or panelist in meetings with the NorCal Harbor Trucking Association and the California Trucking Association. The project will also work with area colleges to promote classes and programs that support sustainability and green energy, such as Emerson College's FirstGen Internship Program.

Pilot Travel Centers, LLC

Pilot Travel Centers, LLC's (Pilot) proposed project, "San Joaquin — Critical Hydrogen Infrastructure in Lodi & Ripon (SJ-CHILR)," will incorporate hydrogen refueling stations with three dispensers each at two locations along Interstate 5 and Highway 99 in San Joaquin County to service MDHD fuel cell electric trucks. The addition of hydrogen stations to the existing fuel stations is not expected to increase localized traffic. The proposed project is

estimated to reduce GHG emissions in the San Joaquin Air Basin by more than 128,560 short tons in the first six years of station deployment (Table 3).

Table 3: Pilot — Estimated Emissions Reductions

Time Period	GHG (short tons)	CO (lb)	NOx (lb)	PM10 (lb)	PM2.5 (lb)	VOC (lb)	SOx (lb)
One Year Average	21,427	146,932	229,634	1,971	1,816	10,217	1,097
Six Years Project Total	128,560	881,591	1,377,802	11,828	10,898	61,303	6,583

Sources: Pilot, AFLEET CFI Emissions Tool

Outreach efforts include cross-cultural engagement with community-based organizations, neighborhood associations, and environmental groups throughout project development to discuss the social, environmental, public health, and economic benefits of alternative transportation fuels. Pilot will partner with the California Mobility Center to develop a targeted, community-level, workforce development plan to provide step-by-step guidance on appropriately scaling the labor and human capital needed to operate the hydrogen refueling stations. The plan will seek to understand current barriers to employment and training and focus on providing equitable training opportunities for workers in Lodi and Ripon.

Ramp Charging

Ramp Charging's proposed project, "Southern California Highway Electrification Project," will build two public fast-charging travel centers with 20.8 megawatts (MW) of charging equipment, solar generation, and battery storage systems on Interstate 5 in Kern County and State Route 99 in Tulare. Each location will have 14 fast chargers serving 28 pull-through charging stalls sized for MDHD commercial vehicles, as well as four 1,200 kilowatt (kW) capable chargers serving eight pull-through charging stalls sized for Class 8 tractors. No increase in overall highway traffic on Interstate 5 or State Route 99 is expected from this project. The proposed project is estimated to reduce GHG emissions by 110,422 short tons during the first six years (Table 4).

Table 4: Ramp Charging — Estimated Emissions Reductions

Time Period	GHG (short tons)*	CO (lb)	NOx (lb)	PM10 (lb)	PM2.5 (lb)	VOC (lb)	SOx (lb)
One Year Average	18,404	43,490	67,968	583	538	3,024	123
Six Years Project Total	110,422	260,937	407,809	3,501	3,226	18,145	737

Sources: Ramp Charging, AFLEET CFI Emissions Tool

*Assumes 33 percent of electricity is sourced from on-site, collocated solar generation.

Outreach efforts will identify key stakeholders including tribes, community colleges, landowners, local businesses, agricultural, workforce, environmental, climate change, and air quality nonprofits or special interest groups in Kern and Tulare Counties. Ramp Charging will develop a project information brochure and participate in public meetings during the California

Environmental Quality Act process. The project will also collaborate with local community college career centers and workforce training programs to provide education and training for electric vehicle charging equipment service technicians.

SkyCharger, LLC

SkyCharger's proposed project, "SkyCharger Charging Stations — Kettleman City and Lebec," will install 32 dual-port chargers, 5.1 MW of solar, and 8 MW hours of energy storage at two MDHD public charging stations in Tulare and Kings Counties along Interstate 5. The charging infrastructure will have the collective capacity to charge 64 MDHD trucks at any time and is estimated to reduce carbon dioxide equivalent emissions by 1,094,218 metric tons over the 20-year project lifetime.

Outreach efforts include implementing a two-way stakeholder engagement strategy with regional community-based organizations, community leaders, California Native American tribes, and local residents. The engagement strategy will provide project information during planning and provide education on the benefits of ZEV transportation. The project will develop a community engagement and workforce plan focusing on local hiring, job recruitment from preapprenticeship programs, and job placement strategies for priority populations facing employment barriers. SkyCharger will sign project labor agreements with the International Brotherhood of Electrical Workers for SkyCharger's proposed electric truck hubs.

CHAPTER 3:
Location Analysis

This LHI Report identifies projects in high-risk communities using staff's adaptation of the Environmental Justice Screening Method.[2] *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 public agencies. CEC staff analyzes the data to assign EJ indicators for each project location specified in the 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, particulate matter 2.5 microns in diameter or smaller ($PM_{2.5}$), or particulate matter 10 microns in diameter or smaller (PM_{10}). The environmental standard uses CARB air-quality-monitoring data on nonattainment[3] status for these pollutants.

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:

1. A minority subset that represents more than 30 percent of a given city's population.
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 categories.
3. A city's poverty rate that exceeds the state average poverty rate.

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2 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*. California Air Resources Board. Accessed April 16, 2025. Available at https://ww2.arb.ca.gov/sites/default/files/classic/research/apr/past/04-308.pdf.

3 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." California Air Resources Board. Accessed April 16, 2025. Available at https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

4. The city (or county if city data are unavailable) unemployment rate exceeds the average state unemployment rate.

The demographic standard uses the U.S. Census Bureau's American Community Survey five-year estimates[4] on race, ethnicity, age, and poverty, and the California Employment Development Department's monthly data[5] on unemployment. Specifically, this LHI Report uses city-level[6] and county-level[7] unemployment data. Unemployment data are not seasonally adjusted.

Analysis Results

Staff finds that four 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. All projects are in communities that meet the environmental standard since they are within a nonattainment zone for ozone, $PM_{2.5}$, or PM_{10}. This finding indicates that there may be existing poor air quality where the proposed projects are located. Four of the proposed project locations also meet the demographic standard since they are in communities that exceed the threshold for two or more EJ indicators

In Table 5, 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 5: EJ Indicators by Project Location Demographic

Site Location	American Indian and Alaska Native (2022)	Asian (2022)	Black or African American (2022)	Hispanic or Latino (Any Race) (2022)	Native Hawaiian and Pacific Islander (2022)	Under 5 Years of Age (2022)	65 Years of Age and Over (2022)	Below Poverty Level (2022)	Unemploy-ment (February 2025)
California	**1.0%**	**15.1%**	**5.6%**	**39.7%**	**0.4%**	**5.7%**	**14.9%**	**12.1%**	**5.5%**

4 American Community Survey codes DP05 and S1701 were used to find data. See "Explore Census Data." U.S. Census Bureau. Accessed April 16, 2025. Available at https://data.census.gov/cedsci/.

5 Overview page with data from most recent and previous months: "Unemployment Rate and Labor Force." Employment Development Department. Accessed April 16, 2025. Available at https://labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html.

6 Most recent data only: "Monthly Labor Force Data for Cities and Census Designated Places (CDP)." Employment Development Department. Accessed April 16, 2025. Available at https://labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls.

7 Most recent data only: "Monthly Labor Force Data for Counties." Employment Development Department. Accessed April 16, 2025. Available at https://labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf.

Site Location	American Indian and Alaska Native (2022)	Asian (2022)	Black or African American (2022)	Hispanic or Latino (Any Race) (2022)	Native Hawaiian and Pacific Islander (2022)	Under 5 Years of Age (2022)	65 Years of Age and Over (2022)	Below Poverty Level (2022)	Unemploy-ment (February 2025)
EJ Indicator Threshold	**30.0%**	**30.0%**	**30.0%**	**30.0%**	**30.0%**	**6.8%**	**17.9%**	**12.1%**	**5.5%**
Alameda County	0.9%	**32.1%***	10.2%	22.2%	0.8%	5.4%	14.6%	9.2%	4.4%
Kern County†	1.1%	5.0%	5.2%	**55.3%***	0.2%	**7.3%***	11.3%	**19.3%***	**9.3%***
Kings County†	1.7%	3.9%	6.5%	**56.1%***	0.2%	**7.3%***	10.5%	**16.2%***	**10.1%***
Oakland	1.2%	15.9%	21.8%	26.6%	0.5%	5.7%	14.1%	**13.2%***	4.7%
Ripon	1.2%	4.8%	0.8%	25.0%	0.2%	**6.9%***	15.4%	6.1%	2.7%
San Joaquin County†	1.0%	17.2%	7.0%	**42.5%***	0.6%	6.7%	13.0%	**12.9%***	**6.8%***
Tulare County†	1.4%	3.6%	1.6%	**66.1%***	0.2%	**7.5%***	11.5%	**18.5%***	**11.2%***

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

Summary

If funded, the proposed projects would result in an expanded supply of reliable and readily accessible charging and hydrogen refueling stations for medium- and heavy-duty ZEVs along designated corridors. This expansion will achieve emissions reductions by encouraging fleet and commercial trucking operations to switch from gas-powered vehicles to ZEVs.

Based on the Environmental Justice Screening Method standards, CEC staff has identified four 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 does not anticipate a significant increase in local pollutants and found no indication that the projects identified in this LHI Report would negatively affect community health. These proposed charging and hydrogen refueling projects may create a net benefit for the communities by reducing harmful criteria air pollutants, toxic air contaminants, and greenhouse gas emissions.

GLOSSARY

Term	Definition
Assessor parcel numbers (APN)	Numbers used to inventory, or identify, a property and are assigned by the local county assessor's office.
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). 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_2e)	A measure used to compare emissions from various greenhouse gases based upon the associated global warming potential.
Carbon monoxide (CO)	A colorless, odorless, highly poisonous gas formed by the incomplete combustion of certain fuels, including gasoline.
Census designated places	A statistical entity defined by the U.S. Census 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.
Class 8 truck	Class 8 vehicles have a gross vehicle weight rating (GVWR) exceeding 33,000 pounds. The class includes tractor trailer tractors, single-unit dump trucks with a GVWR greater than 33,000 pounds, and noncommercial chassis fire trucks typically with three or more axles.
Community-based organization (CBO)	An organization that is intended to serve a particular geographic area and is based mainly on the community which it serves.
Criteria air pollutant	An air pollutant for which acceptable levels of exposure can be determined and for which the U.S. Environmental

Term	Definition
	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 $PM_{2.5}$).
Direct-current fast charger (DCFC)	High-speed charger for electric vehicles. DC fast charging uses direct current (DC) and can provide more power than either Level 1 or Level 2 charging.
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.
Electric vehicle (EV)	A vehicle that is powered partly or completely by electricity. This definition 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.
Fuel cell electric vehicle (FCEV)	A vehicle that is powered partly or completely by fuel cells, sometimes in combination with a small battery or supercapacitor, to power the onboard electric motor. Fuel cells in vehicles generate electricity generally using oxygen from the air and compressed hydrogen.
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_2O), halogenated fluorocarbons (HCFCs), ozone (O_3), perfluorinated carbons (PFCs), and hydrofluorocarbons (HFCs).
Hydrogen refueling station (HRS)	A storage or filling station for hydrogen fuel where hydrogen is dispensed by weight.

Term	Definition
Localized health impacts (LHI)	Potential health impacts on communities.
Medium-duty and heavy-duty (MDHD)	Classes 4–6 medium-duty trucks generally weigh between 14,000 and 26,000 pounds. Classes 7 and 8 heavy-duty trucks weigh between 26,001 and 33,000 pounds.
Metric ton	A unit of weight equal to 1,000 kilograms or 2,205 pounds.
Megawatt charging system (MCS)	A charging connector under development for large battery electric vehicles. The connector will be rated for charging at a maximum rate of 3.75 megawatts. A megawatt is equal to one thousand kilowatts or one million watts.
Nitrogen oxides (NO_x)	A general term including nitric oxide (NO), nitrogen dioxide (NO_2), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation.
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.
$PM_{2.5}$	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."
Short ton	An Imperial unit of mass equal to 2,000 pounds.
Sulfur oxides (SO_x)	A group of pungent, colorless gases formed primarily by the combustion of sulfur-containing fossil fuels, especially coal and oil. Considered major air pollutants, sulfur oxides may impact human health and damage vegetation.
Toxic air contaminant	An air pollutant, identified in California Air Resources Board regulations, which may cause negative health effects even at very low concentrations.
Volatile organic compound (VOC)	Closely related to the term "reactive organic gas" (ROG). VOCs are carbon-containing compounds that evaporate into the air (with a few exceptions) and often have an odor. VOCs

Term	Definition
	contribute to the formation of smog or may themselves be toxic or both. Some examples include gasoline, alcohol, and the solvents used in paints.
Zero-emission vehicle (ZEV)	A vehicle that produces no emissions from the onboard source of power. Common examples are battery-electric vehicles and fuel-cell electric vehicles.

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