

IV. Environmental Impact Analysis

C. Greenhouse Gas Emissions

1. Introduction

This section compares the Project's characteristics with applicable regulations, plans, and policies set forth by the State of California, the Southern California Association of Governments (SCAG), and the City to reduce greenhouse gas (GHG) emissions to determine whether the Project is consistent with and/or would conflict with the provisions of these plans. To assist in analyzing the Project's potential to conflict with applicable regulations, plans and policies related to GHG emissions, this section also estimates the Project's GHG emissions generated by Project construction and operations, taking into account mandatory and voluntary energy and resource conservation measures that have been incorporated into the Project that would reduce GHG emissions. Details of the GHG analysis are provided in the *3822 Figueroa Project Greenhouse Gas Emissions Assessment*, which is attached as Appendix E of this Draft EIR and are incorporated by reference.

2. Environmental Setting

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and severe weather events. Global warming, a related concept, is the observed increase in average temperature of Earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. GHGs are those compounds in Earth's atmosphere that play a critical role in determining Earth's surface temperature.

Earth's natural warming process is known as the "greenhouse effect." It is called the greenhouse effect because Earth and the atmosphere surrounding it are similar to a greenhouse with glass panes in that the glass allows solar radiation (sunlight) into Earth's atmosphere but prevents radiative heat from escaping, thus warming Earth's atmosphere. Some levels of GHGs keep the average surface temperature of Earth close to a hospitable 60 degrees Fahrenheit (°F). However, as GHG from human activities increase, they build up in the atmosphere and warm the climate, leading to many other changes around the world - in the atmosphere, on land, and in the oceans, with associated adverse climatic and ecological consequences.¹

Scientists studying the particularly rapid rise in global temperatures have determined that human activity has resulted in increased emissions of GHGs, primarily from the burning of fossil fuels (from motor vehicle travel, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.), deforestation, agricultural activity, and the decomposition of solid

¹ USEPA, *Climate Change Indicators: Greenhouse Gases*, <https://www.epa.gov/climate-indicators/greenhouse-gases>, accessed August 2025.

waste. Scientists refer to the global warming context of the past century as the “enhanced greenhouse effect” to distinguish it from the natural greenhouse effect.²

Global GHG emissions due to human activities have grown since pre-industrial times. As reported by the United States Environmental Protection Agency (USEPA), global carbon emissions from fossil fuels increased by over 16 times between 1900 and 2008 and by about 43 percent between 1990 and 2015. In addition, in the Global Carbon Budget 2023 report, published in December 2023, atmospheric carbon dioxide (CO₂) concentrations in 2022 were found to be 51 percent above the concentration at the start of the Industrial Revolution, and the present concentration is the highest during at least the last 800,000 years.³ Global increases in CO₂ concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. Regarding emissions of non-CO₂ GHGs, these have also increased significantly since 1990.⁴ In particular, studies have concluded that it is very likely that the observed increase in methane (CH₄) concentration is predominantly due to agriculture and fossil fuel use.⁵

In August 2007, international climate talks held under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) led to the official recognition by the participating nations that global emissions of GHG must be reduced. According to the “Ad Hoc Working Group on Further Commitments of Annex I Parties under the Kyoto Protocol,” avoiding the most catastrophic events forecast by the United Nations Intergovernmental Panel on Climate Change (IPCC) would entail emissions reductions by industrialized countries in the range of 25 to 40 percent below 1990 levels. Because of the Kyoto Protocol’s Clean Development Mechanism, which gives industrialized countries credit for financing emission-reducing projects in developing countries, such an emissions goal in industrialized countries could ultimately spur efforts to cut emissions in developing countries as well.⁶

Regarding the adverse effects of global warming, as reported by SCAG:

Global warming poses a serious threat to the economic well-being, public health and natural environment in Southern California and beyond. The potential adverse impacts of global warming include, among others, a reduction in the quantity and quality of water supply, a rise in sea level, damage to marine and other ecosystems, and an increase in the incidences of infectious diseases. Over the past few decades, energy intensity of the national and state economy has been declining due to the shift to a more service-oriented economy. California ranked fifth lowest among the states in CO₂ emissions from fossil fuel consumption per unit of Gross State Product. However, in terms of total CO₂ emissions, California is second only to Texas in the nation and is the 12th largest source of climate

² Pew Center on Global Climate Change, Climate Change 101: Understanding and Responding to Global Climate Change, October 12, 2006.

³ P. Friedlingstein et al.: *Global Carbon Budget 2023*, December 5, 2023.

⁴ USEPA, *Global Greenhouse Gas Overview*, www.epa.gov/ghgemissions/global-greenhouse-gas-overview, accessed August 2025.

⁵ USEPA, Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gas, updated June 2024, <https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases>, accessed August 2025.

⁶ United Nations Framework Convention on Climate Change, Press Release—Vienna UN Conference Shows Consensus on Key Building Blocks for Effective International Response to Climate Change, August 31, 2007.

change emissions in the world, exceeding most nations. The SCAG region, with close to half of the state's population and economic activities, is also a major contributor to the global warming problem.⁷

a. GHG Fundamentals

GHGs are those compounds in Earth's atmosphere that play a critical role in determining temperature near Earth's surface. GHGs include CO₂, CH₄, nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).⁸ More specifically, these gases allow high-frequency shortwave solar radiation to enter Earth's atmosphere but retain some of the low frequency infrared energy which is radiated back from Earth towards space, resulting in a warming of the atmosphere. Compounds that are regulated as GHGs are discussed in **Table IV.C-1, Description of Identified GHGs**, below.^{9,10}

Table IV.C-1: Description of Identified GHGs^a

Greenhouse Gas	General Description
Carbon Dioxide (CO₂)	An odorless, colorless GHG, which has both natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human-caused) sources of CO ₂ are burning coal, oil, natural gas, and wood.
Methane (CH₄)	A flammable gas and the main component of natural gas. When one molecule of CH ₄ is burned in the presence of oxygen, one molecule of CO ₂ and two molecules of water are released. A natural source of CH ₄ is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH ₄ , which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N₂O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N ₂ O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
Hydrofluorocarbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH ₄ or ethane (C ₂ H ₆) with chlorine and/or fluorine atoms. CFCs are non-toxic, non-flammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone but to a much lesser extent than CFCs.

⁷ SCAG, The State of the Region—Measuring Regional Progress, December 2006, p. 121.

⁸ As defined by California Assembly Bill (AB) 32 and Senate Bill (SB) 104.

⁹ IPCC, Second Assessment Report, Working Group I: The Science of Climate Change, 1995.

¹⁰ IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, Table 2.14, 2007.

Greenhouse Gas	General Description
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semi-conductor manufacturing.
Sulfur Hexafluoride (SF₆)	An inorganic, odorless, colorless, non-toxic, and non-flammable gas. SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF₃)	An inorganic, non-toxic, odorless, non-flammable gas. NF ₃ is used in the manufacture of semi-conductors, as an oxidizer of high energy fuels, for the preparation of tetrafluorohydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high power chemical lasers.
<p>^a GHGs identified in this table are those identified in the Kyoto Protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.</p> <p>Source: Association of Environmental Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007; Environmental Protection Agency, Acute Exposure Guideline Levels (AEGs) for Nitrogen Trifluoride, January 2009; and IPCC, Fifth Assessment Report, https://www.ipcc.ch/report/ar5/syr/, accessed August 2025.</p>	

Not all GHGs possess the same ability to induce climate change. CO₂ is the most abundant GHG in Earth's atmosphere. Other GHGs are less abundant but have higher global warming potential (GWP) than CO₂. Thus, emissions of other GHGs are commonly quantified in the units of equivalent mass of carbon dioxide (CO₂e). GWP is based on several factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO₂, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years otherwise referred to as atmospheric lifetime) relative to that of CO₂.

The larger the GWP, the more that a given gas warms Earth compared to CO₂ over that time.¹¹ These GWP ratios are available from the IPCC. Historically, GHG emission inventories have been calculated using the GWPs from IPCC's SAR. IPCC updated the GWP values in its AR4. The GWPs in IPCC AR4 are used by the California Air Resources Board (CARB) for reporting Statewide GHG emissions inventories, consistent with international reporting standards. By applying the GWP ratios, Project-related CO₂e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO₂ over a 100-year period is used as a baseline.

IPCC has issued an updated Fifth Assessment Report (AR5), which has revised down the GWP for key regulated pollutants. As CARB still uses AR4 values and the modeling software, CalEEMod is built on these assumptions, AR4 GWP values are used for the Project. Generally, the changes from AR4 to AR5 are reductions in warming potential for the GHG emissions most

¹¹ GWPs and associated CO₂e values were developed by the IPCC, and published in its Second Assessment Report (SAR) in 1996. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's SAR. The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). CARB has begun reporting GHG emission inventories for California using the GWP values from the IPCC AR4.

associated with construction and operation of typical development projects and, therefore, represent a conservative estimate of GHG emissions. The GWP from AR4 and AR5 and atmospheric lifetimes for key regulated GHGs are provided in **Table IV.C-2, Atmospheric Lifetimes and Global Warming Potentials**.

Table IV.C-2: Atmospheric Lifetimes and Global Warming Potentials

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon) (AR4 Assessment)	Global Warming Potential (100-Year Time Horizon) (AR5 Assessment)
Carbon Dioxide (CO ₂)	50-200	1	1
Methane (CH ₄)	12 (+/-3)	25	28
Nitrous Oxide (N ₂ O)	114	298	265
HFC-23: Fluoroform (CHF ₃)	270	14,800	12,400
HFC-134a: 1,1,1,2-Tetrafluoroethane (CH ₂ FCF ₃)	14	1,430	1,300
HFC-152a: 1,1-Difluoroethane (C ₂ H ₄ F ₂)	1.4	124	138
PFC-14: Tetrafluoromethane (CF ₄)	50,000	7,390	6,630
PFC-116: Hexafluoroethane (C ₂ F ₆)	10,000	12,200	11,100
Sulfur Hexafluoride (SF ₆)	3,200	22,800	22,500
Nitrogen Trifluoride (NF ₃)	740	17,200	16,100

Source: IPCC, Climate Change 2007: Working Group I: The Physical Science Basis, Direct Global Warming Potentials, Chapter 2, Changes on Atmospheric Constituents and in Radiative Forcing, 2007.

b. Projected Impacts of Global Warming in California

In 2009, California adopted a Statewide Climate Adaptation Strategy (CAS) that summarizes climate change impacts and recommends adaptation strategies across seven sectors: Public Health, Biodiversity and Habitat, Oceans and Coastal Resources, Water, Agriculture, Forestry, and Transportation and Energy. The California Natural Resources Agency (CNRA) updates the CAS every three years and is responsible for preparing reports to the Governor on the status of the CAS. CNRA has produced climate change assessments, which detail impacts of global warming in California.¹² These include:

- Sea level rise, coastal flooding and erosion of California's coastlines would increase, as well as sea water intrusion.
- The Sierra snowpack would decline between 70 and 90 percent, threatening California's water supply.
- Higher risk of forest fires resulting from increasing temperatures and making forests and brush drier. Climate change will affect tree survival and growth.

¹² State of California, Department of Justice, Office of the Attorney General, *Climate Change Impacts in California*, <https://oag.ca.gov/environment/impact>, accessed August 2025.

- Attainment of air quality standards would be impeded by increasing emissions, accelerating chemical processes, and raising inversion temperatures during stagnation episodes, resulting in public health impacts.
- Habitat destruction and loss of ecosystems due to climate change affecting plant and wildlife habitats.
- Global warming can cause drought, warmer temperatures, and saltwater contamination, resulting in impacts to California's agricultural industry.

With regard to public health, as reported by the Center for Health and the Global Environment at the Harvard Medical School, the following are examples of how climate change can affect cardio-respiratory disease: (1) pollen is increased by higher levels of atmospheric CO₂; (2) heat waves can result in temperature inversions, leading to trapped masses or unhealthy air contaminants by smog, particulates, and other pollutants; and (3) the incidence of forest fires is increased by drought, secondary to climate change and to the lack of spring runoff from reduced winter snows. These fires can create smoke and haze, which can settle over urban populations causing acute and exacerbating chronic respiratory illness.¹³

c. Regulatory Framework

There are a number of plans, regulations, programs, and agencies that provide policies, requirements, and guidelines regarding GHG emissions at the federal, State, regional, and local levels. As described below, these plans, guidelines, and laws include the following:

- Federal Clean Air Act
- Federal Corporate Average Fuel Economy (CAFE) Standards
- Federal Energy Independence and Security Act
- California Air Resources Board
- California Greenhouse Gas Reduction Targets
- California Global Warming Solutions Act (AB 32)
- State Climate Change Scoping Plan
- State Cap-and-Trade Program
- State Emission Performance Standards
- State Renewables Portfolio Standard Program
- California Climate Crisis Act (AB 1279)
- Pavley Standards
- California Low Carbon Fuel Standard
- State Advanced Clean Cars Regulations

¹³ Paul R. Epstein, et al., *Urban Indicators of Climate Change, Report from the Center for Health and the Global Environment*, Harvard Medical School and the Boston Public Health Commission, August 2003, unpaginated.

- California Sustainable Communities and Climate Protection Act (SB 375)
- California Senate Bill 743
- California Executive Order N-79-20
- California Executive Order B-55-18
- California Appliance Efficiency Regulations
- Title 24, Building Standards Code and California Green Building Standards Code
- CEQA Guidelines
- South Coast Air Quality Management District CEQA Guidance
- Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy
- L.A.'s Green New Deal
- City of Los Angeles Green Building Code
- City of Los Angeles Solid Waste Programs and Ordinances
- City of Los Angeles General Plan
- City of Los Angeles Housing Element (Housing Needs Assessment)
- City of Los Angeles Mobility Plan 2035
- City of Los Angeles Department of Transportation Traffic Study Policies and Procedures

(1) Federal

(a) Federal Clean Air Act

USEPA is responsible for implementing federal policy to address GHGs. The United States Supreme Court (Supreme Court) ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO₂ and other GHGs are pollutants under the federal Clean Air Act (CAA), which USEPA must regulate if it determines they pose an endangerment to public health or welfare. In December 2009, USEPA issued an endangerment finding for GHGs under the CAA, setting the stage for future regulation.

The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, CH₄ and other non-CO₂ gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

(b) Federal Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President George W. Bush issued Executive Order 13432 in 2007, directing USEPA, the United States Department of Transportation (USDOT), and the United States Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. The National Highway Traffic Safety Administration (NHTSA) subsequently issued multiple final rules regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model years 2012-2016, and 2017-2021. In March 2020, USDOT and USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe CO₂ emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026.¹⁴ These standards set a combined fleet wide average of 36.9 to 37 for the model years 2021 through 2026.¹⁵ In February 2022, USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.¹⁶ This final rule revises current GHG standards for vehicles in model year 2023 through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (i.e., the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles.¹⁷ On June 7, 2024, NHTSA finalized their CAFE standards for model year 2030 to 2035. The final rule requires an industry-wide fuel average of approximately 50.4 mpg for passenger cars and light-duty trucks and an industry fleet-wide average for heavy-duty pickup trucks and vans of roughly 2.851 gallons per 100 miles.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines. Building on the first phase of standards, in August 2016, USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The Phase 2 standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons nationwide annually.¹⁸

(c) Federal Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

¹⁴ USEPA, Final Rule for Model Year 2021 - 2026 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, published April 30, 2020.

¹⁵ NHTSA, Corporate Average Fuel Economy Standards, <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>, accessed on August 2025.

¹⁶ USEPA, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards: Regulatory Update Vol. 86, No. 248 Federal Register page 74434, December 20, 2021.

¹⁷ USEPA, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards: Regulatory Update, Vol. 86, No. 248 Federal Register page 74434, December 20, 2021.

¹⁸ USEPA, EPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond, August 2016.

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”¹⁹

(2) State

(a) California Air Resources Board

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California’s State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the federal CAA. CARB adopted the 2022 SIP September 2022.²⁰ CARB also has primary responsibility for adopting regulations to meet the State’s goal of reducing GHG emissions. The State has met its goals to reduce GHG emissions to 1990 levels by 2020.²¹ Subsequent State goals include reducing GHG emissions to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.

¹⁹ A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

²⁰ CARB, 2022 State Strategy for the State Implementation Program, September 2022 <https://ww2.arb.ca.gov/resources/documents/2022-state-strategy-state-implementation-plan-2022-state-sip-strategy>, accessed August 2025.

²¹ CARB, Final 2022 Climate Change Scoping Plan (Chapter 1), adopted December 2022.

(b) California Greenhouse Gas Reduction Targets

(i) Executive Order S-3-05

Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

In accordance with Executive Order S-3-05, the Secretary of CalEPA is required to coordinate efforts of various agencies, which comprise the California Climate Action Team (CAT), in order to collectively and efficiently reduce GHGs. The CAT provides periodic reports to the Governor and Legislature on the state of GHG reductions in the State, as well as strategies for mitigating and adapting to climate change.

The CAT stated that smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population.

(ii) Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15. Therein, the Governor directed the following:

- Established a new interim Statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e).

(iii) Executive Order B-55-18

Executive Order B-55-18, issued by Governor Brown in September 2018, establishes a new Statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Based on this executive order, CARB would work with relevant State agencies to develop a framework for implementation and accounting that tracks progress towards this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

In October 2020, CARB released a study, which evaluated three scenarios that achieve carbon neutrality in California by 2045. The study was used by CARB in development of the 2022

Scoping Plan.²² More ambitious carbon reduction scenarios that achieve carbon neutrality prior to 2045 may be considered as part of future analyses by the State.

The scenarios analyzed to achieve carbon neutrality include a High Carbon Dioxide Removal (CDR) scenario, Zero Carbon Energy scenario, and a Balanced scenario. The High CDR scenario achieves GHG reductions by relying on CO₂ removal strategies. The Zero Carbon Energy scenario is based on the assumption of zero-fossil fuel emissions by 2045. The Balanced scenario represents a middle point between the High CDR scenario and Zero Carbon Energy scenario. The scenarios would achieve at least an 80-percent reduction in GHGs by 2045, relative to 1990 levels. Remaining CO₂ would be reduced to zero by applying CO₂ removal strategies, including sinks from natural and working lands and negative emissions technologies, such as direct air capture.^{23,24}

Under each of these scenarios, CARB proposed reduction strategies for various sectors that contribute GHG emissions throughout the State. Although specific details are not yet available for the GHG reduction measures discussed above, implementation of these measures would require regulations to be enforced by the State.

(c) California Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020, which the State has achieved. HSC Division 25.5 defines regulated GHGs as CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ and represents the first enforceable Statewide program to limit emissions of these GHGs from all major industries, with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing State actions that would achieve GHG emissions reductions.

To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce Statewide GHG emissions from stationary sources consistent with the CAT strategies, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. In order to achieve the reduction targets, AB 32 requires CARB to adopt rules and regulations in an open public process that achieves the maximum technologically feasible and cost-effective GHG reductions.²⁵

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amend HSC Division

²² Energy+Environmental Economics, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020.

²³ Sinks are defined as natural or artificial reservoirs that accumulate and store a carbon-containing chemical compound for an indefinite period.

²⁴ Energy+Environmental Economics, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020, p. 22.

²⁵ CARB's list of discrete early action measures that could be adopted and implemented before January 1, 2010, was approved on June 21, 2007. The three adopted discrete early action measures are (1) a low-carbon fuel standard, which reduces carbon intensity in fuels Statewide; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and (3) increased methane capture from landfills, which includes requiring the use of state-of-the-art capture technologies.

25.5, establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of State climate policies reach disadvantaged communities. The new goals outlined in SB 32 update the scoping plan requirement of AB 32 and involve increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

AB 197, signed September 8, 2016, is a bill associated with SB 32, which prioritizes efforts to cut GHG emissions in low-income and minority communities. AB 197 requires CARB to make available, and update at least annually, on its website the emissions of GHGs, criteria pollutants, and toxic air contaminants for each facility that reports to CARB and air districts. In addition, AB 197 adds two members of the Legislature to the CARB board as ex officio, non-voting members and creates the Joint Legislative Committee on Climate Change Policies to ascertain facts and make recommendations to the Legislature concerning the State's programs, policies, and investments related to climate change.

(d) State Climate Change Scoping Plan

The Scoping Plan is a GHG reduction roadmap developed and updated by CARB at least once every five years, as required by AB 32. It lays out the transformations needed across various sectors to reduce GHG emissions and reach the State's climate targets. CARB adopted the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) in December 2022, as the third update to the initial plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 target of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business-as-usual activities.²⁶ The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG targets. The 2013 Scoping Plan Update (adopted in 2014) assessed progress toward achieving the 2020 target and made the case for addressing short-lived climate pollutants (SLCPs).²⁷ The 2017 Scoping Plan shifted focus to the newer SB 32 goal of a 40 percent reduction below 1990 levels by 2030 by laying out a detailed cost-effective and technologically feasible path to this target, and also assessed progress towards achieving the AB 32 goal of returning to 1990 GHG levels by 2020.²⁸ The 2020 goal was ultimately reached in 2016, four years ahead of the schedule called for under AB 32.

The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. It identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan.²⁹ The 2030 target is an interim but important stepping stone along the critical path to the broader goal of deep decarbonization by 2045. The relatively longer path assessed in the 2022 Scoping Plan Update incorporates, coordinates, and

²⁶ CARB, Climate Change Scoping Plan: A Framework for Change, 2008.

²⁷ CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014.

²⁸ CARB, California's 2017 Climate Change Scoping Plan, November 2017.

²⁹ CARB, California's 2017 Climate Change Scoping Plan, November 2017.

leverages many existing and ongoing efforts to reduce GHGs and air pollution, while identifying new clean technologies and energy. Given the focus on carbon neutrality, the 2022 Scoping Plan Update also includes discussion for the first time of the natural and working lands sectors as sources for both sequestration and carbon storage, and as sources of emissions as a result of wildfires. The estimated statewide GHG emissions with and without reduction measures in the 2022 Scoping Plan are provided in **Table IV.C-3, Estimated Statewide Greenhouse Gas Emissions Without and With Reduction Measures in the 2022 Scoping Plan.**

Table IV.C-3: Estimated Statewide Greenhouse Gas Emissions Without and With Reduction Measures in the 2022 Scoping Plan

Emissions Scenario	GHG Emissions (MMT_{CO₂e})
2019	
2019 State GHG Emissions	404
2030	
2030 Business-As-Usual (BAU) Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by AB 32 (i.e., 1990 level by 2030)	260
Reduction below BAU necessary to achieve 1990 levels by 2030	52 (16.7%) ^a
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	(3)
MMT _{CO₂e} = million metric tons of carbon dioxide equivalents; parenthetical numbers represent negative values.	
^a 312 – 260 = 52. 52 / 312 = 16.7%	
Source: CARB, Final 2022 Climate Change Scoping Plan, December 2022.	

The 2022 Scoping Plan Update reflects existing and recent direction in the Governor's Executive Orders and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the Scoping Plan. Among these include Executive Order B-55-18 and AB 1279 (The California Climate Crisis Act), which identify the 2045 carbon neutrality and GHG reduction targets required for the Scoping Plan.

Table IV.C-4 below provides a summary of major climate legislation and executive orders issued since the adoption of the 2017 Scoping Plan.

Table IV.C-4: Major State Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan

Bill/Executive Order	Summary
Assembly Bill 1279 (AB 1279) (Muratsuchi, Chapter 337, Statutes of 2022)	AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that the Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and

Bill/Executive Order	Summary
<i>The California Climate Crisis Act</i>	implement policies and strategies that enable CO ₂ removal solutions and carbon capture, utilization, and storage (CCUS) technologies. This bill is implemented through the 2022 Scoping Plan.
Senate Bill 905 (SB 905) (Caballero, Chapter 359, Statutes of 2022) <i>Carbon Capture, Removal, Utilization, and Storage Program</i>	SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology. The bill requires CARB, on or before January 1, 2025, to adopt regulations creating a unified state permitting application for approval of CCUS and CDR projects. The bill also requires CNRA to publish a framework for governing agreements for two or more tracts of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project. The 2022 Scoping Plan modeling reflects both CCUS and CDR contributions to achieve carbon neutrality.
Senate Bill 846 (SB 846) (Dodd, Chapter 239, Statutes of 2022) <i>Diablo Canyon Powerplant: Extension of Operations</i>	SB 846 extends the Diablo Canyon Power Plant's sunset date by up to five additional years for each of its two units and seeks to make the nuclear power plant eligible for federal loans. The bill requires that the California Public Utilities Commission (CPUC) not include and disallow a load-serving entity from including in their adopted resource plan, the energy, capacity, or any attribute from the Diablo Canyon power plant. The 2022 Scoping Plan explains the emissions impact of this legislation.
Senate Bill 1020 (SB 1020) (Laird, Chapter 361, Statutes of 2022) <i>Clean Energy, Jobs, and Affordability Act of 2022</i>	SB 1020 adds interim renewable energy and zero carbon energy retail sales of electricity targets to California end-use customers set at 90 percent in 2035 and 95 percent in 2040. It accelerates the timeline required to have 100 percent renewable energy and zero carbon energy procured to serve state agencies from the original target year of 2045 to 2035. This bill requires each state agency to individually achieve the 100 percent goal by 2035 with specified requirements. This bill requires the CPUC, California Energy Commission (CEC), and CARB, on or before December 1, 2023, and annually thereafter, to issue a joint reliability progress report that reviews system and local reliability. The bill also modifies the requirement for CARB to hold a portion of its Scoping Plan workshops in regions of the state with the most significant exposure to air pollutants by further specifying that this includes communities with minority populations or low-income communities in areas designated as being in extreme federal non-attainment. The 2022 Scoping Plan describes the implications of this legislation on emissions.
Senate Bill 1137 (SB 1137) (Gonzales, Chapter 365, Statutes of 2022) <i>Oil & Gas Operations: Location Restrictions: Notice of Intention: Health protection zone: Sensitive receptors</i>	SB 1137 prohibits the development of new oil and gas wells or infrastructure in health protection zones, as defined, except for purposes of public health and safety or other limited exceptions. The bill requires operators of existing oil and gas wells or infrastructure within health protection zones to undertake specified monitoring, public notice, and nuisance requirements. The bill requires CARB to consult and concur with the California Geologic Energy Management Division (CalGEM) on leak detection and repair plans for these facilities, adopt regulations as necessary to implement emission detection system standards, and collaborate with CalGEM on public access to emissions detection data.
Senate Bill 1075 (SB 1075) (Skinner, Chapter 363, Statutes of 2022)	SB 1075 requires CARB, by June 1, 2024, to prepare an evaluation that includes: policy recommendations regarding the use of hydrogen, and specifically the use of green hydrogen, in California; a description of strategies supporting hydrogen infrastructure, including identifying policies

Bill/Executive Order	Summary
<i>Hydrogen: Green Hydrogen: Emissions of Greenhouse Gases</i>	<p>that promote the reduction of GHGs and short-lived climate pollutants; a description of other forms of hydrogen to achieve emission reductions; an analysis of curtailed electricity; an estimate of GHG and emission reductions that could be achieved through deployment of green hydrogen through a variety of scenarios; an analysis of the potential for opportunities to integrate hydrogen production and applications with drinking water supply treatment needs; policy recommendations for regulatory and permitting processes associated with transmitting and distributing hydrogen from production sites to end uses; an analysis of the life-cycle GHG emissions from various forms of hydrogen production; and an analysis of air pollution and other environmental impacts from hydrogen distribution and end uses.</p> <p>This bill would inform the production of hydrogen at the scale called for in the 2022 Scoping Plan.</p>
<p>Assembly Bill 1757 (AB 1757) (Garcia, Chapter 341, Statutes of 2022)</p> <p><i>California Global Warming Solutions Act of 2006: Climate Goal: Natural and Working Lands</i></p>	<p>AB 1757 requires CNRA, in collaboration with CARB, other state agencies, and an expert advisory committee, to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions in 2030, 2038, and 2045 by January 1, 2024. These targets must support state goals to achieve carbon neutrality and foster climate adaptation and resilience.</p> <p>This bill also requires CARB to develop standard methods for state agencies to consistently track GHG emissions and reductions, carbon sequestration, and additional benefits from natural and working lands over time. These methods will account for GHG emissions reductions of CO₂, methane, and nitrous oxide related to natural and working lands and the potential impacts of climate change on the ability to reduce GHG emissions and sequester carbon from natural and working lands, where feasible.</p> <p>The 2022 Scoping Plan describes the next steps and implications of this legislation for the natural and working lands sector.</p>
<p>Senate Bill 1206 (SB 1206) (Skinner, Chapter 884, Statutes of 2022)</p> <p><i>Hydrofluorocarbon gases: sale or distribution</i></p>	<p>SB 1206 mandates a stepped sales prohibition on newly produced high-global warming potential (GWP) HFCs to transition California's economy toward recycled and reclaimed HFCs for servicing existing HFC-based equipment. Additionally, SB 1206 also requires CARB to develop regulations to increase the adoption of very low-GWP technologies (i.e., GWP<10, and no-GWP) in sectors that currently rely on higher-GWP HFCs.</p>
<p>Senate Bill 27 (SB 27) (Skinner, Chapter 237, Statutes of 2021)</p> <p><i>Carbon Sequestration: State Goals: Natural and Working Lands: Registry of Projects</i></p>	<p>SB 27 requires CNRA, in coordination with other state agencies, to establish the Natural and Working Lands Climate Smart Strategy by July 1, 2023. This bill also requires CARB to establish specified CO₂ removal targets for 2030 and beyond as part of its Scoping Plan. Under SB 27, CNRA is to establish and maintain a registry to identify projects in the state that drive climate action on natural and working lands and are seeking funding.</p> <p>CNRA also must track carbon removal and GHG emission reduction benefits derived from projects funded through the registry.</p> <p>This bill is reflected directly in the 2022 Scoping Plan as CO₂ removal targets for 2030 and 2045 in support of carbon neutrality.</p>
<p>Senate Bill 596 (SB 596) (Becker, Chapter 246, Statutes of 2021)</p>	<p>SB 596 requires CARB, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero-emissions of GHGs associated with cement used within the state as soon as possible,</p>

Bill/Executive Order	Summary
<p><i>Greenhouse Gases: Cement Sector: Net-zero Emissions Strategy</i></p>	<p>but no later than December 31, 2045. The bill establishes an interim target of 40 percent below the 2019 average GHG intensity of cement by December 31, 2035. Under SB 596, CARB must:</p> <ul style="list-style-type: none"> ● Define a metric for GHG intensity and establish a baseline from which to measure GHG intensity reductions. ● Evaluate the feasibility of the 2035 interim target (40 percent reduction in GHG intensity) by July 1, 2028. ● Coordinate and consult with other state agencies. ● Prioritize actions that leverage state and federal incentives. ● Evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low GHG intensity. <p>The 2022 Scoping Plan modeling is designed to achieve these outcomes.</p>
<p>Executive Order N-82-20</p>	<p>Governor Newsom signed Executive Order N-82-20 in October 2020 to combat the climate and biodiversity crises by setting a statewide goal to conserve at least 30 percent of California’s land and coastal waters by 2030. The Executive Order also instructed the CNRA, in consultation with other state agencies, to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the state’s carbon neutrality goal and build climate resilience. In addition to setting a statewide conservation goal, the Executive Order directed CARB to update the target for natural and working lands in support of carbon neutrality as part of this Scoping Plan, and to take into consideration the NWL Climate Smart Strategy.</p> <p>Executive Order N-82-20 also calls on the CNRA, in consultation with other state agencies, to establish the California Biodiversity Collaborative (Collaborative). The Collaborative shall be made up of governmental partners, California Native American tribes, experts, business and community leaders, and other stakeholders from across the state. State agencies will consult the Collaborative on efforts to:</p> <ul style="list-style-type: none"> ● Establish a baseline assessment of California’s biodiversity that builds upon existing data and can be updated over time. ● Analyze and project the impact of climate change and other stressors in California’s biodiversity. ● Inventory current biodiversity efforts across all sectors and highlight opportunities for additional action to preserve and enhance biodiversity. <p>CNRA also is tasked with advancing efforts to conserve biodiversity through various actions, such as streamlining the State’s process to approve and facilitate projects related to environmental restoration and land management. The California Department of Food and Agriculture (CDFA) is directed to advance efforts to conserve biodiversity through measures such as reinvigorating populations of pollinator insects, which restore biodiversity and improve agricultural production.</p> <p>The Natural and Working Lands Climate Smart Strategy informs the 2022 Scoping Plan.</p>

Bill/Executive Order	Summary
Executive Order N-79-20	<p>Governor Newsom signed Executive Order N-79-20 in September 2020 to establish targets for the transportation sector to support the state in its goal to achieve carbon neutrality by 2045. The targets established in this Executive Order are:</p> <ul style="list-style-type: none"> ● 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. ● 100 percent of medium- and heavy-duty vehicles will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks. ● 100 percent of off-road vehicles and equipment will be zero-emission by 2035 where feasible. <p>The Executive Order also tasked CARB to develop and propose regulations that require increasing volumes of zero- electric passenger vehicles, medium- and heavy-duty vehicles, drayage trucks, and off-road vehicles toward their corresponding targets of 100 percent zero-emission by 2035 or 2045, as listed above.</p> <p>The 2022 Scoping Plan modeling reflects these targets.</p>
Executive Order N-19-19	<p>Governor Newsom signed Executive Order N-19-19 in September 2019 to direct state government to redouble its efforts to reduce GHG emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy. This Executive Order instructs the Department of Finance to create a Climate Investment Framework that:</p> <ul style="list-style-type: none"> ● Includes a proactive strategy for the state’s pension funds that reflects the increased risks to the economy and physical environment due to climate change. ● Provides a timeline and criteria to shift investments to companies and industry sectors with greater growth potential based on their focus of reducing carbon emissions and adapting to the impacts of climate change. ● Aligns with the fiduciary responsibilities of the California Public Employees’ Retirement System, California State Teachers’ Retirement System, and the University of California Retirement Program. <p>Executive Order N-19-19 directs the State Transportation Agency to leverage more than \$5 billion in annual state transportation spending to help reverse the trend of increased fuel consumption and reduce GHG emissions associated with the transportation sector. It also calls on the Department of General Services to leverage its management and ownership of the state’s 19 million square feet in managed buildings, 51,000 vehicles, and other physical assets and goods to minimize state government’s carbon footprint. Finally, it tasks CARB with accelerating progress toward California’s goal of five million Zero Emission Vehicle (ZEV) sales by 2030 by:</p> <ul style="list-style-type: none"> ● Developing new criteria for clean vehicle incentive programs to encourage manufacturers to produce clean, affordable cars. ● Proposing new strategies to increase demand in the primary and secondary markets for ZEVs.

Bill/Executive Order	Summary
	<ul style="list-style-type: none"> Considering strengthening existing regulations or adopting new ones to achieve the necessary GHG reductions from within the transportation sector. <p>The 2022 Scoping Plan modeling reflects efforts to accelerate ZEV deployment.</p>
<p>Senate Bill 576 (SB 576) (Umberg, Chapter 374, Statutes of 2019)</p> <p><i>Coastal Resources: Climate Ready Program and Coastal Climate Change Adaptation, Infrastructure and Readiness Program</i></p>	<p>Sea level rise, combined with storm-driven waves, poses a direct risk to the state's coastal resources, including public and private real property and infrastructure. Rising marine waters threaten sensitive coastal areas, habitats, the survival of threatened and endangered species, beaches, other recreation areas, and urban waterfronts. SB 576 mandates that the Ocean Protection Council develop and implement a coastal climate adaptation, infrastructure, and readiness program to improve the climate change resiliency of California's coastal communities, infrastructure, and habitat. This bill also instructs the State Coastal Conservancy to administer the Climate Ready Program, which addresses the impacts and potential impacts of climate change on resources within the conservancy's jurisdiction.</p>
<p>Assembly Bill 65 (AB 65) (Petrie- Norris, Chapter 347, Statutes of 2019)</p> <p><i>Coastal Protection: Climate Adaption: Project Prioritization: Natural Infrastructure: Local General Plans</i></p>	<p>This bill requires the State Coastal Conservancy, when it allocates any funding appropriated pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, to prioritize projects that use natural infrastructure in coastal communities to help adapt to climate change. The bill requires the conservancy to provide information to the Governor's Office of Land Use and Climate Innovation (LUCI) (formerly the Governor's Office of Planning and Research (OPR)) on any projects funded pursuant to the above provision to be considered for inclusion into the clearinghouse for climate adaptation information. The bill authorizes the conservancy to provide technical assistance to coastal communities to better assist them with their projects that use natural infrastructure.</p>
<p>Executive Order B-55-18</p>	<p>Governor Brown signed Executive Order B-55-18 in September 2018 to establish a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. Policies and programs undertaken to achieve this goal shall:</p> <ul style="list-style-type: none"> Seek to improve air quality and support the health and economic resiliency of urban and rural communities, particularly low-income and disadvantaged communities. Be implemented in a manner that supports climate adaptation and biodiversity, including protection of the state's water supply, water quality, and native plants and animals. <p>This Executive Order also calls for CARB to:</p> <ul style="list-style-type: none"> Develop a framework for implementation and accounting that tracks progress toward this goal. Ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. <p>The 2022 Scoping Plan Update is designed to achieve carbon neutrality no later than 2045 and the modeling includes technology and fuel transitions to achieve that outcome.</p>

Bill/Executive Order	Summary
Senate Bill 100 (SB 100) (De León, Chapter 312, Statutes of 2018) <i>California Renewables Portfolio Standard Program: emissions of greenhouse gases</i>	<p>Under SB 100, the CPUC, CEC, and CARB shall use programs under existing laws to achieve 100 percent clean electricity. The statute requires these agencies to issue a joint policy report on SB 100 every four years. The first of these reports was issued in 2021.</p> <p>The 2022 Scoping Plan reflects SB 100 requirements with a few minor updates.</p>
Assembly Bill 2127 (AB 2127) (Ting, Chapter 365, Statutes of 2018) <i>Electric Vehicle Charging Infrastructure: Assessment</i>	<p>This bill requires the CEC, working with CARB and the CPUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million ZEV on California roads by 2030 and of reducing emissions of GHGs to 40 percent below 1990 levels by 2030. The bill requires the CEC to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure.</p> <p>This bill supports the deployment of ZEVs as modeled in the 2022 Scoping Plan.</p>
Senate Bill 30 (SB 30) (Lara, Chapter 614, Statutes of 2018) <i>Insurance: Climate Change</i>	<p>This bill requires the Insurance Commissioner to convene a working group to identify, assess, and recommend risk transfer market mechanisms that, among other things, promote investment in natural infrastructure to reduce the risks of climate change related to catastrophic events, create incentives for investment in natural infrastructure to reduce risks to communities, and provide mitigation incentives for private investment in natural lands to lessen exposure and reduce climate risks to public safety, property, utilities, and infrastructure.</p>
Assembly Bill 2061 (AB 2061) (Frazier, Chapter 580, Statutes of 2018) <i>Near-zero-emission and Zero-emission Vehicles</i>	<p>Existing state and federal laws set specified limits on the total gross weight imposed on the highway by a vehicle with any group of two or more consecutive axles. Under existing federal law, the maximum gross vehicle weight of that vehicle may not exceed 82,000 pounds. AB 2061 authorizes a near-zero- emission vehicle or a zero-emission vehicle to exceed the weight limits on the power unit by up to 2,000 pounds.</p> <p>This bill supports the deployment of cleaner trucks as modeled in this 2022 Scoping Plan.</p>
Source: CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, Table 1-1, December 2022.	

The 2022 Scoping Plan Scenario identifies the need to accelerate AB 32’s 2030 target, from 40 percent to 48 percent below 1990 levels. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology. The Scoping Plan Scenario is summarized in Table 2-1 starting on page 72 of the Scoping Plan. It includes references to relevant statutes and Executive Orders, although it is not comprehensive of all existing new authorities for directing or supporting the actions described.

Achieving the targets described in the 2022 Scoping Plan will require continued commitment to and successful implementation of existing policies and programs, and identification of new policy tools and technical solutions to go further, faster. California’s Legislature and state agencies will continue to collaborate to achieve the state’s climate, clean air, equity, and broader economic and environmental protection goals. It will be necessary to maintain and strengthen this collaborative effort, and to draw upon the assistance of the federal government, regional and local governments, tribes, communities, academic institutions, and the private sector to achieve the state’s near-term and longer-term emission reduction goals and a more equitable future for all Californians. The 2022 Scoping Plan acknowledges that the path forward is not dependent on one agency, one state, or even one country. However, the State can lead by engaging Californians and demonstrating how actions at the state, regional, and local levels of governments, as well as action at community and individual levels, can contribute to addressing the challenge.

Aligning local jurisdiction action with state-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan is identified as critical to achieving the statutory targets for 2030 and 2045. The 2022 Scoping Plan discusses the role of local governments in meeting the State’s GHG reductions goals. Local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. They also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhoods that do not force people into cars. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements, and play a critical role in facilitating the rollout of ZEV infrastructure. As a result, local government decisions play a critical role in supporting state-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority. The City has taken the initiative in combating climate change by developing programs and regulations such as L.A.’s Green New Deal and the Los Angeles Green Building Code. Each of these is discussed further below.

(e) Cap-and-Trade Program

The Climate Change Scoping Plan identified a Cap-and-Trade Program as one of the strategies California would employ to reduce GHG emissions. CARB asserts that this program will help put California on the path to meet its goal of ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under Cap-and-Trade, an overall limit on GHG emissions from capped sectors was established, and facilities subject to the cap will be able to trade permits to emit GHGs.

CARB designed and adopted a California Cap-and-Trade Program³⁰ pursuant to its authority under AB 32. The Cap-and-Trade Program was designed to reduce GHG emissions from public and private major sources (deemed “covered entities”) by setting a firm cap on Statewide GHG emissions and employing market mechanisms to achieve the State’s emission-

³⁰ California Code of Regulations 17, Section 95800 to 96023.

reduction mandates. The Statewide cap for GHG emissions from the capped sectors³¹ (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time as GHG emission reductions are continually achieved throughout the Cap-and-Trade Program's duration.

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities that emit more than 25,000 MTCO₂e per year must comply with the Cap-and-Trade Program.³² Triggering of the 25,000 MTCO₂e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or MRR).³³

Each covered entity with a compliance obligation is required to surrender "compliance instruments"³⁴ for each MTCO₂e of GHG they emit. Covered entities are allocated free allowances in whole or part (if eligible), and can buy allowances at auction, purchase allowances from others, or purchase offset credits.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the Statewide emission limits will not be exceeded. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported.³⁵ Accordingly, for projects that are subject to the CEQA, GHG emissions from electricity consumption are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Cap-and-Trade Program's first compliance period.³⁶

The Cap-and-Trade Program applies to emissions that cover approximately 80 percent of the State's GHG emissions. Demonstrating the efficacy of AB 32 policies, California achieved its 2020 GHG Reduction Target four years earlier than mandated. The largest reductions were the result of increased renewable electricity in the electricity sector, which is a covered sector in the Cap-and-Trade Program.

AB 398 was enacted in 2017 to extend and clarify the role of the State's Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-

³¹ California Code of Regulations 17, Section 95811 - 95812.

³² California Code of Regulations 17, Section 95812.

³³ California Code of Regulations 17, Section 95100-95158.

³⁴ Compliance instruments are permits to emit, the majority of which will be "allowances," but entities also are allowed to use CARB-approved offset credits to meet up to 8 percent of their compliance obligations.

³⁵ California Code of Regulations 17, Section 95811(b).

³⁶ California Code of Regulations 17, Section 95811, 95812(d).

Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

(f) State Emission Performance Standards

SB 1368, signed September 29, 2006, is a companion bill to AB 32, which requires CPUC and CEC to establish GHG emission performance standards for the generation of electricity. These standards also generally apply to power that is generated outside of California and imported into the State. SB 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting CARB to meet its mandate under AB 32.

(g) State Renewables Portfolio Standard

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017 as a Renewable Portfolio Standard (RPS). Subsequent amendments provided additional targets throughout the years. On October 7, 2015, SB 350 (Chapter 547, Statutes of 2015), also known as the Clean Energy and Pollution Reduction Act, further increased the RPS to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. SB 350 also requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030 in comparison to 2015. The 2017 Scoping Plan incorporated the SB 350 standards and estimated the GHG reductions would account for approximately 21 percent of the Scoping Plan reductions.³⁷ On September 10, 2018, SB 100, provided updated RPS targets of 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030, and instructed that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by 2045.³⁸

(h) California Climate Crisis Act (Assembly Bill 1279)

The California Legislature enacted AB 1279, the California Climate Crisis Act, on September 16, 2022. AB 1279 establishes the policy of the State to achieve net zero GHG emissions, carbon neutrality, as soon as possible, but no later than 2045 and achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 targets that, by 2045, statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. SB 1279 also requires CARB to ensure that the 2022 Scoping Plan identified and recommended measures to achieve carbon neutrality and to identify and implement policies and strategies for CO₂ removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the 2022 Scoping Plan's goals.

(i) Pavley Standards

AB 1493 (Chapter 200, Statutes of 2002), enacted on July 22, 2002, required CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In 2004, CARB approved the Pavley regulation to require automakers to control GHG emissions from new

³⁷ CARB, *California's 2017 Climate Change Scoping Plan*, Table 3, p. 31, November 2017. Calculated as: $(108 - 53) / 260 = 21$ percent.

³⁸ California Legislative Information, SB-100 California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases.

passenger vehicles for the 2009 through 2016 model years. Upon adoption of subsequent federal GHG standards by the USEPA that preserved the benefits of the Pavley regulations, the Pavley regulations were revised to accept compliance with the federal standards as compliance with California's standards in the 2012 through 2016 model years. This is referred to as the "deemed to comply" option.

In January 2012, CARB approved GHG emission regulations, which require further reductions in passenger GHG emissions for 2017 and subsequent vehicle model years. As noted above, in August 2012, the USEPA and USDOT adopted GHG emission standards for model year 2017 through 2025 vehicles.³⁹ On November 15, 2012, CARB approved an amendment that allows manufacturers to comply with the 2017-2025 national standards to meet State law. Automobile manufacturers generally comply with these standards through a combination of improved energy efficiency in vehicle equipment (e.g., air conditioning systems) and engines, as well as sleeker aerodynamics, use of strong but lightweight materials, and lower-rolling resistance tires.⁴⁰

In 2018, the USEPA proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE), which would roll back fuel economy standards and revoke California's waiver. The rule amended certain average fuel economy and GHG standards for passenger cars covering model years 2021 through 2026. On March 30, 2020, the SAFE Rule was finalized and published in the Federal Register, commencing a review period. Subsequent legal challenges from a coalition of states, including California, and private industry groups were issued. However, in December 2021, the NHTSA repealed the SAFE Vehicle Rule Part One.⁴¹ Although the SAFE Vehicle Rule Part One has been repealed, GHG modeling contained in regional plans, such as SCAG's 2020-2045 RTP/SCS, have not been updated to account for this repeal.

Subsequently, on March 20, 2024, USEPA announced new, more protective final standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The final rule builds upon USEPA's standards for federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, established in 2021. These standards will phase in over model years 2027 through 2032.

(j) California Low Carbon Fuel Standard

Executive Order S-01-07 was enacted by Governor Arnold Schwarzenegger on January 18, 2007. The order mandates the following: (1) that a Statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 from a 2010 baseline; and (2) that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established in California. The final regulation was approved by the State's Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the LCFS became effective on the same day. In September 2015, CARB approved the re-adoption of the LCFS, which became

³⁹ United States Environmental Protection Agency, Final Rule for Model Year 2017 and Later Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-model-year-2017-and-later-light-duty-vehicle>, accessed December 2025.

⁴⁰ CARB, California's Advanced Clean Cars Midterm Review, pp. ES-17, C-9.

⁴¹ Federal Register. Vol. 86, No. 247, December 29, 2021.

effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted.⁴²

The development of the 2017 Scoping Plan has identified LCFS as a regulatory measure to reduce GHG emission to meet the 2030 emissions target. In September 2018, the standards were amended by CARB to require a 20-percent reduction in carbon intensity by 2030, aligning with California's 2030 targets set by SB 32.⁴³ The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place, including the LCFS.

(k) Advanced Clean Cars Regulations

In 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015–2025.⁴⁴ The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.⁴⁵ During the March 2017 midterm review, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV program for cars and light trucks sold in California through 2025.⁴⁶

In addition, Governor Newsom signed an executive order (Executive Order No. N-79-20) on September 23, 2020 that would phase out sales of new gas-powered passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales or forbid residents from owning gas-powered vehicles. On June 12, 2025, President Trump formally nullified California's Advanced Clean Cars II program (Congressional Resolutions H.J. Res 87 and H.J. Res 88, respectively). Implementation is currently unknown.

In accordance with the executive order, the 2020 Mobile Source Strategy was developed by CARB, a comprehensive analysis that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The 2020 Mobile Source Strategy will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by California Senate Bill 44. The programs and concepts in the 2020 Mobile Source Strategy support other planning efforts, such as the State Implementation Plans (SIP), the 2022 Climate Change Scoping Plan Update, and community emissions reduction plans, with the state planning efforts incorporating the Mobile Source Strategy as they are developed. CARB has begun development of the 2025 Mobile Source Strategy beginning outreach in January

⁴² CARB, *Low Carbon Fuel Standard - About*, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about>, accessed August 2025.

⁴³ CARB, *CARB amends Low Carbon Fuel Standard for wider impact*, 2018, <https://ww2.arb.ca.gov/index.php/news/carb-amends-low-carbon-fuel-standard-wider-impact>, accessed August 2025.

⁴⁴ CARB, *Advanced Clean Cars Program - About*, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>, accessed August 2025.

⁴⁵ CARB, *Advanced Clean Cars Program - About*, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>, accessed August 2025.

⁴⁶ CARB, News Release: CARB finds vehicle standards are achievable and cost-effective, March 24, 2017.

2024. As of March 2025, CARB has paused development of the Mobile Source Strategy and reconsidering the approach.⁴⁷

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program. The ACC II regulations will focus on post-2025 model year light-duty vehicles, as requirements are already in place for new vehicles through the 2025 model year. A rulemaking for ACC II regulations was adopted on November 30, 2022.

(l) Sustainable Communities and Climate Protection Act (SB 375)

The Sustainable Communities and Climate Protection Act of 2008, or SB 375 (Chapter 728, Statutes of 2008), which was adopted by the State on September 30, 2008, establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. SB 375 finds that the “transportation sector is the single largest contributor of greenhouse gases of any sector.”⁴⁸ Under SB 375, CARB is required, in consultation with the Metropolitan Planning Organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. SCAG is the MPO in which the City of Los Angeles is located. CARB set targets for 2020 and 2035 for each of the 18 MPO regions in 2010 and updated them in 2018.⁴⁹ In March 2018, CARB updated the SB 375 targets for the SCAG region to require an eight-percent reduction by 2020 and a 19-percent reduction by 2035 in per capita passenger vehicle GHG emissions.⁵⁰ As discussed further below, SCAG adopted an updated Regional Transportation Plan/Sustainable Community Strategies (2024-2050- RTP/SCS) subsequent to the update of the emission targets. The 2024–2050 RTP/SCS would reduce emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board, which is consistent with SB 375 compliance with respect to meeting the State’s GHG emission reduction goals.⁵¹

Under SB 375, the target must be incorporated within that region’s RTP, which is used for long-term transportation planning, in an SCS. Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land and further provides that local land use plans and policies (e.g., general plans) are not required to be consistent with either the RTP or SCS.

(m) Senate Bill 743

Governor Jerry Brown signed Senate Bill (SB) 743 in 2013, which creates a process to change the way that transportation impacts are analyzed under CEQA. Specifically, SB 743 requires the Governor’s Office of Land Use and Climate Innovation (LUCI) (formerly the Office of Planning and Research (OPR)) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) methodology for evaluating transportation impacts. Particularly within areas

⁴⁷ CARB, *2025 Mobile Source Strategy*, <https://ww2.arb.ca.gov/resources/documents/2025-mobile-source-strategy>, accessed December 2025.

⁴⁸ State of California, Senate Bill No. 375, September 30, 2008.

⁴⁹ CARB, *Sustainable Communities & Climate Protection Program – About*, <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about>, accessed August 2025.

⁵⁰ CARB, SB 375 Regional Greenhouse Gas Emissions Reduction Targets, 2018.

⁵¹ SCAG, 2024–2050 RTP/SCS, Chapter 1: Executive Summary, p. 7, 2024.

served by transit, the required alternative criteria must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” Measurements of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.”

(n) Building Standards and Other Regulations

(i) California Appliance Efficiency Regulations

The Appliance Efficiency Regulations (Title 20, Sections 1601 through 1609 of the California Code of Regulations), adopted by CEC, include standards for new appliances (e.g., refrigerators) and lighting products sold or offered for sale in California. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

(ii) Title 24, Building Standards Code and California Green Building Standards Code

CEC first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 standards is referred to as the California Green Building Standards (CALGreen) Code and was developed to help the State achieve its GHG reduction goals under HSC Division 25.5 (e.g., AB 32) by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy, water, and resource demand. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”⁵² The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program (e.g., Leadership in Energy and Environmental Design) that is not established and adopted by the California Building Standards Commission. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.⁵³

On August 11, 2021, CEC adopted the 2022 Title 24 standards, which went into effect on January 1, 2023. The 2022 standards continue to improve upon the previous (2019) Title 24 standards for new construction of, and additions and alterations to, residential and non-residential

⁵² California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

⁵³ California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

buildings.⁵⁴ The 2022 Title 24 standards ensure that builders use the most energy efficient and energy conserving technologies and construction practices. The 2022 Title 24 standards encourage use of electric heat pumps, requiring newly constructed residences to be electric-ready and introduces solar and battery storage standards as an optional measure to achieve compliance and increases minimum ventilation requirements to improve air quality. Compliance with Title 24 is enforced through the building permit process.

(o) CEQA Guidelines

In August 2007, the California State Legislature adopted SB 97 (Chapter 185, Statutes of 2007), requiring LUCI, formerly OPR, to prepare and transmit new CEQA Guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the Resources Agency by July 1, 2009. In response to SB 97, LUCI adopted CEQA guidelines that became effective on March 18, 2010. In late 2018, LUCI finalized amendments to the CEQA Guidelines, including changes to CEQA Guidelines Section 15064.4, which addresses the analysis of GHG emissions. The amendments became effective on December 28, 2018.

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the CEQA Guidelines.⁵⁵ The CEQA Guidelines require a lead agency to make a good-faith effort, based on the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. Discretion is given to the lead agency whether to (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. Furthermore, three factors are identified that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.⁵⁶

The administrative record for the Guidelines Amendments also clarifies “that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of California Environmental Quality Act’s requirements for cumulative impact analysis.”⁵⁷

⁵⁴ California Energy Commission, Building Energy Efficiency Standards, 2022.

⁵⁵ See 14 Cal. Code Regs. §§ 15064.7 (generally giving discretion to lead agencies to develop and publish thresholds of significance for use in the determination of the significance of environmental effects), 15064.4 (giving discretion to lead agencies to determine the significance of impacts from GHGs).

⁵⁶ 14 Cal. Code Regs. § 15064.4(b).

⁵⁷ Letter from Cynthia Bryant, Director of the Governor’s Office of Planning and Research to Mike Chrisman, California Secretary for Natural Resources, dated April 13, 2009.

(3) Regional

(a) *South Coast Air Quality Management District CEQA Guidance*

The City is located in the South Coast Air Basin (Air Basin), which consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside Counties, in addition to the San Geronio Pass area in Riverside County. The South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds.⁵⁸ A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.⁵⁹ SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 MTCO_{2e} per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO_{2e} per year would be assumed to have a less-than-significant impact on climate change. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO_{2e} per year for stationary source/industrial projects where SCAQMD is the lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects). The Working Group has been inactive since 2011, and SCAQMD has not formally adopted any GHG significance threshold for the Air Basin or other jurisdictions.

(b) *SCAG Regional Transportation Plan/Sustainable Communities Strategy*

To implement SB 375 and reduce GHG emissions by correlating land use and transportation planning, SCAG adopted the 2020–2045 RTP/SCS in September 2020. The vision for the region incorporates a range of best practices for increasing transportation choices, reducing dependence on personal automobiles, further improving air quality, and encouraging growth in walkable, mixed-use communities with ready access to transit infrastructure and employment. More and varied housing types and employment opportunities would be located in and near job centers, transit stations and walkable neighborhoods where goods and services are easily accessible via shorter trips. To support shorter trips, people would have the choice of using neighborhood bike networks, car share or micro-mobility services like shared bicycles or scooters. For longer commutes, people would have expanded regional transit services and more employer incentives to carpool or vanpool. Other longer trips would be supported by on-demand services, such as microtransit, carshare, and citywide partnerships with ride-hailing services. For those that

⁵⁸ SCAQMD, Board Meeting, December 5, 2008, Agenda No. 31, <http://www3.aqmd.gov/hb/2008/December/081231a.htm>, accessed August 2025.

⁵⁹ SCAQMD, *Greenhouse Gases CEQA Significance Thresholds*, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>, accessed August 2025.

choose to drive, hotspots of congestion would be less difficult to navigate due to cordon pricing and using an electric vehicle will be easier due to an expanded regional charging network.

The 2020–2045 RTP/SCS states that the SCAG region was home to about 18.8 million people in 2016 and currently includes approximately 6.0 million homes and 8.4 million jobs in 2022.⁶⁰ By 2045, the integrated growth forecast estimates that these figures will increase by 3.7 million people with nearly 1.6 million more homes and 1.6 million more jobs. Transit Priority Areas (TPAs)⁶¹ will account for less than 1 percent of regional total land but are projected to accommodate 30 percent of future household growth between 2016 and 2045. The 2020-2045 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region’s TPAs. TPAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

The 2020-2045 RTP/SCS is expected to reduce per capita transportation emissions by 19 percent by 2035, which is consistent with SB 375 compliance with respect to meeting the State’s GHG emission reduction goals.⁶² Due to fuel economy and efficiency improvements, GHG emission rates of model year 2017 vehicles have decreased by 15 to 20 percent when compared to model year 2008 and earlier vehicles. However, for purposes of SB 375 emissions reduction targets, the fuel economy improvements have been largely excluded from the reduction calculation. The SB 375 target focuses on the amount of vehicle travel per capita. As discussed above, LUCI, formerly OPR, recommended that achieving 15 percent lower per capita (residential) or per employee (office) vehicle miles traveled (VMT) than existing development is both generally achievable and is supported by evidence that connects this level of reduction to the State’s emissions goals (i.e., SB 375 goal). The reductions generated by fuel economy improvements are already included as part of the State’s GHG emissions reduction program and are not double-counted in the SB 375 target calculation.

On April 4, 2024, SCAG adopted the 2024–2050 RTP/SCS. Similar to the 2020–2045 RTP/SCS, the 2024–2050 RTP/SCS is a long-term plan for the Southern California region that details investment in the transportation system and development in communities to meet the existing and future needs of the region through projects, investments, policies and strategies. While the 2024–2050 RTP/SCS remains focused on its core responsibilities and on the requirements of comprehensive regional transportation planning integrated with the development of a sustainable communities strategy, it also encompasses a holistic approach to programs and strategies that support success of the RTP/SCS, such as workforce development, broadband and mobility hubs. The primary goals of the 2024–2050 RTP/SCS include:

- Mobility: Build and maintain an integrated multimodal transportation network;
- Communities: Develop, connect and sustain livable and thriving communities;
- Environment: Create a healthy region for the people of today and tomorrow; and

⁶⁰ 2020–2045 RTP/SCS population growth forecast methodology includes data for years 2000, 2010, 2016, and 2045.

⁶¹ Defined by the 2020–2045 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a major transit stop (rail or bus rapid transit station) with 15-minute or less service frequency during peak commute hours.

⁶² SCAG, Final 2020-2045 RTP/SCS, Chapter 0: Making Connections, p. 5.

- Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region.

SB 375 does not provide GHG emissions reduction targets specific to the 2024–2050 RTP/SCS that are not also applicable to the 2020–2045 RTP/SCS.

(4) Local

(a) *L.A.'s Green New Deal*

The City addressed the issue of global climate change in *Green LA, An Action Plan to Lead the Nation in Fighting Global Warming* (LA Green Plan/ClimateLA) in 2007. This document outlines the goals and actions the City has established to reduce the generation and emission of GHGs from both public and private activities.

Subsequently on April 8, 2015, Mayor Eric Garcetti released the Sustainable City pLAN, which includes both short-term and long-term aspirations through the year 2035 in various topic areas, including water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.⁶³ Specific targets included the construction of new housing units within 1,500 feet of transit by 2017, reducing VMT per capita by 5-percent by 2025, and increasing trips made by walking, biking or transit by at least 35 percent by 2025. The Sustainable City pLAN was intended to be updated every four years.

In April 2019, the Sustainable City pLAN was updated and renamed as *L.A.'s Green New Deal*, which consists of a program of actions designed to create sustainability-based performance targets through 2050 to advance economic, environmental, and equity objectives.⁶⁴ The Green New Deal augments, expands, and elaborates on the City's vision for a sustainable future and tackles the climate emergency with accelerated targets and new aggressive goals.

While not a plan adopted solely to reduce GHG emissions, within the Green New Deal, "Climate Mitigation," or reduction of GHG is one of eight explicit benefits that help define its strategies and goals. These include reducing GHG emissions through near-term outcomes:

- Reduce potable water use per capita by 22.5 percent by 2025, 25 percent by 2035, and maintain or reduce 2035 per capita water use through 2050.
- Reduce building energy use per square feet for all building types 22 percent by 2025, 34 percent by 2035, and 44 percent by 2050 (from a baseline of 68 thousand British thermal unit [mBTU] per square foot in 2015).
- All new buildings will be net zero carbon by 2030, and 100 percent of buildings will be net zero carbon by 2050.
- Increase cumulative new housing unit construction to 150,000 by 2025 and 275,000 units by 2035.

⁶³ City of Los Angeles, Sustainable City pLAN, April 2015.

⁶⁴ City of Los Angeles. *L.A.'s Green New Deal*, 2019.

- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025 and 75 percent by 2035.
- Increase the percentage of all trips made by walking, biking, micro-mobility/matched rides, or transit to at least 35 percent by 2025, 50 percent by 2035, and maintain at least 50 percent by 2050.
- Reduce VMT per capita by at least 13 percent by 2025, 39 percent by 2035, and 45 percent by 2050.
- Increase the percentage of electric and zero emission vehicles in the city to 25 percent by 2025, 80 percent by 2035, and 100 percent by 2050.
- Increase landfill diversion rate to 90 percent by 2025, 95 percent by 2035, and 100 percent by 2050.
- Reduce municipal solid waste generation per capita by at least 15 percent by 2030, including phasing out single-use plastics by 2028 (from a baseline of 17.85 pounds of waste generated per capita per day in 2011).
- Eliminate organic waste going to landfill by 2028.
- Reduce urban/rural temperature differential by at least 1.7 degrees by 2025 and 3 degrees by 2035.
- Ensure the proportion of Angelenos living within 0.5 mile of a park or open space is at least 65 percent by 2025, 75 percent by 2035, and 100 percent by 2050.

(b) City of Los Angeles Green Building Code

Article 9 of Chapter IX of the Los Angeles Municipal Code (LAMC) is referred to as the “Los Angeles Green Building Code,” which incorporates by reference portions of the CALGreen Code. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings. The Los Angeles Green Building Code includes some requirements that are more stringent than State requirements, such as increased requirements for EV charging spaces and water efficiency, which result in potentially greater energy demand reductions from improved transportation fuel efficiency and water efficiency.

(c) City of Los Angeles Solid Waste Programs and Ordinances

The recycling of solid waste materials also contributes to reduced energy consumption. Specifically, when products are manufactured using recycled materials, the amount of energy that would have otherwise been consumed to extract and process virgin source materials is reduced as well as disposal energy averted. In 1989, California enacted AB 939, the California Integrated Waste Management Act, which establishes a hierarchy for waste management practices, such as source reduction, recycling, and environmentally safe land disposal.

The City has developed and is in the process of implementing the Solid Waste Integrated Resources Plan, also referred to as the Zero Waste Plan, whose goal is to lead the City towards being a “zero waste” City by 2030. These waste reduction plans, policies, and regulations, along

with Mayoral and City Council directives, have increased the level of waste diversion for the City to 76 percent as of 2013.⁶⁵ In addition, the City adopted the Recovering Energy, Natural Resources, and Economic Benefit from Waste for Los Angeles (RENEW LA) Plan in 2006, which aims to achieve a zero waste goal through reducing, reusing, recycling, or converting the resources not going to disposal and achieving a diversion rate of 90 percent or more by 2025.⁶⁶ The City also approved the Waste Hauler Permit Program (Ordinance No. 181,519, LAMC Chapter VI, Article 6, Section 66.32-66.32.5), which requires private waste haulers to obtain AB 939 Compliance Permits to transport construction and demolition waste to City-certified construction and demolition waste processors. The City's Exclusive Franchise System Ordinance (Ordinance No. 182,986), among other requirements, sets a maximum annual disposal level and diversion requirements for franchised waste haulers to promote waste diversion from landfills and support the City's zero waste goals. These programs reduce the number of trips to haul solid waste and, therefore, reduce the amount of petroleum-based fuels and energy used to process solid waste.

(d) City of Los Angeles General Plan

The City does not have a General Plan Element specific to climate change and GHG emissions, but several stated goals, objectives, or policies in the City's General Plan Air Quality Element, Plan for Healthy LA, and Mobility Plan 2035 (Mobility Plan) encourage the reduction in GHG emissions. More specifically, the following five goals from the City's General Plan Air Quality Element would lead to GHG emission reductions:⁶⁷

- Less reliance on single-occupancy vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimal impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality;
- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels, and the implement of conservation measures, including passive measures, such as site orientation and tree planting; and
- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

(i) Housing Element (Housing Needs Assessment)

The Housing Element of the General Plan is prepared pursuant to state law and provides planning guidance in meeting housing needs identified in the SCAG Regional Housing Needs Assessment (RHNA). The Housing Element identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing and growth strategy, and provides the array of programs the City intends to implement to create and preserve sustainable, mixed-income neighborhoods across the City.

⁶⁵ City of Los Angeles, Department of Public Works, LA Sanitation, Recycling, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r?_adf.ctrl-state=kq9mn3h5a_188, accessed August 2025.

⁶⁶ City of Los Angeles, RENEW LA, Five-Year Milestone Report, 2011.

⁶⁷ City of Los Angeles, *Air Quality Element*, June 1991, pages IV-1 to IV-4.

The Housing Needs Assessment chapter of the Housing Element discusses the City's population and housing stock to identify housing needs for a variety of household types across the City. The current RHNA goal for affordable housing within the City is approximately 40 percent of new construction. However, the City's projections show affordable housing comprising 20 percent of new construction, which falls short of the forty percent RHNA goal. In order to address this shortfall in affordable housing, the Housing Element provides measures to streamline and incentivize development of affordable housing. Such measures include revising density bonuses for affordable housing; identifying locations which are ideal for funding programs to meet low-income housing goals; and rezoning areas to encourage low-income housing. With implementation of such measures to increase affordable housing, the Housing Element predicts a significant increase in housing production at all income ranges compared to previous cycles.

The Housing Element also promotes sustainability and resilience, and environmental justice through housing, as well as the need to reduce displacement. It encourages the utilization of alternatives to current parking standards that lower the cost of housing, support GHG and VMT goals and recognize the emergence of shared and alternative mobility. The Housing Element also identifies housing strategies for energy conservation, water conservation, alternative energy sources and sustainable development which support conservation and reduce demand.

(ii) Mobility Plan 2035

In August 2015, the City Council adopted the Mobility Plan, which serves as the City's General Plan circulation element. The City Council has adopted several amendments to the Mobility Plan since its initial adoption, including the most recent amendment on September 7, 2016.⁶⁸ The Mobility Plan incorporates "complete streets" principles and lays the policy foundation for how the City's residents interact with their streets. While the Mobility Plan mainly relates to transportation, certain components would serve to reduce VMT and mobile source GHG emissions. One component of the Mobility Plan is a GHG emission tracking program to establish compliance with SB 375, AB 32 and the region's Sustainable Community Strategy.

(e) Traffic Study Policies and Procedures

The City of Los Angeles Department of Transportation (LADOT) has developed the City Transportation Assessment Guidelines (TAG) (July 2019, updated July 2020 and August 2022) to provide the public, private consultants, and City staff with standards, guidelines, objectives, and criteria to be used in the preparation of a transportation assessment. The TAG establishes the reduction of vehicle trips and VMT as the threshold for determining transportation impacts and, thus, is an implementing mechanism of the City's strategy to reduce land use transportation-related GHG emissions consistent with AB 32, SB 32, and SB 375.

d. Existing Conditions

(1) Existing Statewide Greenhouse Gas Emissions

GHG emissions are the result of both natural and human-influenced activities. Regarding human-influenced activities, motor vehicle travel, consumption of fossil fuels for power generation,

⁶⁸ Los Angeles Department of City Planning, Mobility Plan 2035: An Element of the General Plan, approved by City Planning Commission on June 23, 2016, and adopted by City Council on September 7, 2016.

industrial processes, heating and cooling, landfills, agriculture, and wildfires are the primary sources of GHG emissions. Without human interventions, Earth maintains an approximate balance between the emission of GHGs into the atmosphere and the storage of GHGs in oceans and terrestrial ecosystems. Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have contributed to the rapid increase in atmospheric levels of GHGs over the last 150 years. As reported by CARB, California contributes less than one percent of global and 5.7 percent of national GHG emissions.^{69, 70} The current California GHG inventory compiles Statewide anthropogenic GHG emissions and carbon sinks/storage from years 2000 to 2023.⁷¹ It includes estimates for CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. **Table IV.C-5, State of California Greenhouse Gas Emissions**, identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2022 (i.e., the most recent year in which data are available from CARB). As shown in **Table IV.C-5**, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 38 percent in 2022.⁷²

Table IV.C-5: State of California Greenhouse Gas Emissions (million metric tons CO₂e)

Category	Total 1990 Emissions using IPCC SAR	Percent of Total 1990 Emissions	Total 2022 Emissions using IPCC AR4	Percent of Total 2022 Emissions
Transportation	150.7	35%	139.9	38%
Electric Power	110.6	26%	59.8	16%
Commercial	14.4	3%	14.8	4%
Residential	29.7	7%	24.7	7%
Industrial	103.0	24%	72.7	20%
Recycling and Waste ^a	--	--	8.2	2%
High-GWP/Non-Specified ^b	1.3	<1%	21.3	6%
Agriculture/ Forestry	23.6	6%	29.8	8%
Forestry Sinks ^c	-6.7		--	--
Net Total (IPCC AR4) ^d	431	100%	371.1	100%

^a Included in other categories for the 1990 emissions inventory.
^b High-GWP gases are not specifically called out in the 1990 inventory.
^c Revised methodology under development (not reported for 2022). Negative numbers represent the removal of carbon from the atmosphere.
^d CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.
 SOURCES: California Air Resources Board, CARB, Assembly Bill 32 Greenhouse Gas Emissions Inventory for 2000-2022 – by Category as Defined in the 2008 Scoping Plan, 2024.

(2) Existing Project Site Greenhouse Gas Emissions

The Project Site is currently developed with seven, two-story multi-family residential buildings that are a part of the Fower Drive Historic District along Flower Drive and one, two-story multi-family residential building as well as surface parking along South Figueroa Street. The proposed Project would demolish all existing development on the Project Site to develop a new

⁶⁹ CARB, California Greenhouse Gas Emissions from 2000 to 2023: Trends of Emissions and Other Indicators, November 2025, https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf, accessed December 2025.

⁷⁰ USEPA, U.S. Greenhouse Gas Emissions and Sinks: 1990 to 2022, 2024, <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2022>, accessed December 2025.

⁷¹ A carbon inventory identifies and quantifies sources and sinks of greenhouse gases. Sinks are defined as a natural or artificial reservoir that accumulates and stores some carbon-containing chemical compound for an indefinite period.

⁷² CARB, California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators, September 2024.

seven-story, mixed-use building comprised of 209 residential units, (including 16 units for Low-Income households, 22 units for Very Low-Income households, and four units for Extremely Low-Income households) and 2,705 square feet of ground level retail and restaurant uses. Therefore, existing operational GHG emissions would cease. However, to provide a more conservative analysis, emissions associated with the existing land uses were not considered in this analysis.

3. Project Impacts

a. Threshold of Significance

(1) CEQA Guidelines Appendix G

In accordance with Appendix G of the CEQA Guidelines, a project would have a significant impact related to GHG emissions if it would:

Threshold (a): Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold (b): Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project: the extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs. CEQA Guidelines Section 15064.4 does not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions and for individual projects, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence per CEQA Guidelines Section 15064.7(c).

CNRA released a technical advisory on CEQA and climate change and provided some guidance on assessing the significance of GHG emissions, and stated that, “lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice,” and that while “climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment.”⁷³

Furthermore, LUCI’s technical advisory states that “CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated

⁷³ See generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009, pages 11-13, 14, and 16; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009.

GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.”⁷⁴

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.⁷⁵ To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.⁷⁶ Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions.”⁷⁷

Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The City has not adopted a numeric threshold for the analysis of GHG impacts. As noted above, CEQA Guidelines Section 15064.4 allows the City to determine a threshold of significance that applies to the Project. Accordingly, the threshold of significance applied here is whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The 2022 Scoping Plan, SCAG’s 2024-2050 RTP/SCS, the City of Los Angeles’s Green New Deal, and the Los Angeles Green Building Code all apply to the Project and are all intended to reduce GHG emissions to meet the Statewide targets set forth in AB 32 and amended by SB 32.

(2) SCAQMD Thresholds

The 2008 SCAQMD working group proposed a 3,000 MTCO_{2e} threshold of significance for new, non-industrial development. Though not formally adopted by SCAQMD, the numeric target is supported by expert opinion and the evidence in the record of the proceedings of the SCAQMD GHG CEQA Significance Threshold Working Group, and therefore provides a valid, objective basis upon which to assess the significance of the Project’s potential contribution of GHG emissions to global climate change.

(3) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide does not identify criteria to evaluate GHG emissions impacts. Thus, the potential for the Project to result in impacts from GHG emissions is based on the CEQA Guidelines Appendix G thresholds. To answer both of those threshold questions, the City considers whether the Project is consistent with the following plans:

⁷⁴ Governor’s Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.

⁷⁵ CCR, Title 14, Section 15064(h)(3).

⁷⁶ CCR, Title 14, Section 15064(h)(3).

⁷⁷ CCR, Title 14, Section 15064(h)(3).

- AB 32 2022 Climate Change Scoping Plan;
- SCAG 2024-2050 RTP/SCS consistent with SB 375; and
- L.A.'s Green New Deal

As discussed above, LUCI has noted that lead agencies “should make a good-faith effort to calculate or estimate GHG emissions” from a project.⁷⁸ Therefore, GHG emissions for the Project are quantified below, consistent with LUCI guidelines.

b. Methodology

(1) Project Consistency with Applicable Plans and Policies

LUCI encourages lead agencies to analyze and make use of programmatic mitigation plans and programs when conducting individual project consistency analyses. On a statewide level, the Climate Change Scoping Plan provides measures to achieve AB 32 and SB 32 targets. On a regional level, SCAG's RTP/SCS contains measures to achieve VMT and GHG reductions required under SB 375. The City does not have a programmatic mitigation plan to rely on, such as a Greenhouse Gas Emissions Reduction Plan as recommended in the relevant amendments to the CEQA Guidelines. The City's Green New Deal is not an adopted plan or directly applicable to private development projects. However, the City's Green New Deal, a mayoral initiative, includes short-term and long-term aspirations pertaining to climate change. This analysis addresses consistency with these strategies and goals, as well. If the Project is designed in accordance with these policies and regulations, the Project would result in a less than significant impact, because it would be consistent with the overarching State and City regulations on GHG reduction (e.g., AB 32, SB 32, SB 375). A consistency analysis is provided and describes the Project's compliance with performance-based standards included in the regulations outlined in the applicable portions of CARB's 2022 Scoping Plan, SCAG's 2024-2050 RTP/SCS, and the City's Green New Deal. Additional consistency analysis with the Los Angeles Green Building Code is also provided.

(2) Quantification of Emissions

Global climate change is, by definition, a global cumulative impact caused and otherwise exacerbated by global GHG emissions. Therefore, there can be no meaningful project-level analysis of GHG-emissions impacts. The baseline against which to compare potential impacts of the Project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 Gt of CO₂/year.⁷⁹ As also noted above, GHGs tend to evenly mix throughout the earth's atmosphere. As a result, the geographic extent of climate change and the assessment of GHG emissions' cumulative impacts is worldwide. The Project would result in direct emissions of criteria pollutants generated by the following emissions sources:

⁷⁸ OPR Technical Advisory, p. 5.

⁷⁹ Intergovernmental Panel on Climate Change, Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014.

- Construction: emissions associated with demolition of existing uses, excavation, grading, and construction-related equipment and vehicular activity;
- Area source: emissions associated with consumer products, architectural coatings, and landscape equipment;
- Energy source (building operations): emissions associated with space heating and cooling and water heating; and
- Mobile source: emissions associated with vehicles accessing the Project Site.

This analysis considers construction and operational impacts associated with the Project. Emissions were modeled using the California Emissions Estimator Model (CalEEMod) Version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects, including multi-family development. CalEEMod was developed in collaboration with the air districts of California, who provided data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) to account for local requirements and conditions. GHG impacts for the Project were assessed utilizing CalEEMOD in accordance with the methodologies recommended by CARB and the SCAQMD.

The Project's modeled GHG emissions are compared to SCAQMD's proposed 3,000 MTCO₂e threshold of significance for new, non-industrial development as another line of evidence to assess the potential significance of the Project's GHG emission impacts. The estimated emissions inventory is also used to assess if there would be a reduction in the Project's incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions.

(a) Construction Emissions

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction generate GHG emissions. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the analysis to generate GHG emissions values for each construction activity. Please refer to CalEEMod construction output files (Appendix E) for a complete listing of construction details modeled. CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors, and vehicle trip lengths.

In accordance with SCAQMD's guidance, GHG emissions from construction were amortized (i.e., averaged annually) over the lifetime of the Project.⁸⁰ As impacts from construction activities are short-term, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG

⁸⁰ SCAQMD, Interim CEQA Greenhouse Gas (GHG) Significance Threshold, 2008.

emissions as part of the operational GHG reduction strategies.⁸¹ Thus, total construction GHG emissions were divided by 30 to determine an estimate of annual construction emissions comparable to operational emissions.

(b) Operational Emissions

Similar to construction, SCAQMD-recommends CalEEMod be used to calculate potential direct and indirect GHG emissions generated by new land uses on the Project Site, including area sources, electricity, mobile sources, solid waste generation and disposal, and water usage/wastewater generation. CalEEMod default values for generation/usage rates, GHG emission factors, and GWP values were used in the evaluation of operational GHG emissions of the Project.

Area source emissions include landscaping maintenance equipment (e.g., leaf blowers, lawn mowers, etc.), natural gas combustion (e.g., restaurant cooking); and architectural coating activities; the emissions are based on the size of the land uses (e.g., square footage or dwelling unit), the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted.

Emissions of GHGs associated with electricity demand are based on the size of the land uses, the electrical demand factors for the land uses, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for Los Angeles Department of Water and Power (LADWP) were selected in CalEEMod.

As with electricity, the emissions of GHGs associated with natural gas combustion are based on the size of the land uses, the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu), the GHG emission factors for natural gas combustion, and the GWP values for the GHGs emitted.

Mobile source GHG emissions are calculated based on emission factors and the Project's estimated trip generation, which was provided in the Project's Transportation Assessment (Appendix I) based on Institute of Transportation Engineers (ITE) guidelines.

The emissions of GHGs associated with solid waste disposal are based on the Project's proposed land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition as provided by CalEEMod, and the GWP value for the GHGs emitted.

The GHG emissions related to water usage and wastewater generation are based on the proposed land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution, electrical intensity factors for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. CalEEMod uses electricity intensity factors obtained from the 2006 CEC report, "Refining Estimates of Water-Related Energy Use in California" which represent the amount of electricity needed to transport and treat water. Water usage factors are obtained from surveys conducted throughout California

⁸¹ SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008.

for various land uses. Project water consumption GHG emissions are then quantified based on electricity usage and carbon intensity factors specific to electricity providers described above.

c. Project Design Features

No specific Project Design Features are proposed with regard to greenhouse gas emissions.

d. Analysis of Project Impacts

Threshold (a): Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold (b): Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

(1) Impact Analysis

As mentioned above, in the absence of any adopted quantitative threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted for the purpose of reducing the emissions of GHGs.

As described above, compliance with a qualifying GHG emissions reduction plan would render a project's GHG emission impacts less-than-significant. The analyses below demonstrate that the Project would not conflict with the applicable GHG emission reduction plans and policies, including CARB's Climate Change Scoping Plan, the 2024-2050 RTP/SCS, the City's Green New Deal, and the Los Angeles Green Building Code. The Project would thus not conflict with the applicable GHG reduction plans and policies.

(a) Consistency with the 2022 CARB Scoping Plan

Appendix D, Local Actions, of the 2022 Scoping Plan "includes recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA)."

The State recognizes that almost 50 percent of jurisdictions do not have an adopted CAP. Jurisdictions that wish to take meaningful climate action (such as preparing a non-CEQA qualified CAP or as individual measures) aligned with the State's climate goals in the absence of a CEQA-qualified CAP are advised to look to the three priority areas when developing local climate plans, measures, policies, and actions (transportation electrification, VMT reduction, and building decarbonization).

The State also recognizes in *Appendix D, Local Actions*, of the 2022 Scoping Plan that each community or local area has distinctive situations and local jurisdictions must balance the urgent need for housing⁸² while demonstrating that a project is in alignment with the State's

⁸² The State recognizes the need for 2.5 million housing units over the next eight years, with one million being affordable units. See page 20, Appendix D, 2022 Scoping Plan Update, November 2022.

Climate Goals. The State calls for the climate crisis and the housing crisis to be confronted simultaneously. As noted above, jurisdictions are urged to avoid creating targets that are difficult or impossible to meet as a basis to determine significance. Ultimately, targets that make it more difficult to achieve statewide goals by prohibiting or complicating projects that are needed to support the State's climate goals, like infill development, low-income housing, or solar arrays, are not consistent with the State's goals. The State also recognizes the lead agencies' discretion to develop evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions.

To assist local jurisdictions, the CARB 2022 Scoping Plan presents a non-exhaustive list of impactful GHG reduction strategies that can be implemented by local governments within the three priority areas (Priority GHG Reduction Strategies for Local Government Climate Action Priority Areas).⁸³ A detailed assessment of goals, plans, and policies implemented by the City which would support the GHG reduction strategies in the three priority areas is provided below. In addition, further details are provided regarding the correlation between these reduction strategies and applicable actions included in Table 2-1 (page 72) of the 2022 Scoping Plan (Actions for the Scoping Plan Scenario).

(i) *Transportation Electrification*

The priority GHG reduction strategies for local government climate action related to transportation electrification are discussed below and would support the Scoping Plan action to have 100 percent of all new passenger vehicles to be zero-emission by 2035 (see Table 2-1 of the Scoping Plan). The 2022 Scoping Plan creates the following relevant policy goal:⁸⁴

- **Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).**

The State has adopted AB 1236 and AB 970, which require cities to adopt streamlined permitting procedures for EVCS. As a result, the City updated Section IX of the LAMC, which requires most new construction to designate 30 percent of new parking spaces as capable of supporting future EVSE. This would exceed the CALGreen 2022 requirements of 20 percent of new parking spaces as EV capable. The 2022 CALGreen Code was updated on July 1, 2024 to require 40 percent of new parking spaces as EV capable for residential uses. City code also requires new construction to install EVSE at 10 percent of total residential parking spaces. This requirement also exceeds the CALGreen 2022 requirements of installing EVSE for 25 percent of EV capable parking spaces which is approximately five percent of total parking spaces. The City has also implemented programs to increase the amount of EV charging on city streets, EV carshare, and incentive programs for apartments to be retrofitted with EV chargers. The Project would comply with the current requirements effective at the time of building permit issuance.

The City's goals of installing EV chargers throughout the City, including siting EV charging spaces and EV-capable spaces that exceed state standards, would be consistent with the

⁸³ Table 1 of Appendix D, 2022 Scoping Plan Update, November 2022.

⁸⁴ Table 1 of Appendix D, 2022 Scoping Plan Update, November 2022.

Scoping Plan goals of transitioning to EVs. The Project would include 40 vehicle spaces, consisting of 34 parking spaces for residents and six parking spaces for visitors. The Project would provide 36 EV Ready spaces (all 34 of the residential parking spaces and 25 percent, or two, of the commercial parking spaces would be EV Ready) and would further be subject to the most updated version of the California Green Building Code at time of Project filing. The Project's EV parking supply would comply with City of Los Angeles Ordinance 184,692 requirements. Therefore, the Project would provide EV charging infrastructure that would support the 2022 Scoping Plan's focus on zero-emission transportation.

(ii) *VMT Reduction*

The priority GHG reduction strategies for local government climate action related to VMT reduction are discussed below and support the 2022 Scoping Plan goal of reducing VMT per capita 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. The 2022 Scoping Plan sets out the following relevant strategies to reduce VMT:⁸⁵

- **Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.**

Pursuant to SB 375, CARB has set regional targets to achieve GHG emissions reductions, primarily through promoting changed land use patterns and improved transportation system and transit options. The 2035 target for the SCAG region is a 19 percent reduction in per capita vehicle GHG emissions relative to 2005 levels. SB 375 requires integration of planning processes for transportation, land use and housing, and generally encourages jobs/housing proximity, promotes transit-oriented development (TOD), and encourages high-density residential/commercial development along transit corridors. To implement SB 375 and reduce GHG emissions by correlating land use and transportation planning, SCAG adopted the 2024-2050 RTP/SCS, discussed further below. The 2024-2050 RTP/SCS is expected to reduce per capita transportation emissions by 19 percent by 2035, which is consistent with SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

On the local level, the City's Mobility Plan 2035 contains measures and programs related to VMT reduction throughout the City. With regard to parking standards, the implementation of Mobility Plan programs and California statute AB 2097 reduces or eliminates parking requirements for certain types of developments near transit (within half a mile).

Mobility Plan 2035 established a "Complete Streets" planning framework that resulted in the City of Los Angeles Complete Streets Design Guide in 2015, consistent with California's Complete Streets Act of 2008. A supplemental update to the Complete Streets Design Guide was adopted by the City in 2020. The Complete Streets Design Guide also provides reduction strategies to increase public access to electric shuttles, car sharing and walking, continues to build out networks in the Mobility Plan for pedestrians, bicyclists, and transit users, has implemented an EV car sharing network, and is working towards increasing publicly available chargers, and introducing new electric DASH buses. These programs and services would be available to and facilitated by the Project.

⁸⁵ Table 1 of Appendix D, 2022 Scoping Plan Update, November 2022.

Per AB 2345 and AB 1763 (density bonus for affordable housing), the Project is not required to provide more than 0.5 parking spaces per dwelling unit. AB 2097 prohibits public agencies from imposing minimum parking requirements on development projects within a half-mile of major transit stops, such as the Project Site, enabling parking for such sites to be driven solely by market demand. In line with the regulations and strategies that call for reduced parking and facilitating electric vehicles and alternative forms of transportation under state law and Complete Streets, the proposed Project would provide 40 vehicle parking spaces including 34 residential and six commercial spaces. The Project would provide 0.16 spaces per dwelling unit. The Project would also provide 128 residential long-term bicycle spaces, 14 short-term residential bicycle spaces, two commercial long-term bicycle spaces, and two short-term bicycle spaces for a total of 146 bicycle parking spaces. The Project would provide 36 EV Ready spaces (all 34 of the residential parking spaces and 25 percent, or two, of the commercial parking spaces would be EV Ready) and would further be subject to the most updated version of the California Green Building Code at time of Project filing. Therefore, the Project would be consistent with, and not conflict with, the implementation of parking reduction and Complete Streets policies.

The Project Site is an infill development within a densely populated urban area located within walking and biking distance to existing commercial, institutional, and neighborhood-serving retail uses and transit. The Project would increase housing on a site located close to the campus and service uses. The Project Site is approximately 0.4 miles from the Expo Park and USC Metro rail stations which serve the Metro E Line and provides service to Santa Monica and Downtown Los Angeles. Metro also operates multiple local and express bus lines and stops within a 0.5-mile radius that serve the Project Site, including the 2, 81, and 550 Lines. The Los Angeles Department of Transportation (LADOT) also serves the Project Site with the DASH Southeast and King-East service routes, with a stop located approximately 400 feet south of the Project Site along South Figueroa Street. The Project's focus on locating its growth near the heavily urbanized area and near mobility options demonstrates that the Project would contribute to reducing GHG emissions from the transportation sector in line with state and local GHG reduction strategies and goals. The Project would also meet the state and City's strict efficiency standards, complying with sustainable practices included in the Title 24 standards, CALGreen Code, and City ordinances such as those requiring increased installation of EV charging stalls and stations, bike parking and storage, and low-flow fixtures.

(iii) Building Decarbonization

Building decarbonization refers to emissions reduction strategies including maximizing energy efficiency, use of low- and zero-carbon electricity, demand flexibility, energy storage, use of very low- or no-GWP refrigerants, and eliminating fuel combustion by electrifying appliances and equipment.⁸⁶ SB 100 strengthened the State's RPS by requiring that 60 percent of all electricity provided to retail users in California come from renewable sources by 2030 and that 100 percent come from carbon-free sources by 2045. The priority GHG reduction strategies for local government climate action related to electrification are discussed below and would support the Scoping Plan actions regarding meeting increased demand for electrification without new fossil gas-fire resources and all-electric appliances beginning in 2026 (residential) and 2029

⁸⁶ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix F – Building Decarbonization, 2022.

(commercial) (see Table 2-1 of the Scoping Plan). The Scoping Plan sets out the following relevant strategies to related building decarbonization:⁸⁷

- **Adopt all-electric new construction reach codes for residential and commercial uses.**

California has committed to achieving a goal of 100 percent sustainable and carbon-free energy by 2045 through SB 100, the 100 Percent Clean Energy Act of 2018. California's transition away from fossil fuel-based energy sources will bring the Project's GHG emissions associated with building energy use down to zero as the state and local service provider, LADWP electric supply becomes 100 percent sustainable and free of GHG emissions. LADWP has committed to achieve the 80 percent RPS by 2030 and to meet 100 percent carbon-free power by the year 2045.⁸⁸ The land use sector will benefit from RPS because the electricity used in buildings will be increasingly carbon-free, but implementation does not depend (directly, at least) on how buildings are designed and built.

In future years, the LADWP will be required to increase the amount of renewable energy in the power mix to comply with SB 100 requirements. The combination of the all-electric LAMC regulations and increasing availability of renewable energy will serve to reduce GHG emissions from sources traditionally powered by natural gas. Therefore, the Project would be consistent and not conflict with the LAMC.

Overall, the Project would not conflict with the GHG reduction-related actions and strategies contained in the 2022 Scoping Plan. As such, impacts related to consistency with the 2022 Scoping Plan would be less than significant.

(iv) SCAG RTP/SCS Consistency

On April 4, 2024, SCAG's Regional Council adopted Connect SoCal (2024 - 2050 Regional Transportation Plan/Sustainable Communities Strategy [2024 RTP/SCS]). Under Senate Bill (SB) 375, SCAG's 2024 RTP/SCS establishes GHG emissions goals to reduce GHG emissions in the region by eight percent from 2005 levels by 2020 and 19 percent below 2005 levels by 2035.⁸⁹ SCAG's 2024 RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

SCAG plays a critical role in project selection, programming, and administration of federal funds available to the region. The 2024 RTP/SCS invests \$751.7 billion in the transportation system, primarily in operations and maintenance, to ensure the continued performance of the entire current transportation network. Implementation of the 2024 RTP/SCS would add 181,200 new miles of transit revenue service, 4,000 new miles of bike lanes and 869 new miles to the Regional Express Lane Network. Strategic investments in infrastructure and transportation would improve access to employment centers and stimulate regional economic growth and opportunity

⁸⁷ Table 1 of Appendix D, 2022 Scoping Plan Update, November 2022.

⁸⁸ Los Angeles Department of Water & Power, LA100 Achieving 100% Renewable Energy in Los Angeles: Roadmap Towards 100% Carbon Free by 2035, 2024.

⁸⁹ SCAG, Connect SoCal (2024 – 2050 RTP/SCS), 2024.

in historically underserved areas. Connect SoCal is an important planning document for the region, allowing public agencies to implement transportation projects in a coordinated manner while qualifying for federal and state funding. Connect SoCal also supports local jurisdictions in making informed land use planning and housing development decisions that promote the key goals of the plan to reduce VMT and GHG emissions.

The 2024RTP/SCS accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness of the existing transportation system. The 2024 RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals, Federal Clean Air Act (FCAA) air quality requirements, increased housing production, improved equity and resilience, the preservation of natural lands, improvement of public health, increased transportation safety, support for the region’s vital goods movement industries, and more efficient use of resources. The majority of GHG emissions associated with new development consists of mobile sources, and therefore an analysis of the Project’s compatibility with the 2024 RTP/SCS is an appropriate indicator of whether the project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project’s consistency with the relevant goals of the 2024 RTP/SCS is analyzed in detail in **Table IV.C-6, 2024 Regional Transportation Plan/Sustainable Communities Strategy Consistency**.

Table IV.C-6: 2024 Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals	Compliance
2024 Regional Transportation Plan/Sustainable Communities Strategy Consistency¹	
Mobility: Build and maintain an integrated multimodal transportation network.	
Ensure that reliable, accessible, affordable, and appealing travel options are readily available, while striving to enhance equity in the offerings in high-need communities.	No Conflict. While this is not a project-specific policy, the Project would not conflict with this goal. The Project is located in a highly urbanized and walkable setting surrounded by residential, commercial, educational and entertainment uses with access to public transit and bicycle infrastructure. Additionally, the Project is located near existing transit routes, including the Los Angeles County Metropolitan Transportation Authority (Metro) E line located 0.3 miles northwest of the Project Site. Metro has multiple routes with stops that travel along the Project Site frontages, including the 2, 81, and 550 lines which travel north/west along South Figueroa Street. LADOT also serves the Project Site with the DASH Southeast and King-East service routes. Therefore, the Project would not conflict with this goal.
Communities: Develop, connect, and sustain communities that are livable and thriving.	
Create human-centered communities in urban, suburban, and rural settings to increase mobility options and reduce travel distances.	No conflict. The Project proposes a new seven-story, mixed-use building comprised of 209 dwelling units (including 16 units for Low-Income households, 22 units for Very Low-Income households), and four units for Extremely Low-Income households) and 2,705 square feet of ground level retail and restaurant uses. The Project is located in a highly urbanized setting surrounded by residential, commercial, educational and entertainment

SCAG Goals	Compliance
	<p>uses. Additionally, the Project is located near existing transit routes, including the Metro Expo Line located 0.3 miles northwest of the Project Site. LA Metro has multiple routes with stops that travel along the Project Site frontages, including the 2, 81, and 550 lines which travel north/west along South Figueroa Street. The LADOT also serves the Project Site with the DASH Southeast and King-East service routes. Therefore, the Project would not conflict with this goal.</p>
<p>Produce and preserve diverse housing types in an effort to improve affordability, accessibility, and opportunities for all households.</p>	<p>No Conflict. The Project proposes the development of 209 apartment units which would include 42 units of affordable housing, providing new housing opportunities within the City for a variety of income levels. Of the 209 units, 16 units would be designated for Low-Income households, 22 units for Very Low-Income households, and four units for Extremely Low-Income households. Therefore, the Project would not conflict with this goal.</p>
<p>Environment: Create a healthy region for the people of today and tomorrow.</p>	
<p>Develop communities that are resilient and can mitigate, adapt to, and respond to chronic and acute stresses and disruptions, such as climate change.</p>	<p>No Conflict. As discussed in the Project's Air Quality Assessment, the Project would not exceed SCAQMD's regional or localized thresholds. As confirmed by the California Supreme Court in the <i>Friant Ranch</i> decision², projects that do not exceed the SCAQMD's regional criterial pollutant and localized significance thresholds (LSTs) would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts. The Project would provide new housing on an infill site in a dense and highly urbanized area near transit, services, educational institutions, and services, reducing vehicle miles traveled. In addition, the Project would comply with all applicable efficiency requirements and provide EV chargers for the residential and commercial components. The Project is located approximately 10.4 miles inland and would therefore not be subject to risks associated with sea level rise. The Project would also provide central air conditioning in all units and commercial spaces to offer relief from increased exterior surface temperatures. The Project thus promotes GHG-reduction strategies and is well suited to maintaining resiliency against the effects of climate change and associated health impacts. Therefore, the Project would not conflict with this goal.</p>
<p>Integrate the region's development pattern and transportation network to improve air quality, reduce greenhouse gas emissions and enable more sustainable use of energy and water.</p>	<p>No Conflict. While the Project is not a transportation improvement Project, location of the Project within a highly developed area would reduce trip lengths, which would reduce GHG and air quality emissions. Therefore, the Project would not conflict with this goal.</p>
<p>Conserve the region's resources.</p>	<p>No Conflict. The proposed Project is located on an infill site that is not designated for agricultural uses, natural resources, or conservation. Project development would</p>

SCAG Goals	Compliance
	not result in a loss of the region’s resources. Therefore, the Project would not conflict with this goal.
Economy: Support a sustainable, efficient, and productive regional economic environment that provides opportunities for all people in the region.	
Improve access to jobs and educational resources.	No Conflict. The Project would provide new housing near transit and educational institutions, reducing travel distances for residents. Additionally, the Project includes commercial uses, providing new employment opportunities. It is also situated on a main commercial thoroughfare in an area surrounded by a wide variety of commercial uses providing jobs, in addition to being connected to other employment centers and uses through its close proximity to transit including light rail. Therefore, the Project would not conflict with this goal.
<p>N/A = Not Applicable Source: 1. SCAG, Connect SoCal (2024 – 2050 RTP/SCS), 2024. 2. <i>Sierra Club v. County of Fresno</i> (Dec. 24, 2018) 6 Cal.5th 502.</p>	

Consistency with Integrated Growth Forecast

The RTP/SCS provides socioeconomic forecast projections of regional population growth. The forecasts, which are adopted by SCAG’s Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.

Growth forecasts prepared by SCAG contained in the 2024-2050 RTP/SCS indicate that the number of households within the City will increase from 1,398,600 in 2019 to 1,828,200 in 2050, an increase of 429,600 households.⁹⁰ The Project would include 209 units which would provide replacement housing for approximately 51 units. Therefore, the net number of new units on the Project Site would be 158 units.

The Project’s proposed net 158 units would represent 0.04 percent of the City’s anticipated household growth between 2019 and 2050 forecasted by SCAG. Thus, the Project’s estimated household growth would be within regional growth projections for the City.

Based on the City’s average household size of 2.7, the increase of 429,600 households under the 2024-2050 RTP/SCS in the City between 2019 and 2050 would result in an approximate increase of 1,159,920 persons in the City between 2019 and 2050.⁹¹ When utilizing the average household size of 3.35 for the South Los Angeles Community Plan Area which is higher than the City, the Project’s net 158 proposed units would result in a population increase of approximately 529 residents. The Project’s anticipated population growth (529 persons) would represent 0.05 percent of the City’s anticipated growth between 2019 and 2050. Thus, the Project’s estimated population growth would be within regional growth projections for the City.

⁹⁰ SCAG, Connect SoCal 2024 Demographics and Growth Forecast, April 4, 2024, page 40.

⁹¹ SCAG, Connect SoCal 2024 Demographics and Growth Forecast, April 4, 2024, page 40.

As shown in **Table IV.C-6** and discussed above, the Proposed Project would be consistent with the stated goals and growth forecast of the 2024 RTP/SCS, ensuring that the Project's contribution to climate change is not cumulatively considerable and that the Project would not interfere with SCAG's ability to achieve the region's GHG emission reduction target of 19 percent by the year 2035 or the post-2020 mobile source GHG reduction targets consistent with applicable relevant state GHG reduction goals.

Consistency with VMT Reduction Strategies and Policies

As discussed above, the City is basing its determination of significance of the Project's GHG emissions for CEQA purposes solely on the Project's consistency with State, regional, and local regulatory strategies and policies adopted to reduce GHG emissions. The Project design includes characteristics that would reduce trips and VMT within the Air Basin as measured by CalEEMod as compared to the Project without implementation of VMT reducing measures. These relative reductions in vehicle trips and VMT from the Project without implementation of VMT reducing measures within the Air Basin help quantify the GHG emissions.

The Project would develop residential and commercial uses on the Project Site in close proximity to existing educational, office, retail, and restaurant uses, which would reduce VMT by encouraging walking and non-automotive forms of transportation, introducing new residential uses in close proximity to job centers, and increasing transit accessibility by locating new residential units within close proximity to existing bus routes and the Metro E Line. The Project is consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near public transit. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops. Implementation of these sustainability features would contribute to a reduction in VMT.

The Project would also be consistent with the following key GHG reduction strategies in the 2024-2025 RTP/SCS, which is based on changing the region's land use and travel patterns:

- Encourage and support the implementation of projects, both physical and digital, that facilitate multimodal connectivity, prioritize transit and shared mobility, and result in improved mobility, accessibility and safety;
- Encourage residential and employment development in areas surrounding existing and planned transit/rail stations;
- Promote the growth of origins and destinations, with a focus on future housing and population growth, in areas with existing and planned urban infrastructure that includes transit and utilities; and
- Encourage housing development in transit-supportive and walkable areas that create more interconnected and resilient communities.

Further, the Project is located within a Transit Priority Area and Priority Development Area and is located adjacent to a High Quality Transit Corridor (HQTC)⁹² and the Project would contribute to the productivity and use of the regional transportation system. The Project would

⁹² A high-quality transit corridor is defined in PRC Section 21155(b) as "[a] corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours." The City of Los Angeles defines peak hours as between 6:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 7:00 p.m.

provide housing and employment near transit and encourage active transportation by providing new bicycle parking infrastructure. Thus, the Project would further promote a reduction in VMT and subsequent reduction in GHG emissions and would be consistent with the 2024-2050 RTP/SCS goals.

Increased Use of Alternative Fueled Vehicles Policy Initiative

The second category of strategies and policies of the 2024-2050 RTP/SCS, with regard to individual development projects, such as the Project, is to increase alternative fueled vehicles to reduce per capita GHG emissions. The 2024-2050 RTP/SCS policy initiative focuses on accelerating the deployment of a zero-emission transportation system. As discussed in Section II, Project Description, of this Draft EIR, the Project would include 40 vehicle spaces, consisting of 34 parking spaces for residents and six parking spaces for visitors. The Project would provide 36 EV Ready spaces (all 34 of the residential parking spaces and 25 percent, or two, of the commercial parking spaces would be EV Ready) and would further be subject to the most updated version of the California Green Building Code at time of Project filing.

Energy Efficiency Strategies and Policies

The third category of strategies and policies of the 2024-2050 RTP/SCS for individual developments, such as the Project, involves improving energy efficiency (e.g., reduction energy consumption) to reduce GHG emissions. The 2024-2050 RTP/SCS policy initiative focuses on exploring and advancing the transition toward zero-emission and clean technologies and other transformative technologies, where viable. As discussed in Section II, Project Description, of the Draft EIR, the Project has been designed and would be constructed to incorporate environmentally sustainable building features and construction protocols required by the Los Angeles Green Building Code and the CALGreen Code. The Project would emphasize energy and water conservation, which would be achieved through the use of energy-efficient heating, ventilation, and air conditioning (HVAC), lighting systems, a gray water system for irrigation, ENERGY STAR® appliances, and low-flow plumbing fixtures. The Project would also reserve 15 percent of roof area for solar use.

Land Use Assumptions

At the regional level, the 2024-2050 RTP/SCS is a plan adopted for the purpose of reducing GHGs. In order to assess the Project's consistency with the 2024-2050 RTP/SCS, this Draft EIR also analyzes the Project's land use characteristics for consistency with those utilized by SCAG in its SCS. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as the 2024-2050 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The Project's consistency with the applicable goals and principles set forth in the 2024-2050 RTP/SCS is discussed in Section IV.D, Land Use and Planning, of the Draft EIR.

In sum, the Project is the type of land use development that is encouraged by the 2024-2050 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve the GHG reductions from the land use and transportation sectors required by

SB 375, which, in turn, advances the State’s long-term climate policies.⁹³ By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with State regulatory requirements.

Overall, the Project would not conflict with the GHG reduction-related actions and strategies contained in the 2024-2050 RTP/SCS. As such, impacts related to consistency with the 2024-2050 RTP/SCS would be less than significant.

(v) Consistency with the City of Los Angeles Green New Deal

The City’s Green New Deal includes both short-term and long-term goals through the year 2050 in various topic areas, including water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.

While not a plan adopted solely to reduce GHG emissions, addressing climate change is one of eight explicit topics that help define the Green New Deal’s strategies and goals. Although the Green New Deal mainly targets GHG emissions related to City-owned buildings and operations, certain reductions associated with the Project would promote the Green New Deal’s goals. The Green New Deal’s specific targets include ensuring 57 percent of new housing units are built within 1,500 feet of transit by 2025 and 75 percent by 2035; reducing VMT per capita by at least 13 percent by 2025, 39 percent by 2035, and 45 percent by 2050; increasing the percentage of all trips made by walking, biking, micro-mobility/matched rides or transit to at least 25 percent by 2025 and 50 percent by 2035 and has established targets such as 100 percent renewable energy by 2045, installation of 10,000 publicly-available EVSE by 2022 and 28,000 by 2028, diversion of 100 percent of waste by 2050, and recycling 100 percent of wastewater by 2035.⁹⁴

Table IV.C-7: Project Consistency with Applicable GHG Emissions Goals and Actions of City’s Green New Deal provides a discussion of the Project’s consistency with applicable GHG-reducing actions from the Green New Deal. As discussed therein, the Project would not conflict with the applicable goals and actions of the Green New Deal.

Table IV.C-7: Project Consistency with Applicable GHG Emissions Goals and Actions of City’s Green New Deal

Action	Description	Consistency Analysis
Focus Area: Local Water		
Reduce potable water use per capita by 22.5% by 2025; and 25% by 2035; and maintain or reduce 2035 per capita water use through 2050.	The City would build upon the success of Save the Drop program and develop additional water conservation campaigns. In addition, the City would continue to benchmark customer use and improve data gathering to identify effective programs.	No Conflict. While this action primarily applies to the City and LADWP, the Project would incorporate water conservation features to reduce water use. Water usage rates were calculated assuming default CalEEMod rates. Water usage rates under City

⁹³ As discussed above, SB 375 legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32.

⁹⁴ City of Los Angeles, L.A.’s Green New Deal, Sustainable City pLAn, 2019 Targets.

Action	Description	Consistency Analysis
		Ordinance No. 184,248, the 2019 California Plumbing Code, 2022 CALGreen Code, 2020 Los Angeles Plumbing Code, and 2022 Los Angeles Green Building Code reflects approximately a 20-percent reduction in water usage as compared to the CalEEMod default base demand.
Focus Area: Clean and Healthy Buildings		
All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050.	The City would perform a complete building electrification study and develop supporting programs. Financing would be expanded and improved to provide electrification, existing energy efficiency, and solar programs.	No Conflict. While this action primarily applies to the City, the Project would be designed and operated to meet the applicable requirements of the CALGreen Code and the Los Angeles Green Building Code. The Project would be subject to the 2022 Title 24 Standards which represent “challenging but achievable design and construction practices” that represent “a major step towards meeting the Zero Net Energy (ZNE) goal”. ¹
Reduce building energy use per square foot for all building types 22% by 2025; 34% by 2025; and 44% by 2050.	The City would increase awareness of incentives and smart building energy management systems. An energy consumption report will be prepared to assess the energy-water nexus.	No Conflict. While this action primarily applies to the City, the Project would be designed and operated to meet or exceed the applicable requirements of the CALGreen Code and the Los Angeles Green Building Code.
Focus Area: Mobility and Public Transit		
Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050.	The City would update the Transportation Demand Management (TDM) ordinance and develop first/last mile infrastructure improvements around transit stations. TDM strategies would also be implemented consistent with the West Wide Mobility Plan to ease congestion.	No Conflict. While this action primarily applies to the City, the Project Site is located in a highly urbanized and walkable setting surrounded by residential, commercial, educational and entertainment uses with access to public transit and bicycle infrastructure. Additionally, the Project is located near existing transit routes, including the LA Metro Expo Line located 0.3 miles northwest of the Project Site. LA Metro has multiple routes with stops that travel along Project Site frontages, including the 2, 81, and 550 Lines which travel north/west along South Figueroa Street. The LADOT also serves the Project Site

Action	Description	Consistency Analysis
		<p>with the DASH Southeast and King-East service routes. This encourages the use of public transit and reduces Project-generated vehicular trips and related VMT. The Project would also promote a pedestrian-friendly community by placing residential and commercial uses within walking distance of office, retail, and commercial uses. The Project is designated as a PDA by the 2024-2050 RTP/SCS. The Project would also provide bicycle parking spaces in accordance with LAMC requirements. The Project's proposed residential area would result in an estimated VMT per capita of 4.9, which would be below the City's threshold for the South Los Angeles Area Planning Commission (APC).</p>
<p>Focus Area: Mobility and Public Transit</p>		
<p>Increase the percentage of electric and zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050.</p>	<p>The City would increase the electric vehicle ownership by providing rebates for used EVs and chargers, as well as promote trade-in events for electric vehicles. The City would also increase the number of EV charging stations by pursuing public-private partnerships in developing charging stations, streamline permitting processes for EV charger installations and update building codes to simplify EV charging requirements.</p>	<p>No Conflict. The Project would support this policy because the Project would provide EVSE and electric vehicle supply wiring consistent with applicable City requirements.</p>
<p>¹ CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.</p>		

Although the City's Green New Deal is not an adopted plan or directly applicable to private development projects, the Project would not conflict with its goals as it is an infill development consisting of multifamily housing and commercial uses on an infill site in a highly urbanized area in close proximity to transit. The Project is located near existing transit routes, including the Metro E Line located 0.3 miles northwest of the Project Site. Metro has multiple stops for routes that travel along the Project Site frontages, including the 2, 81, and 550 lines which travel north/west along South Figueroa Street. The LADOT also serves the Project Site with the DASH Southeast and King-East service routes. Furthermore, the Project would comply with CALGreen Code and comply with the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) in furtherance of the aspirations included in the Green New Deal with regard to energy-efficient buildings and waste and landfills. The Project would also provide bicycle parking and facilities. Therefore, as the

Project's GHG emissions would be generated in connection with a development located and designed to be consistent with the applicable City plan goals and actions for reducing GHG emissions, the Project would not conflict with these City plans adopted for the purpose of reducing GHG emissions.

Overall, the Project would not conflict with the Green New Deal. As such, impacts pertaining to consistency with the Green New Deal would be less than significant.

(vi) Los Angeles Green Building Code

The Project would comply with the Los Angeles Green Building Code by complying with the California Title 24 Building Energy Efficiency Standards, as codified with amendments by the City. The Project would also meet the mandatory measures of the CALGreen Code as amended in the LAMC by the City. The residential component of the Project would be all-electric, supporting Statewide carbon neutrality goals. Therefore, the Project would not conflict with the Los Angeles Green Building Code.

(vii) State Executive Orders and Policies

A study prepared by E3 shows that the State's existing and proposed regulatory framework will put the State on a pathway to reduce its GHG emissions level to the statewide policy goal included in Executive Order B-30-15 of 40 percent below 1990 levels by 2030 and to 80 percent below 1990 level by 2050 if additional appropriate reduction measures are adopted.⁹⁵ Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, which requires that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. As discussed above, the 2022 Scoping Plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. The Project advances these goals by reducing VMT, as described in more detail above, and other sustainable features that encourage the use of electric vehicles, improve energy efficiency, and reduce water usage, including, but not limited to the use of energy-efficient heating, ventilation, and air conditioning (HVAC), lighting systems, a gray water system for irrigation, ENERGY STAR® appliances, and low-flow plumbing fixtures. Additionally, the Project would reserve 15 percent of roof area for solar use.

⁹⁵ Energy and Environmental Economics (E3), *Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board (October 2020)* Mahone, Amber. The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the State's goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. With input from the agencies, E3 developed long-term scenarios that explore the potential pace at which emission reductions can be achieved, as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. The model encompasses the entire California economy with detailed representations of the buildings, industry, transportation, and electricity sectors.

The emissions modeling in the 2022 Scoping Plan has projected 2030 statewide emissions, which take into account known commitments (reduction measures), such as SB 375, SB 350, and other measures. The emissions inventory identified an emissions gap, meaning that emissions reductions due to known commitments do not decline fast enough to achieve the 2030 target. In order to fill this gap, the 2022 Scoping Plan assumed that new regulations, as well as the Cap-and-Trade Program, would deliver the reductions necessary to achieve the 2030 emissions target. As mentioned above, in 2017, AB 398 was passed to clarify the role of the State's Cap-and-Trade Program from 2021 through 2030. As a result of AB 398, many programs to achieve the 2030 target increased in stringency beginning in 2021 to meet accelerated 2030 targets. In the 2022 Scoping Plan, CARB has identified that changes to the Cap-and-Trade Program would be necessary to achieve the 2030 target. CARB is expected to issue a notice of formal rulemaking to incorporate changes necessary to the Cap-and-Trade Program in 2024. Although the Project is consistent with the 2022 Scoping Plan, additional measures to achieve the 2030 targets and beyond are outside of the Project's control. While any evaluation of post-2030 Project emissions would be speculative, the Project would not preclude or impede the State achieving the 2030 targets.

Executive Order S-3-05 establishes a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. This goal, however, has not been codified. That being said, studies have shown that, in order to meet the 2050 target, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its 2008 Climate Change Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 goal are too far in the future to define in detail".⁹⁶ In the 2014 Scoping Plan, however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."⁹⁷

Although the Project's emissions level in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal, and it is reasonable to expect the Project's emissions level (1,368 metric tons of CO₂e per year as discussed below) to decline as the regulatory initiatives identified by CARB in the 2014 Scoping Plan are implemented, and other technological innovations occur.⁹⁸ Stated differently, the Project's total emissions at buildout presented in **Table IV.C-10** in the analysis below,⁹⁹ represents the maximum emissions inventory for the Project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. That inventory takes into account existing regulations and regulations that would apply to the Project at its buildout year. The Project's GHG emissions associated with electrical usage would be reduced to zero in 2050 since the electricity provider (LADWP) servicing the

⁹⁶ CARB, Climate Change Scoping Plan: A Framework for Change, December 2008, p. 117.

⁹⁷ CARB, 2017 Scoping Plan Update, November 2017, p. 18.

⁹⁸ Such regulatory measures which will further reduce GHG emissions include the RPS under SB 100 which requires 100-percent renewable energy by 2045.

⁹⁹ The analysis is conservative because credit from existing operational emissions, which would demonstrate further reduced emissions, has not been accounted for in the analysis.

Project Site must generate electricity with 100 percent renewables by 2045 (SB 100). As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would not conflict with the Executive Order’s horizon year (2050) goal. Further, the Project is consistent with the 2024-2050 RTP/SCS, which demonstrate that the region would meet the post-2030 GHG reduction goal of 19 percent by 2035. The Project is the type of land use development that is encouraged by the 2024-2050 RTP/SCS to reduce VMT to achieve GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State’s long-term climate policies. The Project’s proposed residential use would result in an estimated VMT per capita of 4.9, which would be below the City’s threshold for the South Los Angeles Area Planning Commission (APC). By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with State climate targets for 2030 and beyond.

For the reasons described above, the Project’s post-2030 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets and Executive Orders S-3-05 and B-30-15.

(viii) Carbon Neutrality

As discussed above, Executive Order B-55-18 establishes a new statewide goal to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter. Based on this executive order, CARB would work with relevant State agencies to develop a framework for implementation and accounting that tracks progress towards this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

Also discussed above, CARB has released a study evaluating three scenarios that achieve Carbon Neutrality in California by 2045. The scenarios analyzed to achieve carbon neutrality include a High Carbon Dioxide Removal (CDR) scenario, Zero Carbon Energy scenario, and a Balanced scenario. Under each of these scenarios, CARB proposed reduction strategies for various sectors that contribute GHG emissions throughout the State. **Table IV.C-8: Project Consistency with 2045 Carbon Neutrality Goals** provides a summary of key emission reduction strategies required to achieve Carbon Neutrality by 2045. In addition, **Table IV.C-8** demonstrates how the Project would be consistent or not conflict with these measures.

Although specific details are not yet available for the GHG reduction measures discussed above, implementation of these measures would require regulations to be enforced by the State. The Project would be required to comply with regulations in support of the goal of Carbon Neutrality by 2045 and would, therefore, not be in conflict with and, thus, be consistent with the State’s achievement of the goals included in the Executive Order B-55-18.

Table IV.C-8: Project Consistency with 2045 Carbon Neutrality Goals

Sector	Description	Consistency Analysis
Low Carbon Fuels	The State would use advanced biofuels for ground transportation, renewable aviation fuel, and biomethane for electricity	No Conflict. This action primarily applies to the transportation fuel providers. However, the Project would source transportation fuel

Table IV.C-8: Project Consistency with 2045 Carbon Neutrality Goals

Sector	Description	Consistency Analysis
	generation. Hydrogen may also be blended into pipeline gas demand as well as hydrogen for fuel cell transportation.	from the providers that would comply with these reduction measures.
Buildings	The State would require 100 percent of sales of electric appliances by 2030 through 2040.	No Conflict. The Project would comply with all such regulatory requirements.
Transportation	<p>The State would require 100 percent Battery Electric Vehicle (BEV) sales for Light Duty Vehicles (LDV) and Medium Duty Vehicles (MDV) as early as 2030. Sales of Heavy Duty Vehicles (HDV) would achieve at least 45 percent BEV or CNG as early as 2035.</p> <p>At least 50 percent of rail within the State would be electrified and 50 percent of in-state aviation be electrified.</p>	No Conflict. Residents and visitors of the Project purchasing vehicles within the State would comply with BEV or compressed natural gas (CNG) vehicle sales requirements. Therefore, the Project would not conflict with requirements on sales of BEV or CNG powered vehicles. In addition, the Project would install EVSE as dictated by City and CALGreen requirements.
Industry and Agriculture	<p>The State would require industry to be up to 53 percent electrified and up to 19 percent of energy to be met with hydrogen. Cement, glass, oil, and gas industries would be required to achieve carbon capture of at least 14 MMT. Agricultural energy emissions would be reduced by at least 80 percent.</p> <p>Oil and gas extraction and petroleum refining energy demand would be reduced by at least 90 percent.</p>	No Applicable. The Project would not include industrial or agricultural uses.
Electricity	Electricity generation within the state is fueled with natural gas, biomethane, or hydrogen. At least 95 percent of electricity generation would be zero carbon.	No Conflict. This action primarily applies to the local power utility company (LADWP). However, the Project would source electricity from the LADWP that would comply with these reduction measures.
High GWP and Non-Combustion	Landfill and wastewater methane would be reduced by 23 percent. Pipeline fugitive emissions would be reduced by 72 percent, agricultural methane would be reduced by 41 percent, and refrigerants would be reduced by 75 percent. Percent reductions are relative to Year 2020.	No Conflict. This action primarily applies to the local water utility (LADWP) and solid waste utility. However, the Project would source water from the LADWP and generate solid waste within the City that would comply with these reductions.

Table IV.C-8: Project Consistency with 2045 Carbon Neutrality Goals

Sector	Description	Consistency Analysis
Carbon Dioxide Removal	At least 33 million metric tons/year of carbon dioxide removal needed in 2045.	Not Applicable. While this action primarily applies to the State, the Project would comply with this policy as required by current or future regulations.
Source: Energy + Environmental Economics, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, Table 1, October 2020.		

(ix) Conclusion

The Project's consistency with applicable GHG reduction plans and policies demonstrates that the Project does not conflict with these regulations and policies, and complies with or exceeds the regulations and reduction actions/strategies outlined in the Climate Change Scoping Plan, 2024-2050 RTP/SCS, the City's Green New Deal, and the Los Angeles Green Building Code. **Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to GHG emissions would be less than significant.**

(b) Project Emissions

As described above, compliance with a GHG emissions reduction plan renders a project's impact less than significant. Quantitative calculations are provided below in support of the consistency analysis, which describes the Project's compliance with, or exceedance of performance-based standards included in the regulations and policies outlined in the applicable portions of the Climate Change Scoping Plan, the 2024-2050 RTP/SCS, the City's Green New Deal, and the Los Angeles Green Building Code. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Project is provided below.

(i) Construction

The Project would result in direct emissions of GHGs from construction. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the Project is depicted in **Table IV.C-9, Construction-Related Greenhouse Gas Emissions.**

Table IV.C-9: Construction-Related Greenhouse Gas Emissions

Category	MTCO ₂ e
Construction Year 1 (2027)	442
Construction Year 2 (2028)	561
Construction Year 3 (2029)	590
Total Construction Emissions	1,593
30-Year Amortized Annual Construction	53
Source: CalEEMod version 2022.1.	

As shown in **Table IV.C-9**, the Project would result in the generation of approximately 1,593 MTCO₂e over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period, then added to the operational emissions in order to determine the Project's annual GHG emissions inventory.¹⁰⁰ The amortized Project construction emissions would be 53 MTCO₂e per year. A complete listing of the construction equipment by on-site and off-site activities, durations, and emissions estimation model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix E of this Draft EIR. Once construction is complete, the generation of these GHG emissions would cease.

(ii) *Operational*

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas as part of onsite commercial uses, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, solid waste generation, and the energy required to convey water to, and wastewater from, the Project. Total GHG emissions associated with the Project are summarized in **Table IV.C-10, Operational Project Greenhouse Gas Emissions**.

Table IV.C-10: Operational Project Greenhouse Gas Emissions

Emissions Source	MTCO₂e per Year
Construction Amortized Over 30 Years	53
Area Source	22
Energy	291
Mobile	910
Waste	60
Water and Wastewater	31
Refrigerants	1
Total Project Emissions	1,368
Source: CalEEMod version 2022.1.	

Below is a description of the primary sources of operational emissions:

Area Sources. Area source emissions occur from architectural coatings, landscaping equipment, and consumer products. Landscaping is anticipated to occur throughout the Project site. Additionally, the primary emissions from architectural coatings are volatile organic

¹⁰⁰ The amortization period of 30-years is based on the standard assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

compounds, which are relatively insignificant as direct GHG emissions. Refer to Appendix E of this Draft EIR for the supporting calculations that reflect the emission reduction measures.

Energy Consumption. Energy consumption consists of emissions from Project consumption of electricity and natural gas.

Mobile Sources. Mobiles sources from the Project were calculated with CalEEMod based on the trip generation from the *3822 Figueroa Transportation Assessment* (Traffic Study), prepared by Kimley-Horn (March 2025). According to the Traffic Study, the Project would generate 975 total daily vehicle trips.¹⁰¹

Solid Waste. Solid waste releases GHG emissions in the form of methane when these materials decompose.

Water and Wastewater. GHG emissions from water demand would occur from electricity consumption associated with water conveyance and treatment.

Refrigerants. Air conditioning and refrigerator equipment typically generate GHG emissions.

Table IV.C-10 shows that the Project's unmitigated emissions would be approximately 1,368 MTCO₂e annually from operations with amortized construction. Project-related GHG emissions would not exceed SCAQMD's interim 3,000 MTCO₂e per year threshold. Therefore, Project-related GHG emissions would be less than significant.

(c) Conclusion

As set forth above, the Project would generate GHG emissions. However, even a very large individual project would not generate enough GHG emissions on its own to significantly influence global climate change. Moreover, as discussed above, the Project would not conflict with the Climate Change Scoping Plan, the 2024-2050 RTP/SCS, the City's Green New Deal, or the Los Angeles Green Building Code. The Project's evaluation of consistency with the above plans is the primary basis for determining the significance of the Project's GHG-related impacts on the environment. Accordingly, as shown above, since the Project would not conflict with applicable plans, regulations or goals, the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. In addition, the Project's GHG emissions are less than half the 3,000 MTCO₂e per year threshold proposed by SCAQMD, totaling 1,368 MTCO₂e annually. Thus, as the Project would not conflict with relevant plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs, impacts related to GHG emissions would be less than significant.

¹⁰¹ The Transportation Assessment for this Project, found in Appendix I, of this Draft EIR, notes that the Project would generate a total of 1,017 daily vehicle trips. This amount is derived using generation rates utilized in the LADOT VMT Calculator, however the Project estimated 975 daily vehicle trips which is derived using the ITE Trip Generation Manual generation rates. Pursuant to the City's Transportation Assessment Guidelines screening criteria, a project's daily vehicle trips may be estimated using the LADOT VMT Calculator tool or the most recent edition of the ITE Trip Generation Manual. A technical memorandum was prepared dated April 2026 that analyzes the relevant potential environmental impacts associated with the LADOT VMT Calculator trip generation figures, which confirmed impacts under that scenario remain less than significant. The technical memorandum is attached to as Appendix K of this Draft EIR.

(2) Mitigation Measures

Project-level impacts related to GHG emissions would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to GHG emissions were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e. Cumulative Impacts

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years, which allow them to be dispersed fairly evenly in earth's atmosphere around the globe.

(1) Impact Analysis

As a general matter, an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a cumulatively consideration contribution to the global phenomenon of climate change.¹⁰² The State CEQA Guidelines generally address GHG emissions as a cumulative impact because of the global nature of climate change.¹⁰³ As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself".¹⁰⁴ As such, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. In addition, the Project, as well as other cumulative related projects, would also be subject to all applicable regulatory requirements mentioned above that tend to reduce GHG emissions, including compliance with CEQA for non-exempt projects. As discussed above, the Project is consistent with and would not interfere with the achievement of the applicable state and local laws, plans and policies analyzed herein, and Project-related GHG emissions would not exceed the 3,000 MTCO_{2e} threshold of significance proposed by SCAQMD for non-industrial development projects.

The analysis shows that the Project is consistent with the 2022 Scoping Plan, the 2024-2050 RTP/SCS, regulatory requirements to reduce regional GHG emissions from the land use and transportation sections by 2020 and 2035, and the aspirations of the Green New Deal, which includes specific targets related to housing and development and mobility and transit. Given the Project's consistency with statewide, regional, and local plans adopted for the reduction of GHG emissions, the Project's incremental contribution to GHG emissions and their effects on climate change would not be cumulatively considerable. **For these reasons, the Project's cumulative impact on global climate change would be less than significant.**

¹⁰² California Air Pollution Control Officers Association, *CEQA and Climate Change White Paper*, 2008.

¹⁰³ Pub. Resources Code, § 21083, subd. (b)(2).

¹⁰⁴ *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 512.

(2) Mitigation Measures

Cumulative impacts related to GHG emissions would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to GHG emissions were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.