4. ENVIRONMENTAL IMPACT ANALYSIS
F. 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, 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 to reduce GHG emissions. Details of the GHG analysis are provided in the supplemental technical report, which is attached as Appendix F-1 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. 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 waste.

[1] USEPA, *Climate Change Indicators: Greenhouse Gases*, https://www.epa.gov/climate-indicators/greenhouse-gases, accessed September 1, 2021.

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 2019 report, published in December 2019, atmospheric carbon dioxide (CO_2) concentrations in 2018 were found to be 47 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 CO_2 concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. Regarding emissions of non-CO_2 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 (CH_4) 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]

In December 2015, the US entered into the Paris Agreement which has a goal of keeping a global temperature rise this century below 2 degrees Celsius above pre-industrial levels and limit the temperature increase further to 1.5 degrees Celsius. This agreement requires that all parties report regularly on emissions and implementation efforts to achieve these goals.

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2 Pew Center on Global Climate Change, *Climate Change 101: Understanding and Responding to Global Climate Change*.

3 P. Friedlingstein et al.: *Global Carbon Budget 2019*, 2019.

4 USEPA, *Global Greenhouse Gas Emissions Data*, www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data, accessed September 1, 2021.

5 USEPA, *Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gas*, updated April 2021.

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.

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 CO_2 emissions from fossil fuel consumption per unit of Gross State Product. However, in terms of total CO_2 emissions, California is second only to Texas in the nation and is the 12th largest source of climate 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 the Earth's atmosphere that play a critical role in determining temperature near the Earth's surface. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).[8] More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Compounds that are regulated as GHGs are discussed in Table 4-F-1 below.[9,10]

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 Intergovernmental Panel on Climate Change, *Second Assessment Report, Working Group I: The Science of Climate Change*, 1995.

10 Intergovernmental Panel on Climate Change, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, Table 2.14, 2007.

Table 4.F-1
Description of Identified GHGs[a]

GREENHOUSE GAS	GENERAL DESCRIPTION
Carbon Dioxide (CO_2)	An odorless, colorless GHG, which has both natural and anthropocentric 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 (CH_4)	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 (N_2O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O 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_2H_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.
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 (SF_6)	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 (NF_3)	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.

[a] *GHGs identified in this table are ones identified in the Kyoto Protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.*

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 (AEGLs) for Nitrogen Trifluoride; January 2009.

Not all GHGs possess the same ability to induce climate change. Carbon dioxide is the most abundant GHG in Earth's atmosphere. Other GHGs are less abundant but have higher global warming potential (GWP) than CO_2. Thus, emissions of other GHGs are commonly quantified in the units of equivalent mass of carbon dioxide (CO_2e). GWP is based on several factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, 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 CO_2.

The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time.[11] These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). The IPCC updated the GWP values in its Fourth Assessment Report (AR4). The GWPs in the IPCC AR4 are used by CARB for reporting Statewide GHG emissions inventories, consistent with international reporting standards. By applying the GWP ratios, Project-related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline.

The IPCC has issued an updated Fifth Assessment Report (AR5), which has revised down the majority of the GWP for key regulated pollutants. As CARB still uses AR4 values and the modeling

[11] GWPs and associated CO2e values were developed by the Intergovernmental Panel on Climate Change (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.

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 most associated with construction and operation of typical development projects. The GWP from AR4 and AR5 and atmospheric lifetimes for key regulated GHGs are provided in Table 4.F-2.

Table 4.F-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_2O)	114	298	265
HFC-23: Fluoroform (CHF_3)	270	14,800	12,400
HFC-134a: 1,1,1,2-Tetrafluoroethane (CH_2FCF_3)	14	1,430	1,300
HFC-152a: 1,1-Difluoroethane ($C_2H_4F_2$)	1.4	124	138
PFC-14: Tetrafluoromethane (CF_4)	50,000	7,390	6,630
PFC-116: Hexafluoroethane (C_2F_6)	10,000	12,200	11,100
Sulfur Hexafluoride (SF_6)	3,200	22,800	23,500
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.

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 will be updating the CAS and is responsible for preparing reports to the Governor on the status of the CAS. The Natural Resources Agency 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.
- 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 CO_2; (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]

[12] State of California, Department of Justice, Office of the Attorney General, *Climate Change Impacts in California*, https://oag.ca.gov/environment/impact, accessed September 1, 2021.

[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.

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
- Corporate Average Fuel Economy (CAFE) Standards
- Energy Independence and Security Act
- California Air Resources Board
- California Greenhouse Gas Reduction Targets
- California Global Warming Solutions Act (AB 32)
- Climate Change Scoping Plan
- Cap-and-Trade Program
- Emission Performance Standards
- Renewables Portfolio Standard Program
- Clean Energy and Pollution Reduction Act
- Pavley Standards
- California Low Carbon Fuel Standard
- Advanced Clean Cars Regulations
- Sustainable Communities and Climate Protection Act (SB 375)
- Senate Bill 743
- Executive Order N-79-20
- California Appliance Efficiency Regulations
- Title 24, Building Standards Code and CALGreen Code
- CEQA Guidelines
- South Coast Air Quality Management District
- Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy
- 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
- Traffic Study Policies and Procedures

(1) Federal

(a) Federal Clean Air Act

The United States Environmental Protection Agency (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 CO_2 and other GHGs are pollutants under the federal Clean Air Act (CAA), which the USEPA must regulate if it determines they pose an endangerment to public health or welfare. In December 2009, U.S. EPA issued an endangerment finding for GHGs under the Clean Air Act, 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, methane and other non-CO_2 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) 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 the 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 year 2011 and later for model years 2012-2016, and 2017-2021. In March 2020, the USDOT and the USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe carbon dioxide 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 affected. [15]

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines. Building on the first phase of standards, in August 2016, the EPA 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 CO_2 emissions by approximately 1.1 billion metric tons.[16]

[14] United States Environmental Protection Agency, *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] National Highway Traffic Safety Administration (NHTSA), *Corporate Average Fuel Economy standards.*

[16] U.S. EPA, *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.*

(c) 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:

- 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 the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the 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."[17]

(2) State

(a) California Air Resources Board

The 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 Clean Air Act. 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

[17] *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.*

reduce GHG emissions to 1990 levels by 2020. Subsequent State goals include reducing GHG emissions to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.

(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 carbon dioxide equivalent.

(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.

(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. HSC Division 25.5 defines regulated GHGs as CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 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 achieve the maximum technologically feasible and cost-effective GHG reductions.[18]

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 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 linked to SB 32 and signed on September 8, 2016, prioritizes efforts to cut GHG emissions in low-income or 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

[18] 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.

ascertain facts and make recommendations to the Legislature and the houses of the Legislature concerning the State's programs, policies, and investments related to climate change.

(d) Climate Change Scoping Plan

AB 32 required CARB to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (HSC section 38561 (h)). The 2008 Climate Change Scoping Plan proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[19] The 2008 Climate Change Scoping Plan had a range of GHG reduction actions which included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms, such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

The 2008 Climate Change Scoping Plan called for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions were addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard (LCFS), and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to use energy more efficiently. Utility energy providers were required to include more renewable energy sources through implementation of the Renewables Portfolio Standard.[20] Additionally, the 2008 Climate Change Scoping Plan emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicates that substantial savings of electricity and natural gas will be accomplished through "improving energy efficiency by 25 percent."

The 2008 Climate Change Scoping Plan identified several specific issues relevant to the development projects, including:

- The potential of using the green building framework as a mechanism, which could enable GHG emissions reductions in other sectors (i.e., electricity, natural gas), noting that:

  A Green Building strategy will produce greenhouse gas savings through buildings that exceed minimum energy efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. Combined, these measures can also contribute to healthy indoor air quality, protect human health, and minimize impacts to the environment.

- The importance of supporting the Department of Water Resources' work to implement the

[19] CARB, *Climate Change Scoping Plan*, December 2008.

[20] For a discussion of Renewables Portfolio Standard, refer to subsection California Renewables Portfolio Standard.

Governor's objective to reduce per capita water use by 20 percent by 2020. Specific measures to achieve this goal include water use efficiency, water recycling, and reuse of urban runoff. The *Climate Change Scoping Plan* notes that water use requires significant amounts of energy, including approximately one-fifth of statewide electricity.

- Encouraging local governments to set quantifiable emission reduction targets for their jurisdictions and use their influence and authority to encourage reductions in emissions caused by energy use, waste and recycling, water and wastewater systems, transportation, and community design.

As required by HSC Division 25.5, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions reduction target for 2020. The 2020 emissions reduction target was originally set at 427 million metric tons (MMT) of CO_2e using the GWP values from the IPCC SAR. Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the scope of the reductions California must make to return to the 1990 emissions level by 2020 as required by AB 32. CARB originally defined the "business-as-usual" or BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the 2008 Climate Change Scoping Plan, as approximately 596 $MMTCO_2e$ (using GWP values from the IPCC SAR). For example, in further explaining CARB's BAU methodology, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards. Therefore, under these original projections, the State would have had to reduce its 2020 BAU emissions by 28.4 percent to meet the 1990 target of 427 $MMTCO_2e$.

(i) *2014 Update to the Climate Change Scoping Plan*

The First Update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations.[21] In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined the 1990 GHG emissions inventory and 2020 GHG emissions limit to be increased to 431 $MMTCO_2e$. CARB also updated the State's 2020 BAU emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that had recently been adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 was 509.4 $MMTCO_2e$. Therefore, under the first update to the Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 $MMTCO_2e$ would have been 78.4 $MMTCO_2e$, or a reduction of GHG emissions by approximately 15.4 percent, (down from 28.4 percent).

The stated purpose of the First Update was to "highlight… California's success to date in reducing its GHG emissions and lay… the foundation for establishing a broad framework for continued

[21] CARB, *First Update to the AB 32 Scoping Plan*, May 2014.

emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050."[22] The First Update found that California was on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the State realizes the expected benefits of existing policy goals.[23]

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the State's economy to evaluate and describe the larger transformative actions that will be needed to meet the State's more expansive emission reduction needs by 2050."[24] Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction target.

Based on CARB's research efforts, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050."[25] Those technologies include 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 the rapid market penetration of efficient and clean energy technologies.

The First Update discussed new residential and commercial building energy efficiency improvements, specifically identifying progress towards zero net energy buildings as an element of meeting mid-term and long-term GHG reduction goals. The First Update expressed CARB's commitment to working with the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) to facilitate further achievements in building energy efficiency.

(ii) *2017 Update to Climate Change Scoping Plan*

In response to the passage of SB 32 and the identification of the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan in December 2017.[26] The 2017 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and the First Update while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health. The 2017 Update includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels,

[22] CARB, *2014 Update*, May 2014, p. 4.

[23] CARB, *2014 Update*, May 2014, p. 34.

[24] CARB, *2014 Update*, May 2014, p. 6.

[25] CARB, *2014 Update*, May 2014, p. 32.

[26] CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

efficiency regulations, and the Cap-and-Trade program, which constraints and reduces emissions at covered sources.[27]

CARB's projected Statewide 2030 emissions takes into account 2020 GHG reduction policies and programs.[28] The 2017 Scoping Plan also addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions would be achieved from electricity sector standards (i.e., utility providers to supply 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. Implementation of mobile source strategies (cleaner technology and fuels) include the following:

- At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025
- At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030
- Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations
- Medium- and heavy-duty GHG Phase 2
- Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_X standard.
- Last Mile Delivery: New regulation that would result in the use of low NO_X or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for Class 3–7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.
- Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."

The alternatives in the Scoping Plan are designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is

[27] CARB, *2017 Update*, November 2017, p. 6.

[28] CARB, *2017 Update*, November 2017.

not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the State's GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations.[29] Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures.[30]

For individual projects under CEQA, the 2017 Scoping Plan states that local governments can support climate action when considering discretionary approvals and entitlements. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the Scoping Plan, the State's long-term goals, and climate change science.[31]

The City of Los Angeles has not developed per capita targets for 2030 or 2050; however, the City recognizes that GHG emissions reductions are necessary in the public and private sectors. The City has taken the initiative in combating climate change by developing programs such as the Green New Deal and Green Building Code. Each of these programs is discussed further below.

[29] CARB, *2017 Update*, November 2017, p.97.

[30] CARB, *2017 Update*, November 2017, p.97.

[31] CARB, *2017 Update*, November 2017, p. 100.

A summary of the GHG emissions reductions required under HSC Division 25.5 is provided in **Table 4.F-3**, *Estimated Statewide Greenhouse Gas Emissions Reductions Required by HSC Division 25.5*.

TABLE 4.F-3
Estimated Statewide Greenhouse Gas Emissions Reductions Required by HSC Division 25.5

EMISSIONS SCENARIO	GHG EMISSIONS ($MMTCO_2E$)
2008 Scoping Plan (IPCC SAR)	
2020 BAU Forecast (CARB 2008 Scoping Plan Estimate)	596
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	427
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	169 (28.4%) [a]
2014 Scoping Plan Update (IPCC AR4)	
2020 BAU Forecast (CARB 2014 Scoping Plan Estimate)	509.4
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	431
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	78.4 (15.4%) [b]
2017 Scoping Plan Update	
2030 BAU Forecast ("Reference Scenario" which includes 2020 GHG reduction policies and programs)	389
2030 Emissions Target Set by HSC Division 25.5 (i.e., 40% below 1990 Level)	260
Reduction below Business-As-Usual Necessary to Achieve 40% below 1990 Level by 2030	129 (33.2%) [c]

$MMTCO_2e$ = million metric tons of carbon dioxide equivalents
[a] 596 – 427 = 169 / 596 = 28.4%
[b] 509.4 – 431 = 78.4 / 509.4 = 15.4%
[c] 389 – 260 = 129 / 389 = 33.2%

SOURCE: CARB, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011; CARB, 2020 Business-as-Usual (BAU) Emissions Projection, 2014 Edition, 2017, http://www.arb.ca.gov/cc/inventory/data/bau.htm. Accessed October 2017; CARB, California's 2017 Climate Change Scoping Plan, November 2017.

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34 to 79 $MMTCO_2$ of the 2030 reduction obligation.[32] The State's short-lived climate pollutants strategy, which is for GHGs that remain in the atmosphere for shorter periods of time compared to longer-lived GHGs like CO_2, is expected to cover approximately 17 to 35 $MMTCO_2e$. The Renewables Portfolio Standard with 50 percent renewable electricity by 2030 is expected to cover approximately 3 $MMTCO_2$. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero emission vehicles and improving the freight system efficiency, and is expected to cover approximately 11 to 13 $MMTCO_2$. Under the Scoping Plan Scenario, CARB expects that the reduction in GHGs from doubling of the energy efficiency savings in natural gas and electricity end uses in the CEC 2015 Integrated Energy Policy Report by 2030 would cover approximately 7 to 9 $MMTCO_2$ of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

(e) Cap-and-Trade Program

The Climate Change Scoping Plan identifies 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 is 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 Program[33] pursuant to its authority under AB 32. The Cap-and-Trade Program is 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-reduction mandates. The Statewide cap for GHG emissions from the capped sectors[34] (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the 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 $MTCO_2e$ per year must comply with the Cap-and-Trade Program.[35] Triggering of the 25,000 $MTCO_2e$ 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").[36]

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32 CARB, *California's 2017 Climate Change Scoping Plan*, Appendix G, November 2017.

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

34 California Code of Regulations 17, Section 95811, 95812.

35 California Code of Regulations 17, Section 95812.

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

Each covered entity with a compliance obligation is required to surrender "compliance instruments"[37] for each $MTCO_2e$ 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.[38] 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 Program's first compliance period.[39]

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

(f) Energy-Related (Stationary) Sources

(i) *Emission Performance Standards*

SB 1368, signed September 29, 2006, is a companion bill to AB 32, which requires the CPUC and the 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

[37] 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% of their compliance obligations.

[38] California Code of Regulations 17, Section 95811(b).

[39] California Code of Regulations 17, Section 95811, 95812(d).

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.

(i) *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 Renewables Portfolio Standard (RPS). Subsequent amendments provided additional targets throughout the years. Most recently, on October 7, 2015, SB 350 (Chapter 547, Statues 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. The 2017 Climate Change Scoping Plan incorporated the SB 350 standards and estimated the GHG reductions would account for approximately 21 percent of the Scoping Plan reductions.[40] On September 10, 2018, SB 100, provided additional RPS targets of 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by 2045.[41]

(g) Mobile Sources

(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 greenhouse gas emissions from new passenger vehicles for the 2009 through 2016 model years. Upon adoption of subsequent federal greenhouse gas standards by the United States Environmental Protection Agency (U.S. EPA) 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 greenhouse gas emission regulations which require further reductions in passenger greenhouse gas 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.[42] 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

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

[41] California Legislative Information, *SB-100 California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases*.

[42] United States Environmental Protection Agency, 2012.

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.[43]

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. In August 2021, USEPA proposed to revise and strengthen the emissions standards for passenger cars and light trucks for model years 2023-2026.

On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the State's GHG and ZEV programs under Section 209 of the Clean Air Act.[44] The withdrawal of the waiver was effective November 26, 2019. In response, several states including California filed a lawsuit challenging the withdrawal of the EPA waiver.[45] In April 2021, the USEPA announced it will move to reconsider its previous withdrawal and grant California permission to set more stringent climate requirements for cars and SUVs.[46]

(ii) *California Low Carbon Fuel Standard*

Executive Order S-01-07 was enacted 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; and (2) that a LCFS for transportation fuels be established in California. The final regulation was approved by the 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 effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted.[47]

The development of the 2017 Scoping Plan Update has identified LCFS as a regulatory measure to reduce GHG emission to meet the 2030 emissions target. In September 2018, the standards

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

44 84 FR 51310.

45 United States District Court for the District Court of Columbia, *State of California vs. Chao*, Case 1:19-cv-02826, 2019.

46 United States Federal Register, *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment (Document Number: 2021-08826),* April 28, 2021.

47 CARB, *Low Carbon Fuel Standard - About*, https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about. Accessed September 1, 2021.

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.[48]

(iii) *Advanced Clean Cars Regulations*

In 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015–2025.[49] 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 Zero-Emission Vehicle (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.[50] 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.[51] Effective November 26, 2019, the federal SAFE Vehicles Rule Part One: One National Program withdrew the California waiver for the GHG and ZEV programs under section 209 of the Clean Air Act, which revokes California's authority to implement the Advanced Clean Cars and ZEV mandates. In response, several states including California filed a lawsuit challenging the withdrawal of the EPA waiver.[52] In April 2021, the USEPA announced it will move to reconsider its previous withdrawal of the waiver.[53]

In addition, Governor Gavin 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, nor forbid residents from owning gas-powered vehicles. In accordance with the Executive Order, CARB is developing a 2020 Mobile Source Strategy, a comprehensive analysis that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The strategies will provide important information

48 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 September 1, 2021.

49 CARB, *Advanced Clean Cars Program - About*, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about, Accessed September 1, 2021.

50 CARB, *Advanced Clean Cars Program - About*, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about, Accessed September 1, 2021.

51 CARB, News Release: *CARB finds vehicle standards are achievable and cost-effective*, ww2.arb.ca.gov/news/carb-finds-vehicle-standards-are-achievable-and-cost-effective, Accessed September 1, 2021.

52 United States District Court for the District Court of Columbia, State of California vs. Chao, Case 1:19-cv-02826, 2019.

53 United States Federal Register, *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment (Document Number: 2021-08826),* April 28, 2021.

for numerous regulations and incentive programs going forward by conveying what is necessary to address the aggressive emission reduction requirements.

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 package is anticipated to be presented to the Board in June 2022.

(iv) *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), establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. SB 375 finds that the "transportation sector is the single largest contributor of greenhouse gases of any sector."[54] Under SB 375, CARB is required, in consultation with the Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. SCAG is the Metropolitan Planning Organization in which the City of Los Angeles is located in. CARB set targets for 2020 and 2035 for each of the 18 metropolitan planning organization regions in 2010, and updated them in 2018.[55] In March 2018, the CARB updated the SB 375 targets for the SCAG region to require an 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.[56] As discussed further below, SCAG has adopted an updated Regional Transportation Plan / Sustainable Community Strategies (RTP/SCS) subsequent to the update of the emission targets. 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.[57]

Under SB 375, the target must be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (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.

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

55 CARB, *Sustainable Communities & Climate Protection Program – About*. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about. Accessed September 1, 2021.

56 CARB, *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*, https://www.arb.ca.gov/cc/sb375/finaltargets2018.pdf. Accessed September 1, 2021.

57 SCAG, *Final 2020–2045 RTP/SCS, Chapter 0: Making Connections*, p. 5, May 7, 2020.

(v) *Senate Bill 743*

Governor 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 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 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."

(h) Building Standards and Other Regulations

(i) *California Appliance Efficiency Regulations*

The Appliance Efficiency Regulations (Title 20, Sections 1601 through 1608), adopted by the CEC, include standards for new appliances (e.g., refrigerators) and lighting, if they are 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 CALGreen Code*

The 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 Building 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."[58] The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program 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

[58] California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.[59]

On May 9, 2018, the CEC adopted the 2019 Title 24 Standards, which went into effect on January 1, 2020. The 2019 standards continue to improve upon the previous (2016) Title 24 standards for new construction of, and additions and alterations to, residential and non-residential buildings.[60] The 2019 Title 24 Standards ensure that builders use the most energy efficient and energy conserving technologies and construction practices. As described in the 2019 Title 24 Standards represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the Zero Net Energy (ZNE) goal." Single-family homes built with the 2019 Title 24 Standards are projected to use approximately seven percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once the mandated rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. Nonresidential buildings are projected to use approximately 30 percent less energy due mainly to lighting upgrades.[61] Compliance with Title 24 is enforced through the building permit process.

(i) CEQA Guidelines

In August 2007, the California State Legislature adopted Senate Bill 97 (SB 97) (Chapter 185, Statutes of 2007), requiring the Governor's Office of Planning and Research (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, the OPR adopted CEQA guidelines that became effective on March 18, 2010.

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the guidelines.[62] The 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:

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

60 CEC, 2019 Building Energy Efficiency Standards.

61 CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.

62 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).

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.[63]

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."[64]

(3) Regional

(a) South Coast Air Quality Management District CEQA Guidance

The City of Los Angeles 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 Gorgonio 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.[65] A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.[66] The 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

63 14 Cal. Code Regs. § 15064.4(b).

64 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.

65 SCAQMD, Board Meeting, December 5, 2008, Agenda No. 31, http://www3.aqmd.gov/hb/2008/December/081231a.htm. Accessed September 1, 2021.

66 SCAQMD, *Greenhouse Gases CEQA Significance Thresholds*, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds. Accessed September 1, 2021.

projects where the SCAQMD is the lead agency. However, the 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 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 2020–2046 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS) in October 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 choose to drive, hotspots of congestion would be less difficult to navigate due to cordon pricing and using an electric vehicle will be easier thanks 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.[67] By 2045, the integrated growth forecast projects 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[68] (TPAs) 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

[67] 2020–2045 RTP/SCS population growth forecast methodology includes data for years 2010, 2010, 2016, and 2045.

[68] 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.

GHG emission reduction goals.[69] 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, OPR recommended that achieving 15 percent lower per capita (residential) or per employee (office) 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.

(4) Local

(a) Green New Deal

The City of Los Angeles 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.

In April 2019, the *Green New Deal (Sustainable City Plan 2019)*, was released, consisting of a program of actions designed to create sustainability-based performance targets through 2050 designed to advance economic, environmental, and equity objectives.[70] L.A.'s Green New Deal is the first four-year update to the City's first Sustainable City pLAn that was released in 2015.[71] It augments, expands, and elaborates L.A.'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 mBTU/sq.ft in 2015).
- All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.

69 SCAG, *Final 2020–2045 RTP/SCS, Chapter 0: Making Connections*, p. 5, May 7, 2020.

70 City of Los Angeles. LA's Green New Deal, 2019.

71 City of Los Angeles, Sustainable City pLAn, April 2015.

- Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035.
- 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 lbs. 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 1/2 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

On December 11, 2019, the Los Angeles City Council approved Ordinance No. 186,488, which amended Chapter IX of the Los Angeles Municipal Code (LAMC), referred to as the Los Angeles Green Building Code, by adding a new Article 9 to incorporate various provisions of the 2019 CALGreen Code. Projects filed on or after January 1, 2020, must comply with the provisions of the Los Angeles Green Building 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.

(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.[72] The RENEW LA Plan, 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.[73] The City has 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, and its General Plan does not have any stated goals, objectives, or policies specifically addressing climate change and GHG emissions. However, the following five goals from the City's General Plan Air Quality Element would also lead to GHG emission reductions[74]:

- 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

[72] 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 September 1, 2021.

[73] City of Los Angeles, *RENEW LA, Five-Year Milestone Report, 2011.*

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

- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

(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) 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.

THRESHOLDS OF SIGNIFICANCE

As City has adopted the thresholds set forth in Appendix G (Appendix G) of the CEQA Guidelines[75], as its project specific thresholds of significance, pursuant to those Guidelines, the Proposed Project would have a significant impact with respect to greenhouse gas emissions (GHGs) if it would:

Threshold (a): ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.***

Threshold (b): ***Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases.***

METHODOLOGY

For the reasons set forth below, to analyze the project's GHG impacts under these thresholds the City will utilize a qualitative analysis that will analyze the Project's Consistency with the following plans, policies and regulations adopted to reduce GHG emissions:

- Executive Order S-3-05 and AB 32;
- AB 32 Scoping Plan and First Update;
- Executive Order B-30-15, SB 32 and 2017 Scoping Plan;
- SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy;
- City of Los Angeles Mobility 2035 Plan;
- City of Los Angeles Green New Deal; and
- City of Los Angeles Green Building Ordinance.

In addition, to comply with the requirements of CEQA Guidelines, section 15064.4(a) the analysis includes a good faith estimate of the GHG emissions resulting from the project, both with and without project specific measures, including project design features as well as regulatory compliance measures, intended to implement the policies, programs and regulations identified above that have been adopted to reduce GHG emissions.

A. Basis for Qualitative Analysis of GHG Impact Threshold Questions

The basis for this methodology is provided as follows. The Department of City Planning has adopted Appendix G as its thresholds of significance and the Appendix G threshold questions for GHG impacts may be analyzed utilizing a qualitative approach. SCAQMD has not adopted a GHG significance threshold for land use development projects, although it has adopted significance thresholds for industrial-type projects for which it is the lead agency (SCAQMD 2014). Those industrial thresholds are not relevant to the Proposed Project, as the only projects for which

[75] The CEQA Guidelines are set forth in Cal. Code of Regulations, Title 14, Division G, Chapter 3, Sections 15000-15387.

the SCAQMD serves as the lead agency are those involving the adoption of air quality rules or regulations, or projects that have not gone through CEQA environmental review via another lead agency. The City is the lead agency for this Project. In the absence of adopted thresholds for land use development projects based on SCAQMD guidance, the City has the discretion to use a significance threshold relevant to the Proposed Project.

On November 30, 2015, the California Supreme Court issued an opinion on significance thresholds under CEQA for the evaluation of impacts associated with GHGs in the case *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife*. The following discussion summarizes the relevant facts and holdings of that case, which assessed the use of qualitative, i.e., consistency with applicable plans, programs, and policies, and quantitative GHG significance thresholds.

The Court stated that California air pollution control officials and air quality districts have made several proposals for numerical thresholds. Multiple agencies' efforts at framing GHG significance issues have not yet coalesced into any widely accepted set of numerical thresholds but have produced a certain level of consensus on the value of AB 32 consistency as a criterion. Neither AB 32 nor the CARB Scoping Plan related thereto set out a mandate or method for CEQA analysis of GHG emissions from a proposed project. An amendment to CEQA adopted in 2007[76], however, required the preparation, adoption, and periodic update of guidelines for mitigation of GHG impacts. The resulting direction from the State was that a lead agency should attempt to describe, calculate or estimate the amount of GHG emissions a project will emit, but recognized that agencies have discretion in how to do so. CEQA Guideline 15064.4 further provides that when assessing the significance of GHG emissions, the agency should consider these factors among others: (1) the extent to which the 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. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The Court also acknowledged that the scope of global climate change and the fact that GHGs, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on where they are emitted; for GHGs, it does not. So the concern is not necessarily locational, but whether the particular project, which will accommodate California's housing and/or economic development needs, is sustainable. A significance criterion framed in terms of efficiency and conservation in land use (as compared to a business-as-usual [BAU] pattern of growth) is superior to a simple numerical threshold because CEQA is not intended as a population control measure.

[76] Cal. Public Resources Code section 21083.05.

Furthermore, the Court stated that this consideration favors consistency with AB 32's statewide goals as a permissible significance criterion for project GHG emissions. Meeting statewide reduction goals does not preclude all new development. Rather, the AB 32 Scoping Plan, the State's roadmap for meeting AB 32's target, assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians. To the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary for the entire State, one can reasonably argue that its impact is not cumulatively considerable, because it would be helping to solve the cumulative problem of GHG emissions as envisioned by California law. Given the reality of growth, some GHG emissions from new housing and commercial developments are inevitable. The critical CEQA question is the cumulative significance of a project's GHG emissions and, as discussed previously, from a climate change point of view it does not matter where in the State those emissions are produced. Under these circumstances, evaluating the significance of a project's GHG emissions with respect to their effect on the State's efforts to meet its long term goals is a reasonable threshold. The Trial Court in the April 2021 Ruing concerning the Flower Market Project found that a significance threshold based on the Project's consistency with plans aimed at reducing GHG emissions is permitted under CEQA.

The Supreme Court in *Center for Biological Diversity* recognized potential options for analyzing cumulative significance of a project's GHG emissions, including:

- Business-as-usual (BAU) Model. BAU comparison based on the Scoping Plan methodology if supported by substantial evidence that the metric used supports what level of reduction from business as usual a new land use development at the proposed location must contribute to comply with state goals.
- Consistency with AB 32's goal in whole or in part by looking at compliance with regulatory programs designed to reduce GHG; provided the project complies with or exceeds the regulations that were adopted by CARB, or state agencies to comply with Scoping Plan; and provided, the significance analysis only relates to impacts within the area governed by the regulation – e.g., reliance on Title 24 energy efficiency rules that are intended to reduce GHG from building would not address GHG impacts from transportation. And/or showing consistency with local GHG reduction plans, (e.g., climate action plan), to provide a basis for the tiering or streamlining of project-level CEQA analysis, including as consistent with CEQA Guidelines Section 15183.3.
- Relying on numerical thresholds for significance for GHG.

Section 15064.4 was amended in 2019 to incorporate the holding in *Center for Biological Diversity* case as well as others. That section now directs lead agencies as follows:

§ 15064.4. Determining the Significance of Impacts from Greenhouse Gas Emissions.

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good- faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Quantify greenhouse gas emissions resulting from a project; and/or

(2) Rely on a qualitative analysis or performance based standards.

(b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas 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.

(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 greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

(c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

Based on the above legal standards, the City finds that analyzing the Project's GHG emissions through consistency with the plans, policies and regulations identified above that have been adopted to reduce GHG emissions is the appropriate methodology to analyze the project's GHG impacts in the context of the GHG threshold questions set forth in Appendix G.

Using consistency with AB 32's statewide goal for GHG reduction, and subsequently adopted plans, programs, policies, standards, and regulations as identified above, rather than a numerical threshold, as a significance criterion is also consistent with the broad guidance provided by Section 15064.4 of the CEQA Guidelines to reflect that there is no iron-clad definition of significance. Section 15064.4 was not intended to restrict agency discretion in choosing a method for assessing GHG emissions, but rather to assist lead agencies in investigating and disclosing all that they reasonably can regarding a project's GHG emissions impact.

Basis for Estimate of Project's GHG Emissions

As stated above, CEQA Guidelines, section 15064.4(a) states a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual date, to describe and estimate the amount of greenhouse gas emissions resulting from a project. CEQA Guidelines, section 15064.4(c) states a lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from the project and that the lead agency has the discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change.

Based upon this guidance, GHG emissions were quantified from construction and operation of the Project using SCAQMD's California Emissions Estimator Model (CalEEMod). Operational emissions include both direct and indirect sources including mobile sources, water use, solid waste, area sources, natural gas, and electricity use emissions. 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 criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[39][77]

Finally, the estimate of GHG emissions includes two scenarios. One is based upon a No Action Taken (NAT) scenario. The No Action Taken scenario is modeled on the "Business As Usual" (or "BAU") approach taken by CARB in its Scoping Plans adopted to implement plans and programs to reduce GHG emissions to the levels identified in the Legislation referred to as AB 32[78] and SB 32[79]. (Refer to pp. Tables 4.F-7 and 7 of this Section 4.F for a more detailed discussion of those statutes.) Both AB 32 and SB 32 call for reduction of GHG emissions relative to a baseline year (1990). Therefore, CARB, as the regulatory agency primarily responsible for implementing a state-wide plan to achieve the goals in AB 32 and SB 32, had to establish a baseline for GHG emissions (referred to as business as usual in CARB's scoping plans). The Scoping Plan sets forth the BAU projection, which assumes no conservation or regulatory efforts to reduce GHG emissions beyond what was in place when the forecast was made.

[77] *See www.caleemod.com.*

[78] AB 32 is provided at Cal. Health and Safety Code sections 35500 *et seq*.

[79] SB 32 is provided at Cal. Health and Safety Code sections 35800 *et seq*.

Further, the 2020 NAT scenario does not consider site-specific conditions, Project Design Features, or prescribed mitigation measures.

The second scenario used in evaluating the Project's GHG related impacts (which is referred to '"Project As Proposed") assumes the Project will implement measures required by the plans, policies and regulations adopted to reduce GHG emissions.

Finally, the City does not have or use a numerical threshold for GHG or a methodology that relies on a quantitative analysis. Instead, the Project's GHG emissions are quantified and provided to comply with CEQA Guidelines, section 15064.4(a) and to provide evidence that the implementation of the plans, policies and regulations adopted to reduce GHG emissions will result in actual GHG reductions.

ESTIMATE OF PROJECT'S GHG EMISSIONS

Construction Emissions

An estimate of GHG emissions attributable to the construction of the Project was provided in the Original Draft EIR. That same estimate is used in this revised analysis of the Project's construction-related GHG emissions, which is a conservative approach because it does not account for, among other things, newer type of construction equipment that generate less air pollutants and GHG emissions. The only change to the estimate of the Project's construction-related emissions is to update the period of construction to 2022 through 2024.

Construction of the Project would emit GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction workers and vendors traveling to and from the Project Site. These impacts would vary day to day over the duration of construction activities. As illustrated in Table 4.F-4[80], construction emissions of CO_2 would peak in 2024, when up to 29,924 pounds of CO_2e per day are anticipated following implementation of Mitigation Measure C-1 (in Section 4.C, Air Quality). These emissions are further incorporated in the assessment of long-term operational impacts by amortizing them over a 30-year period, pursuant to guidance from the State and SCAQMD.

[80] For ease of comparison to the Section 4.F of the Original Draft EIR, the numbering of the tables in this Section begins with Table 4.F.-4.

Table 4.F-4
Estimated Construction Emissions (Pounds Per Day)

Construction Year	CO_2	CH_4	N_2O	CO_2e
2022	24,061	5	0	24,191
2023	18,349	4	0	18,438
2024	29,784	6	0	29,924

Source: DKA Planning 2018, based on CalEEMod 2016.3.2 model runs, included in the Original Draft EIR. Refer to page 4.F.6 for discussion of methodology for calculating construction-related GHG emissions.

Operational Emissions

1. Overview of Methodology

In the Original EIR, the GHG emissions attributable to the operation of the Project were calculated for the year 2020. As stated in the Introduction to this PR-DEIR, the Trial Court ruled that the conclusion in the Original EIR that the Project would be consistent with the goal in SB 32 of reducing GHG emissions by 40 percent by the year 2030 was not supported by substantial evidence. In response, the revised analysis of the Project's GHG impacts provided in this Section 4.F (1) clarifies the Project's "net" GHG emissions, (2) updates that Project's GHG emissions by accounting for new water consumption standards established by the Los Angeles Department of Water and Power (LADWP), Title 24 standards updated in 2019, and the urban infill nature of the Project, (3) provides a consistency analysis of the Project with CARB's 2017 Scoping Plan (which implements SB 32), and (4) provides a consistency analysis of the Project with SCAG's 2020-2045 RTP/SCS. As shown at Table 4.F-5B, the Project as proposed will reduce GHG emissions by 64 percent relative to the applicable baseline, which reduction substantially exceeds the 40 percent reduction goal in SB 32. Accordingly, the modeling of the Project's operational-related GHG emissions was not further modified. This approach is conservative because it does not account for additional regulatory programs aimed at further reducing GHG emissions.

2. Calculation of Operational GHG Emissions

Greenhouse gas emissions were calculated for long-term operations. Both one-time emissions and indirect emissions are expected to occur each year after build-out of the Project. One-time emissions from construction and vegetation removal were amortized over a 30-year period because no significance threshold has been adopted for such emissions. The Project emission reductions are results of Project's commitments and regulatory changes, which include the implementation of the Renewables Portfolio Standard (RPS) of 33 percent for the year 2020, the Pavley regulation and Advanced Clean Cars program mandating higher fuel efficiency standards for light-duty vehicles, and the Low Carbon Fuel Standard (LCFS). GHG reductions associated with the programs implemented after 2020 were not accounted for, which conservatively

estimates the Project's GHG emissions. For example, the analysis did not account for SB 100 which provides additional RPS target of 44 percent by the year 2024. Further, it should be noted that GHG reductions due to LCFS are currently not incorporated into CalEEMod. The CalEEMod model incorporates EMFAC2014 emission factors which do not take into account the most recent 2017 LCFS updates. As a conservative assumption, GHG emissions reductions resulting from the LCFS updates were not included in the Project's emissions inventory.

This analysis provided in this Section 4.F of the PR-DEIR compares the Project's GHG emissions to the emissions that would be generated by the Project in the absence of any GHG reduction measures anticipated for 2020 by the 2017 CARB Scoping Plan (i.e., the 2020 NAT scenario). This approach is consistent with the concepts used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32. This methodology is used to analyze consistency with applicable GHG reduction plans and policies and demonstrate the efficacy of the measures contained therein, but it is not a threshold of significance.

As discussed above, analysis in the Original EIR compared GHG emissions under the 2020 NAT scenario to emissions under the Project as Proposed Scenario, which includes regulatory actions and mandates to be in force in 2020. Early-action measures identified in the *Climate Change Scoping Plan* that had not been approved at the time were not credited in the original analysis. By not speculating on potential regulatory conditions, the analysis took a conservative approach that likely overestimated the Project's GHG emissions at build-out.

The 2020 NAT scenario is used to establish a comparison with Project-generated GHG emissions. The 2020 NAT scenario does not consider site-specific conditions, Project Design Features, or prescribed mitigation measures. As an example, a NAT scenario would apply a base ITE trip-generation rate for the Project and would not consider site-specific benefits resulting from the proposed mix of uses or close proximity to public transportation. Accordingly, the 2020 NAT scenario used in the Original Draft EIR for the Project did not assume the lower GHG emissions associated with the Project's profile as an urban infill, mixed-use development with proximity to substantial public transit, which would produce substantial GHG emission reductions relative to land uses that are located in a more typical community that has not coordinated its land use and transportation planning.

Further, the analysis under the 2020 NAT scenario assumed compliance with the minimum performance level required under Title 24 at the time the Original Draft EIR was being prepared. The 2020 NAT scenario also consider State mandates that were already in place when CARB prepared the *Supplemental FED* in 2011 (e.g., Pavley I Standards, full implementation of California's Statewide Renewables Portfolio Standard beyond current levels of renewable energy, and the California Low Carbon Fuel Standard).

Compared to the 2020 NAT scenario, emissions calculations for the Project under the "As Proposed" scenario includes credits or reductions for the regulatory compliance measures which would implement GHG reduction plans and the Project Design Features, such as reductions in energy (e.g., updated Title 24 standards) and water demand (e.g., updated LADWP water consumption standards). In addition, as mobile source GHG emissions are directly dependent on the number of vehicle trips, a decrease in the number of Project generated trips as a result of Project features will provide a proportional reduction in mobile source GHG emissions (such as reduction in traffic trips associated with the urban infill nature of the Project). It should be noted that the scenario studied in the Original Draft EIR conservatively did not include actions and

mandates that were not already in place at the time of the notice of preparation for the Original Draft EIR, but were expected to be in force in 2020 (e.g., Pavley II), which could have further reduced GHG emissions from use of light-duty vehicles by 2.5 percent.

Table 4.F-5 below was provided in the Original Draft EIR for the Project. As demonstrated in Table 4.F-5, the emissions for the Project and its associated 2020 NAT scenario are estimated to be 8,720 and 13,030 $MTCO_2e$ per year, respectively, which shows the Project would reduce emissions by 33 percent from the 2020 NAT scenario. Based on that analysis, the Project would conflict with the State-wide reduction target of 15.4 percent set forth in the AB 32 2014 Scoping Plan.

Table 4.F-5
Estimated Annual Project CO2e GHG Emissions (Metric Tons per Year)

Scenario and Source	2020 NAT Scenario*	As Proposed Scenario	Reduction from 2020 NAT Scenario	Change from 2020 NAT Scenario
Area Sources	6	6	-	0%
Energy Sources	5,996	3,477	-2,518	-42%
Mobile Sources	6,011	4,220	-1,791	-30%
Waste Sources	222	222	-	0%
Water Sources	597	597	-	0%
Construction	198	198	-	0%
Total Emissions	13,030	8,720	-4,310	-33%
Net Emissions	-	6,512	N/A	N/A

Note: Daily construction emissions amortized over 30-year period pursuant to SCAQMD guidance. Annual construction emissions derived by taking total emissions over duration of activities and dividing by construction period.

** The 2020 NAT scenario did not assume 30 percent reduction in mobile source emissions from Pavley emission standards (19.8%), low carbon fuel standards (7.2%), vehicle efficiency measures (2.8%); does not assume 42 percent reduction in energy production emissions from the state's renewables portfolio standard (33%), natural gas extraction efficiency measures (1.6%), and natural gas transmission and distribution efficiency measures (7.4%). The 2020 NAT scenario also does not account for post-2020 reductions associated with more recent regulatory programs, such as the updated RPS target of 44 percent by the year 2024.*

Source: DKA Planning, 2018.

The analysis in Table 4.F-5 was updated in connection with the preparation of the Revised Sections of the Draft EIR. First, the GHG emissions listed in the original Table 4.F-5 do not reflect any credits for the existing GHG emissions from the existing Flower Market. Table 4.F-5A below provides the Project's "net" GHG emissions. "Net" emissions represent the difference between operational GHG emissions from the proposed Project and the GHG emissions from existing uses at the Project Site. To arrive at net new emission figures, the existing emissions were subtracted because the GHG emission figures for the Project account for the entirety of the Project, including the redeveloped portion of the Flower Market. To derive the net GHG emission figures, the existing GHG emissions of 2,208 $MTCO_2e$ per year[81] is subtracted from both Project scenarios in Table 4.F-5. Table 4.F-5A below reflects the net new emission figures.

Table 4.F-5A
Net Operational GHG Emissions (Metric Tons per Year)
Estimated Annual Project CO_2e GHG Emissions (Metric Tons per Year)

Source	2020 NAT Scenario	As Proposed Scenario	Reduction from 2020 NAT Scenario	Change from 2020 NAT Scenario
Area Sources	6	6	-	0%
Energy Sources	5,996	3,477	-2,518	-42%
Mobile Sources	6,011	4,220	-1,791	-30%
Waste Sources	222	222	-	0%
Water Sources	597	597	-	0%
Construction	198	198	-	0%
Total Emissions	13,030	8,720	-4,310	-33%
Existing Emissions	-2,208	-2,208		
Net Emissions	10,822	6,512	-4,310	-40%
Source: DKA Planning, 2021 (Appendix F-1).				

The analysis of the Project's GHG impacts was then further updated to account for regulatory programs aimed at reducing GHG emissions that took effect after the Original Draft EIR. The GHG analysis in the Original Draft EIR evaluated the GHG emissions under the "As Proposed" scenario based on, among other factors, regulatory measures adopted at the time in 2018 in furtherance of AB 32. As predicted by the 2017 Scoping Plan and other studies, additional regulatory programs have been developed since the adoption of SB 32 and the 2017 Scoping Plan. Two of the more notable programs and their resulting reduction in GHG emissions are (a) a 20 percent reduction in GHG emissions attributable to energy sources due to compliance with

[81] The estimate of the existing GHG emissions attributable to the operation of the existing Flower Market is the same estimate provided in the Original Draft EIR.

2019 Title 24 Energy Conservation Measures and (b) a 20 percent reduction in GHG emissions attributable to water sources due to compliance with advanced LADWP water consumption standards. The CalEEMod air quality model used in California to estimate project-level GHG emissions was developed in 2016 used the energy efficiency standards at the time (i.e., 2016 California Building Standards Code or Title 24). The 2019 Title 24 standards contain more substantial energy efficiency requirements for new construction, emphasizing the importance of building design and construction flexibility to establish performance standards that substantially reduce energy consumption for water heating, lighting, and insulation for attics and walls, which were not captured in the 2016 CalEEMod model. In addition, LADWP has adopted programs designed to reduce indoor water consumption and wastewater generation by 20 percent. These include the 2019 requirements for installation of the latest ultra-high efficiency plumbing fixtures, the 2016 standards that promote increasing water-resistant turf and incorporating rainfall capture techniques in project designs, aggressive outdoor water consumption programs through its landscape ordinance, and water recycling programs designed to increase recycled water to 59,000 acre-feet by 2035. These water reductions and associated GHG reductions were also not captured in the 2016 CalEEMod model.

Further, the 2020 NAT scenario in the Original Draft EIR did not assume the lower GHG emissions associated with the Project's profile as an urban infill, mixed-use development with proximity to substantial public transit, which would produce substantial GHG emission reductions relative to land uses that are located in a more typical community that has not coordinated its land use and transportation planning. As reflected in Table 4.F-6, the projected reductions in vehicle trips and VMT would range from 0-50 percent in reductions from pass-by trips, up to 20 percent for internal capture trips within the development, and up to 15 percent reductions from the substantial mode share from public transit. A key strategy in CARB's Scoping Plans for reducing GHG emissions is to encourage local land use authorities to approve such urban infill development adjacent to mass transit. Since the 2020 NAT scenario is a baseline scenario that does not assume implementation of such GHG reduction strategies, then the 2020 NAT scenario assumes the Project is not developed as an urban infill project. If the GHG emission reductions from mobile sources associated with an urban infill project are not used in the 2020 NAT scenarios, the GHG emissions in the Mobile Sources category in the 2020 NAT scenario would increase.

Table 4F-5B provides the updated GHG emissions for the Project under the 2020 NAT scenario and the As Proposed scenario accounting for the LADWP water consumption standard, 2019 Title 24 standard, and the urban infill nature of the Project. As shown, the "As Proposed" Scenario, would result in approximately 64 percent fewer net emissions than the 2020 NAT Scenario. The reduction demonstrates that material reductions in Project GHG emissions would be achieved through conformance with regulations designed to reduce GHG emissions.

Table 4F-5B
Estimated Annual Project CO_2e GHG Emissions (Metric Tons per Year)

Source	2020 NAT Scenario	As Proposed Scenario	Reduction from NAT Scenario	Change from 2020 NAT Scenario
Area Sources	6	6	-	0%
Energy Sources	5,996	2,782	-3,214	-54%
Mobile Sources	10,801	4,220	-6,581	-61%
Waste Sources	222	222	-	0%
Water Sources	597	478	-119	-20%
Construction	198	198	-	0%
Total Emissions	17,820	7,906	-9,914	-56%
Existing Emissions	-2,208	-2,208		
Net Emissions	15,612	5,698	-9,914	-64%

Source: DKA Planning, 2021 (Appendix F-1).

Table 4.F-6
Daily Vehicle Travel Reductions Associated with the Project

Land Use	Reduction from Internal Capture	Reduction from Pass-By Trips	Reduction from Transit/Walk-In Trips
Office	11%	0%	15%
Apartments	20%	0%	0%
Retail	14%	50%	15%
Restaurant	14%	20%	15%
Event Space	0%	0%	15%
Source: Fehr & Peers; The Southern California Flower Market Traffic Impact Analysis; 2018.			

It should be noted that each source category of GHG emissions from the Project is subject to a number of regulations that directly or indirectly reduce climate change-related emissions: A number of these programs apply at the State level, such as Emissions from small on-site sources are subject to specific emission reduction mandates, energy-related emissions are covered by the State's renewable portfolio mandates, operational efficiencies that reduce energy use and waste are mandated by CALGreen building codes, drought-related water conservation emergency orders and related State Water Quality Control Board restrictions, and major appliances that are regulated by California Energy Commission requirements for energy efficiency. Refer to Tables 4.F-7 and 4.F-7A, below, for the identification of State programs aimed at reducing GHG emissions as provided for in CARB's Scoping Plans. These regulatory programs were accounted for in the Project's As Proposed Scenario.

At the Project level, the Project would be subject to and comply with a number of state and local regulations aimed at reducing GHG emissions, and compliance with those regulations has been accounted for in the As Proposed scenario provided in Tables 4.F-5A and B (although to be conservative, the GHG emission reductions associated with the Project's compliance with the City's Green Building Ordinance was not accounted for in the As Proposed scenario). The Project would comply with those regulations as follows:

- Construction debris will be recycled with a target rate of 75 percent.
- Pollution control will occur during construction by limiting dust and moisture build up.
- All adhesives, coatings, paint and other finishes installed in interior spaces will be low- or no-VOC (volatile organic compounds).
- Electric Vehicle charging spots will be provided (no less than 6 percent of the total number of parking spaces provided).

- Bicycle parking will be provided (both short-term and long-term) to encourage tenants to utilize alternative modes of transportation.

- Building will be provided with conduit and rooftop space for a potential photovoltaic solar panel array and will have a 'cool roof' to reduce the heat island effect.

- Majority of the landscape will be drought tolerant and low-water use type. The irrigation design will be water-conserving type with moisture sensors.

- All plumbing fixtures will be low-flow or ultra-low flow. Building will be designed to be 'grey-water ready'.

- All composite wood products will meet the low VOC limits specified by the California Air Resources Board.

It should also be noted that the GHG emission analyses reflected in Tables 4F.5 through 4.F-5B do not account for the GHG emissions attributable to Project Design Features that will further reduce GHG emissions. While it can be difficult to quantify the GHG emissions attributable to all of those Project Design Features, those features will further reduce the Project's GHG emissions from the levels reflected in the above Tables. These features are identified in the section below.

In addition to the GHG emission reductions described below, it is important to note that the CO_2 estimates from mobile sources (particularly CO_2, CH_4, and N_2O emissions) are likely much greater than the emissions that would actually occur. The methodology used assumed that all emissions sources are new sources of GHGs and that emissions from these sources are 100 percent additive to existing conditions. This is a standard approach taken for air quality analyses. In many cases, such an assumption is appropriate because it is impossible to determine whether emissions sources associated with a project move from outside the air basin and are in effect new emissions sources, or whether they are sources that were already in the air basin and just shifted to a new location. Because the effects of GHGs are global, a project that shifts the location of a GHG-emitting activity (e.g., where people live, where vehicles drive, or where companies conduct business) would result in no net change in global GHG emissions levels.

For example, if a substantial portion of California's population migrated from the South Coast Air Basin to the San Joaquin Valley Air Basin, this would likely decrease GHG emissions in the South Coast Air Basin and increase emissions in the San Joaquin Valley Air Basin, but little change in overall global GHG emissions. However, if a person moves from one location where the land use pattern requires auto use (e.g., commuting, shopping) to a new development that promotes shorter and fewer vehicle trips, more walking, and overall less energy usage, then it could be argued that the new development would result in a potential net reduction in global GHG emissions.

The Project contains numerous regulatory compliance measures described throughout this analysis, as well as Project Design features identified below, that would reduce the Project's GHG emissions profile and would represent improvements as compared to the 2020 NAT scenario. Again, the GHG emission estimates provided above are not for the purpose of environmental impact analysis but to comply with CEQA Guidelines, section 15064.4(a) and to demonstrate that

the measures incorporated into the Project are consistent with the plans, policies and regulations aimed at reducing GHG emissions that are discussed in the Impact Analysis section below.

PROJECT DESIGN FEATURES

Project Design Feature GHG-PDF-1: The design of the new building will incorporate the following sustainability features:

- Designing the residential tower to both provide views and limit heat gain through shading or other devices.
- If carpet is provided, it will meet the Carpet and Rug Institute's Green Label Plus Program or be Greenguard certified.
- Resilient flooring provided will meet UL Greenguard Gold or other green certification program.
- Educational materials will be provided for the residential tenant occupants that include:

Information from local utility, water and water recovery providers on methods to further reduce resource consumption, including recycle programs and locations. Information regarding public transportation and/or carpool options will also be made available at the Project Site.

IMPACT ANALYSIS

As stated above, to answer the two Appendix G questions that serve as the City's GHG thresholds, the Project is analyzed to determine if it is consistent with the following relevant plans, policies and regulations adopted for the purpose of reducing GHG emissions:

- Executive Order S-3-05, AB 32 and AB 32 Scoping Plan and First Update;
- Executive Order B-30-15, SB 32 and 2017 Scoping Plan;
- SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy;
- City of Los Angeles Mobility 2035 Plan;
- City of Los Angeles Green New Deal; and
- City of Los Angeles Green Building Ordinance.

With respect to the two Executive Orders referenced above and the legislation that codified those orders (i.e., AB 32 and SB 32), CARB's Scoping Plans provide for strategies and programs aimed at achieving the GHG reduction goals in those orders and legislation. For example, the 2017 Scoping Plan states that the Plan "establishes a path that will get California to its 2030 target" and "identifies how the State can reach our 2030 climate target to reduce...GHG emissions by 40 percent from 1990 levels." (2017 Plan at pp. 1).[82] Similarly, CARB's First Update provides that it "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction

[82] California Air Resources Board California's 2017 Climate Change Scoping Plan, https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf

strategies recommended by ARB would serve to reduce the Project's post-2020 emissions level to the extent required by applicable by law. (CARB's First Update, p. 4 and Table 6 pp. 94-99.)

Finally, this revised analysis of the Project's GHG impacts evaluates consistency with plans and programs aimed at reducing GHG emissions by the year 2020, which has passed, in order to provide a complete and updated evaluation of the Project's GHG impacts that was initially provided in the Original EIR, which was published prior to the year 2020.

Executive Order S-03-05, AB 32 and AB 32 Scoping Plan and First Update

The Project is consistent with the State's Executive Order S-3-05, which calls for strategies for the purpose of reducing GHG emissions. (Goals identified in this Executive Order were adopted in AB 32.) These strategies encourage the development of more efficient land-use patterns to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. The Project includes elements of smart land use as it is a mixed-used development located in an urban infill area well-served by transportation infrastructure that includes robust public transit provided by Metro. Accordingly, the Project is consistent with Executive Order S-3-05.

AB 32 (Cal. Health and Safety Code sections 35500 *et seq*.) calls for the reduction of GHG emissions to 1990 levels by the Year 2020. The AB 32 Scoping Plan and 2014 First Update provides the basis for policies that will reduce cumulative GHG emissions within California to 1990 levels by 2020. Table 4.F-7 evaluates the Project's consistency with the AB 32 Scoping Plan and 2014 First Update to determine whether it would result in adverse cumulative impacts to global climate change. The Project is consistent with the focus of the Scoping Plan and 2014 First Update focus on emission reductions from several key sectors:

- **Energy Sector:** Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the state's zero net energy building goals, would serve to reduce the Project's emissions level.[83] Additionally, further additions to California's renewable resource portfolio would favorably influence the Project's emissions level.[84]
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project's emissions level.[85]
- **Water Sector:** The Project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.[86]
- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the Project's emissions level.[87]

[83] *CARB, First Update, pp. 37-39, 85, May 2014.*

[84] *CARB, First Update, pp. 40-41, May 2014.*

[85] *CARB, First Update, pp. 55-56, May 2014.*

[86] *CARB, First Update, p. 65, May 2014.*

[87] *CARB, First Update, p. 69, May 2014.*

Based on this evaluation, the Project would be consistent with all feasible and applicable strategies recommended in the AB 32 Scoping Plan and First Update.

Table 4.F-7
Project Consistency With AB 32 Scoping Plan GHG Emissions Reduction Strategies

Strategy	Project Consistency
California Cap-and-Trade Program. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions.	**Not Applicable.** The statewide program is not relevant to the Project.
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the system. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	**Not Applicable.** The development of standards is not relevant to the Project.
Energy Efficiency. Maximize energy efficiency building and appliance standards and pursue additional efficiency efforts including new technologies, and new policy and mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent.** The Project is designed to meet Cal Green building standards by including several measures designed to reduce energy consumption. This includes provision of conduits and rooftop space for photovoltaic solar panels, use of resilient flooring
Renewables Portfolio Standard. Achieve 33 renewable energy mix statewide by 2020.	**Consistent.** The Project will utilize energy from the Los Angeles Department of Water and Power, which has goals to diversify its portfolio of energy sources to increase the use of renewable energy.
Low-Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Not Applicable.** The statewide program is not relevant to the Project.
Regional Transportation-Related Greenhouse Gases. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	**Not Applicable.** The development of regional planning goals is not relevant to the Project. The Project's infill location near 28 bus routes within ¼-mile make it consistent with the smart growth objectives of the region's Sustainable Communities Strategy (SCS).
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not Applicable.** State agencies are responsible for implementing regulations and promoting efficiency in goods movement.

Table 4.F-7
Project Consistency With AB 32 Scoping Plan GHG Emissions Reduction Strategies

Strategy	Project Consistency
Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Consistent.** The Project would include photovoltaic solar panels that would cover some of the house load. Further, the Project would use energy from LADWP, which obtains a portion of its power through solar sources. In accordance with the City's Green Building Ordinance, an electrical conduit would be provided from the electrical service equipment to an accessible location in a location suitable for future connection to a solar system. The conduit shall be labeled as per the Los Angeles Fire Department requirements. The electrical panel shall be sized to accommodate the installation of a future electrical solar system. A minimum of 250 square feet of contiguous unobstructed roof area will be provided for the installation of future photovoltaic or other electrical solar panels. The location shall be suitable for installing future solar panels as determined by the designer.
Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission.	**Not Applicable.** This measure addresses industrial facilities.
High Speed Rail. Support implementation of a high speed rail system.	**Not Applicable.** This calls for the California High Speed Rail Authority and stakeholders to develop a statewide rail transportation system.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent.** The Project is designed to meet Cal Green building standards and will include several measures designed to reduce energy consumption.
High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	**Not Applicable.** State agencies are responsible for implementing these measures.

Table 4.F-7
Project Consistency With AB 32 Scoping Plan GHG Emissions Reduction Strategies

Strategy	Project Consistency
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials and mandate commercial recycling. Move toward zero waste.	**Consistent.** The Project is expected to have minimal impact on solid waste facilities.
Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not Applicable.** Resource Agency departments are responsible for implementing this measure.
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent.** The Project would use water-efficient landscaping. The building will be designed to be grey-water ready.
Agriculture. In the near-term, encourage investment in manure digester and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not Applicable.** The Project does not include agricultural facilities.
Source: DKA Planning, 2017.	

Based on this evaluation, the Project would be consistent with all feasible and applicable strategies recommended in the AB 32 Scoping Plan and First Update.

Executive Order B-30-15, SB 32 and 2017 Scoping Plan

On April 29, 2015, Governor Brown issued an executive order setting a statewide GHG reduction target of 40 percent below 1990 levels by 2030. SB 32, which codified Executive Order B-30-15, calls for Statewide reductions in GHG 40 percent below 1990 levels by 2030. In November 2017, CARB adopted a Climate Change Scoping Plan (2017 Scoping Plan) that addressed how long-term objectives could be met, including SB 32 targets in 2030. (Specifically, the 2017 Scoping Plan states that the Plan "establishes a path that will get California to its 2030 target" and "identifies how the State can reach our 2030 climate target to reduce…GHG emissions by 40 percent from 1990 levels." (2017 Plan at pp. 1).[88] Also, many of the emission reduction strategies recommended by CARB would serve to reduce the Project's post-2020 emissions level to the extent applicable by law and help lay the foundation "…for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by

[88] California Air Resources Board California's 2017 Climate Change Scoping Plan, https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf

2050," as called for in CARB's First Update to the AB 32 Scoping Plan.[89,90]

The 2017 Scoping Plan and the SB 32 objectives that drive it 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. Although a number of these strategies are currently promulgated, some have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. Based on the following analysis provided in Table 4.F-7A, the Project would be consistent with the State's Climate Change Scoping Plan's objective of reducing 2030 GHG emissions in accordance with SB 32.

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Senate Bill 350 (SB 350) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030.[a] • Increase RPS to 50 percent of retail sales by 2030. • Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	California Public Utilities Commission, California Energy Commission, CARB	**Consistent.** As Los Angeles Department of Water and Power (LADWP) would provide electricity service to the Project Site, by 2030 the Project would use electricity consistent with the requirements of SB 350. It is assumed that LADWP will receive at least 33 percent of electricity from renewable sources by year 2020 and 50 percent by 2030 (with a straight-line interpolation for the Project buildout year of 2024). The Project would comply with CalGreen and Title 24 energy efficiency standards.[91]

[89] *CARB, First Update, p. 4, May 2014. See also id. at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the "electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles."]*

[90] *CARB, First Update, Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.*

[91] *While* SB 350 is focused on utilities that provide electricity to retails customers, it should be noted that the Project will meet the State's energy efficient target by, among other ways, complying with the City's Green Building Code and designing the Project to include energy efficient appliances, boilers, heaters and air conditioning systems.

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
• Reduce GHG emissions in the electricity sector through the implementation of the above measures as modeled in Integrated Resource Plans to meet GHG planning targets in the IRP. Load-serving entities and publicly-owned utilities meet GHG emission reductions through measures described in IRPs.		
Senate Bill 100 (SB 100). The California Renewables Portfolio Standard Program (2018) requires a Statewide renewables energy portfolio that requires retail sellers to procure renewable energy that is at least 50 percent by December 31, 2026 and 60 percent by December 31, 2030. It would also require that local publicly owned electric utilities procure a minimum quantity of electricity from renewable energy resources achieve 44 percent of retail sales by December 31, 2024 and 60 percent by December 31, 2030.	LADWP, California Public Utilities Commission	**Consistent.** LADWP is required to generate electricity that would increase renewable energy resources to 33 percent by 2020 and 50 percent by 2030. The results of DWP's Los Angeles 100% Renewable Energy Study (LA100), released March 2021, show that a reliable, 100-percent renewable electricity supply is indeed achievable for LA by 2045 or even a decade sooner. As LADWP would provide electricity service to the Project, by 2030 the Project would use electricity consistent with the requirements of SB 100. The Project would comply with this this action/strategy being located within the LADWP service area and compliance with CalGreen and Title 24 energy efficiency standards
Implement Mobile Source Strategy (Cleaner Technology and Fuels) • At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.	CARB, California State Transportation Agency, Southern California Gas, Caltrans California Energy Commission, Office	**Consistent.** GHG emissions generated by Project-related vehicular travel would benefit from proposed regulation, and mobile source emissions generated by the Project would be reduced with implementation of standards under the Advanced Clean Cars Program

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
• At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030. • Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations. • Medium- and heavy-duty GHG Phase 2. • Innovative Clean Transit • Last Mile Delivery • Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."	of Planning and Research, Local agencies	for LEV and ZEVs, consistent with reduction of GHG emissions under AB 32. Mobile source GHG emissions estimates conservatively do not include this additional 34-percent reduction in mobile source emissions as the CalEEMod model does not yet account for this regulation. In addition, in December 2008, the regulation requires all public transit agencies to gradually transition to a 100-percent zero-emission bus fleet and encourages them to provide innovative first and last-mile connectivity and improved mobility for transit riders. Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, Senate Bill (SB) 350, and Assembly Bill (AB) 32. With regard to SB 375, the Project represents an infill development within an existing urbanized area that would concentrate more hotel and hospitality uses within an HQTA. Therefore, the Project would be consistent with SB375 and SCAG's 2020-2045 RTP/SCS. Furthermore, the RTP/SCS would result in an estimated 19-percent decrease in per capita GHG emissions from passenger vehicles by 2035. Project-related transportation emissions would be reduced by approximately 30 percent and therefore, the Project would be consistent with SB 375 and the 2020-2045 RTP/SCS.

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Increase Stringency of SB 375 Sustainable Communities Strategy (2035 Targets)	CARB	**Consistent.** The Project would be consistent with SB 375 for developing an infill project within an existing urbanized area. This would concentrate new residential, commercial, and other uses within an HQTA. Project-related transportation emissions would be reduced by approximately 30 percent and therefore, the Project would be consistent with SB 375 and the 2020-2045 RTP/SCS.
By 2019, adjust performance measures used to select and design transportation facilities. Harmonize project performance with emissions reductions, and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection).	California State Transportation Agency and Southern California Gas, Office of Planning and Research, CARB, GoBiz, IBank, Department of Finance, California Transportation Commission, Caltrans	**Not Applicable.** The Project would not involve construction of transportation facilities. However, the Project would be located in close proximity to ample transit opportunities, including Metro local routes and LADOT transit services. The access to active transportation infrastructure for both pedestrians and bicyclists will further reduce impacts to the transportation infrastructure in Downtown Los Angeles.
By 2019, develop pricing policies to support low- GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	California State Transportation Agency, Caltrans, California Transportation Commission, Office of Planning and Research/Southern California Gas, CARB	**Consistent.** The Project would support this policy by providing the electric vehicle supply wiring (EV-ready) for code-required parking spaces for the Project.
Implement California Sustainable Freight Action Plan, including improving freight system efficiency. This includes deploying over 100,000 freight vehicles and	CARB	**Not Applicable.** The Project land uses would not include freight transportation or warehousing. Therefore, the Project would not interfere or impede the implementation of the Sustainable Freight Action Plan.

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
equipment capable of zero emission operation and maximize zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		
Adopt a Low Carbon Fuel Standard (LCFS) with a Carbon Index (CI) reduction of 18 percent.	CARB	**Not Applicable.** This regulatory program applies to fuel suppliers, not directly to land use development. GHG emissions related to vehicular travel associated with the Project would benefit from this regulation because fuel used by Project-related vehicles would be required to comply with LCFS. Mobile source GHG emissions estimates were calculated using CalEEMod that includes implementation of the LCFS into mobile source emission factors. The current LCFS, last amended in September 2018, establishes a 20 percent reduction in CI from a 2010 baseline by 2030.
Mobile		
Implement the Short-Lived Climate Pollutant Strategy by 2030: • 40 percent reduction in methane and hydrofluorocarbon emissions below 2013 levels. • 50 percent reduction in black carbon emissions below 2013 levels.	CARB, CalRecycle, California Department of Food and Agriculture, California State Water Resources Control Board, Local air districts	**Consistent.** The Project would comply with the CARB Short-Lived Climate Pollutant (SLCP) Reduction Strategy, which limits the use of hydrofluorocarbons for refrigeration uses.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, California Department of Food and Agriculture, California State	**Not Applicable.** This strategy calls on regulators to reduce GHG emissions from landfills and is not applicable to a development project. Under SB 1383, the California Department of Resources Recycling

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
	Water Resources Control Board, Local air districts	and Recovery (CalRecycle) is responsible for achieving a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and 75-percent reduction by 2025.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	**Not Applicable**. This applies to State regulators and is not applicable to a development project. Assembly Bill 398 (AB 398) was enacted in 2017 to extend and clarify the role of the state's Cap-and-Trade Program from January 1, 2021, through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink: • Protect land from conversion through conservation easements and other incentives. • Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity. • Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments. • Establish scenario projections to serve as the foundation for the Implementation Plan.	California Natural Resources Agency and departments within, California Department of Food and Agriculture, CalEPA, CARB	**Not Applicable.** This applies to State regulators and is not applicable to a development project. This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan.

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Other		
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	**Not Applicable.** This applies to State regulators and is not applicable to a development project. This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan.
Implement Forest Carbon Plan	California Natural Resources Agency, CAL FIRE, CalEPA	**Not Applicable.** This applies to State regulators and is not applicable to a development project. This regulatory program applies to state and federal forest land, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	**Not Applicable.** This applies to State regulators and is not applicable to a development project. Funding and financing mechanisms are the responsibility of the state and local agencies. The Project would not conflict with funding and financing mechanisms to support GHG reductions.

[a] Senate Bill 350 (2015–2016 Regular Session) Stats 2015, Ch. 547.

[b] CARB, Advance Clean Cars, Midterm Review, www.arb.ca.gov/msprog/acc/acc-mtr.htm.

[c] CARB, Advanced Clean Local Trucks (Last mile delivery and local trucks), https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks

[d] CARB, LCFS Rulemaking Documents, https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation

Table 4.F-7A
Consistency Analysis—2017 Scoping Plan

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis

[e] CARB, Reducing Short-Lived Climate Pollutants in California, https://ww2.arb.ca.gov/our-work/programs/slcp

[f] CARB, Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions, www.calrecycle.ca.gov/climate/slcp/.

Source: California Air Resources Board (CARB), California's 2017 Climate Change Scoping Plan (Table 17: Climate Change Policies and Measures), November 2017.

Source: DKA Planning, 2021 (Appendix F-1).

SCAG's RTP/SCS

At the regional level, the 2020-2045 RTP/SCS represent the region's Climate Action Plan that defines strategies for reducing GHGs. In order to assess the Project's potential to conflict with the RTP/SCS, this section analyzes the Project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

The Project is an infill development that is consistent with the 2020-2045 RTP/SCS and its focus on integrated land use planning. Specifically, the Site's location near 28 local transit and bus services places it in a High Quality Transit Area (HQTA). Further, the vertical integration of land uses on the site would produce substantial reductions in auto mode share to and from the Site that would help the region accommodate growth and promote public transit ridership that minimizes GHG emission increases and reduces per capita emissions consistent with the RTP/SCS. Further, the inclusion of electric vehicle charging infrastructure would support the penetration of electric zero-emission vehicles into the vehicle fleet.

The Original Draft EIR analyzed the Project's consistency with the 2016-2040 RTP/SCS. For completeness sake, that analysis is repeated in Table 4.F-8 below. The Project's consistency with the 2020-2045 RTP/SCS is provided in Table 4.F-8A.

Table 4.F-8
Project Consistency With SCAG 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Land Use Strategies		
Reflect the changing population and demands, including combating gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The Project would include residences that would add to the supply of housing in metropolitan Los Angeles County.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016 RTP/SCS focus on growing near transit facilities.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG, Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016 RTP/SCS focus on focusing growth along the 2,980 miles of Livable Corridors in the region.
Provide more options for short trips through	SCAG, Local Jurisdictions	**Consistent.** The Project would help further jobs/housing balance objectives that can improve

Neighborhood Mobility Areas and Complete Communities.		the use of Neighborhood Electric Vehicles for short trips. The Project is also generally consistent with the Complete Communities initiative that focuses on creation of mixed-use districts in growth areas.
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities, the Project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG Local Jurisdictions	**Consistent.** The Project is an infill development that would help reduce demand for growth in urbanizing areas that threaten greenfields and open spaces.
Transportation Strategies		
Preserve our existing transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the Project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions Local Jurisdictions	**Consistent.** The Project is an infill development that will minimize congestion impacts on the region because of its proximity to public transit, Complete Communities, and general density of population and jobs.
Promote safety and security in the transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the Project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes, goods movement, and airport ground transportation systems.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional growth. The Project would not interfere with this larger goal of investing in the transportation system.

Technological Innovation and 21st Century Transportation		
Promote zero-emissions vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include pre-wiring for electric vehicle charging infrastructure.
Promote neighborhood electric vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include pre-wiring for electric vehicle charging infrastructure.
Implement shared mobility programs.	SCAG Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the Project would not interfere with these emerging programs.
Source: Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; April 2016.		

As such, Table 4.F-8 demonstrates the Project's consistency with the Actions and Strategies set forth in the 2016–2040 RTP/SCS. The Project would also be consistent with the applicable goals and principles, as well as GHG reduction related actions and strategies set forth in the 2016–2040 RTP/SCS.

On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS which will form the basis of the transportation strategies in the region's future 2022 AQMP air quality attainment plan. Table 4.F-8A provides a comparison of the Proposed Project against the GHG-related performance measures of the SCS.

Table 4.F-8A
Project Consistency With SCAG 2020-2045 RTP/SCS

Objectives	Responsible Party(ies)	Consistency Analysis
Increase percentage of region's total household growth occurring within HQTAs.	SCAG Local Jurisdictions	**Consistent.** The Project would locate 323 residential units, including 32 units for moderate-income families, in the heart of SCAG's Downtown Los Angeles HQTA. This will help increase the supply and diversity of housing stock in the City and would support the City's efforts to add to the supply and diversity of housing in metropolitan Los Angeles County.
Increase percent of the region's total employment growth occurring within HQTAs.	SCAG Local Jurisdictions	**Consistent.** The Project is an infill development that would create new jobs associated with the wholesale trade, retail, restaurant, and office uses, consistent with the 2020 RTP/SCS policies and would advance the smart growth efforts in SCAG's Downtown Los Angeles HQTA.
Decrease total acreage of greenfield or otherwise rural land uses converted to urban use.	SCAG Local Jurisdictions	**Consistent.** The Project is an infill development with both housing and commercial uses that would reduce the demand for sprawl development in greenfield or rural areas on the fringes of Southern California.
Decrease daily vehicle miles driven per person.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the midst of heavy transit infrastructure that would reduce daily VMT per capita. This includes access to Metro and LADOT local and express bus service and subway and light rail infrastructure. The Site is near the 7th Street/Metro Center, Pershing Square, and other rail transit stations that provide access to the B and D subway lines and A and E light rail lines that access regional destinations.
Decrease average daily distance traveled for work and non-work trips (in miles)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA with a heavy density of housing and jobs in the midst of heavy transit infrastructure that would reduce travel distances per capita. The Site is near the 7th Street/Metro Center, Pershing Square, and other rail transit stations that provide access to the B and D subway lines and A and E light rail lines that access regional destinations.

Objectives	Responsible Party(ies)	Consistency Analysis
Increase percentage of work and non-work trips which are less than 3 miles in length.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA with a heavy density of housing and jobs in the midst of heavy transit infrastructure that would increase the rate of travel less than three miles in length.
Increase share of short trip lengths for commute purposes.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA with a heavy density of housing and jobs in the midst of heavy transit infrastructure that would shorten commute trips.
Decrease average minutes of delay experienced per capita due to traffic congestion.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles and the proximity to transit infrastructure.
Decrease excess travel time resulting from the difference between a reference speed and actual speed.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles corridor. As such, the Project would help reduce recurrent traffic congestion delay for general vehicles.
Decrease excess travel time for heavy-duty trucks result from the difference between reference speed and actual speed.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles. As such, the Project would help reduce recurrent traffic congestion delay for heavy-duty trucks.

Objectives	Responsible Party(ies)	Consistency Analysis
Increase percentage of PM peak period trips completed within 45 minutes by travel mode.	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles. Because the Project's location will attract travel to and from the many activity centers in Downtown Los Angeles, the share of PM peak period trips that are less than 45 minutes would increase when compared to an urban sprawl location.
Increase percentage of trips that use transit (work and all trips)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA with a heavy density of housing and jobs in the midst of heavy transit infrastructure that would help increase transit mode share. The Site is near the 7th Street/Metro Center, Pershing Square, and other rail transit stations that provide access to the B and D subway lines and A and E light rail lines that access regional destinations.
Decrease average travel time to work (all modes)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles. Because the Project's location will attract travel to and from the many activity centers in Downtown, average travel time to work should be reduced when compared to an urban sprawl location.
Increase percentage of trips using either walking or biking (by trip type)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown Los Angeles. Portions of Downtown Los Angeles are

Objectives	Responsible Party(ies)	Consistency Analysis
		within a Pedestrian Enhanced District that will attract future infrastructure investment to incentivize walking.
Reduce per capita GHG emissions (from 2005 levels)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in auto traffic and congestion by virtue of its heavy transit and active transportation mode share given its location. As such, it is consistent with AB 32, SB 32, SB 375, and other initiatives designed to reduce per capita GHG emissions from 2005 levels.
Increase percentage of trips using a travel mode other than single occupancy vehicle (SOV)	SCAG Los Angeles County Metropolitan Transportation Authority Local Jurisdictions	**Consistent.** The Project is an infill development with both residential and mixed commercial uses in the dense Downtown Los Angeles HQTA that will reduce the rate of growth in SOV use and congestion by virtue of its heavy transit and active transportation mode share given its location in Downtown. The Site is near the 7th Street/Metro Center, Pershing Square, and other rail transit stations that provide access to the B and D subway lines and A and E light rail lines that access regional destinations. Portions of Downtown Los Angeles are within a Pedestrian Enhanced District that will attract future infrastructure investment to incentivize walking.
Source: Southern California Association of Governments; 2020–2045 RTP/SCS *Source: DKA Planning, 2021 (Appendix F-1).*		

As illustrated in Table 4.F-8A, the Proposed Project is fully in line with the objectives and direction of the 2020–2045 RTP/SCS. Its infill location in the Downtown Los Angeles HQTA is the type of setting to promote regional policies that leverage regional transportation infrastructure, both rail and bus, while also leveraging the ability of local active transportation infrastructure to further reduce long-distance trips with last-mile options and local trips that can often be accomplished faster with bicycling or walking. Therefore, the Project would be consistent with the GHG reduction related actions and strategies contained in the 2020–2045 RTP/SCS.

City of Los Angeles Mobility 2035 Plan

While the Mobility 2035 Plan focuses on developing a multi-modal transportation system, its key policy initiatives include considering the strong link between land use and transportation and targeting GHG through a more sustainable transportation system. The Project is fully consistent with these general objectives, including the most relevant strategy, Program No. D7, which calls for the development of GHG tracking program that would quantify reductions in GHG from reductions in vehicle miles traveled. The Project will lower GHG emissions due to fewer vehicle miles traveled since it is an urban infill project located in close proximity to transit and bus lines. Further, the mixed use nature of the project will reduce automobile trips and associated GHG emissions. (Refer to Table 4.F-6.)

City of Los Angeles Sustainable City pLAn/L.A.'s Green New Deal

The Sustainable City pLAn includes both short-term and long-term aspirations 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, within L.A.'s Green New Deal (Sustainable City pLAn 2019), climate mitigation is one of eight explicit benefits that help define its strategies and goals.

The Sustainable City pLAn/L.A.'s Green New Deal provides information as to what the City will do with buildings and infrastructure in its control, and provides specific targets related to housing and development, as well as mobility and transit, including the reduction of VMT per capita by 5 percent by 2025, and increasing trips made by walking, biking or transit by at least 35 percent by 2025. As noted above, the Sustainable City pLAn was updated in April 2019 and renamed as L.A.'s Green New Deal, which has established targets such as 100 percent renewable energy by 2045, diversion of 100 percent of waste by 2050, and recycling 100 percent of wastewater by 2035. Although the Sustainable City pLAn/L.A.'s Green New Deal mainly targets GHG emissions related to City owned buildings and operations, certain reductions associated with the Project would promote its goals. Such measures include increasing renewable energy usage; reduction of per capita water usage; promotion of walking and biking to work, promotion of high density housing close to major transportation stops; and various recycling and trash diversion goals. Table 4.F-9 below provides a discussion of the Project's consistency with applicable GHG-reducing actions from the City of LA's Green New Deal. As discussed therein, the Project would be consistent with the applicable goals and actions of the City of LA Green New Deal.

Although the Sustainable City pLAn/L.A.'s Green New Deal is not an adopted plan or directly applicable to private development projects, the Project would generally be consistent with these aspirations as it is an infill development consisting of residential and commercial uses on a Project

Site with the access to rail and bus lines and is located in a Transit Priority Area. In addition, the Project would comply with 2019 Title 24 Standards and would implement measures to reduce overall energy usage compared to baseline conditions. Furthermore, the Project would implement various project design features to reduce energy usage and would comply with the City of Los Angeles Solid Waste Management Policy Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) in furtherance of the aspirations included in the Sustainable City pLAn/L.A.'s Green New Deal with regard to energy-efficient buildings and waste and landfills. The Project would also provide secure short- and long-term bicycle storage areas for Project residents and guests.

Overall, the Project would be consistent with the Sustainable City pLAn/L.A.'s Green New Deal. Therefore, impacts pertaining to consistency with the Sustainable City pLAn/L.A.'s Green New Deal would be less than significant.

Table IV.F-9
Consistency with Applicable GHG Emissions Goals and Actions of LA'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.	**Consistent.** While this action primarily applies to the City and LADWP, the Project would incorporate water conservation features to reduce water use. Water usage rates would be consistent with the requirements under City Ordinance No. 184,248, the 2016 California Plumbing Code, 2019 CALGreen, 2017 Los Angeles Plumbing Code, and 2020 Los Angeles Green Building Code and reflects approximately a 20 percent reduction in water usage as compared to the 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.	**Consistent.** While this action primarily applies to the City, the Project would be designed and operated to meet or exceed the applicable requirements of CALGreen and the Los Angeles Green Building Code. Furthermore, the Project would be subject to the 2019 Title 24 Standards, which are a major step towards meeting the ZNE goal.
Reduce building energy use per sf for	The City would increase awareness of incentives and smart building	**Consistent.** While this action primarily applies to the City, the

Action	Description	Consistency Analysis
all building types 22% by 2025; 34% by 2035; and 44% by 2050.	energy management systems. An energy consumption report will be prepared to assess the energy-water nexus.	Project would be designed and operated to meet or exceed the applicable requirements of CALGreen and the Los Angeles Green Building Code.
Focus Area: Housing and Development		
Ensure 57% of new housing units are built within 1500 ft of transit by 2025; and 75% by 2035.	The City would develop regulatory tools and strategies to encourage transit ridership and focus growth in housing near the North Hollywood Station, Van Nuys Station, Sepulveda Station, Reseda Station, and Sherman Way Station. New stations would also be added to the Purple [now D] Line from Downtown L.A. to UCLA. This action reduces vehicle emissions by facilitating access to transit which can reduce single occupancy vehicle trips and help alleviate traffic congestion, and most importantly, reducing associated GHG emissions.	**Consistent.** While this action primarily applies to the City, the Project would concentrate new residential and commercial uses in close proximity to public transit opportunities (e.g., light rail and bus routes). The Project Site is well served by public transit.
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 Side Mobility Plan to ease congestion.	**No Conflict.** While this action primarily applies to the City, the Project would be located near mass transit to reduce vehicle trips. The Project would also promote a pedestrian-friendly community by placing residential and commercial uses within walking distance to other retail and entertainment uses. The Project Site is located in a HQTA as designated by the 2020–2045 RTP/SCS. The Project would also provide bicycle parking spaces in accordance with LAMC requirements for Project residents and visitors. As discussed above, the Project would result in a per capita VMT which is lower when compared to the APC designated for the Project area..

Action	Description	Consistency Analysis
Focus Area: Mobility and Public Transit		
Increase the percentage of electric and zero emission vehicles in the City to 25% by 2025; 80% by 2035; and 100% by 2050.	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.	**No Conflict.** The Project would support this policy by providing EV charging stations and EV supply wiring consistent with City requirements.

City of Los Angeles Green Building Ordinance

Pursuant to the City's Los Angeles Green Building Ordinance, the Project will comply with the 2019 Los Angeles Green Building Code. Under the City's Green Building Code, the Project must incorporate measures and design elements that reduce the carbon footprint of the development. As such, the Project would meet each of the ordinance's requirements for implementing specific requirements and/or meeting performance standards for resource conservation, including: (1) measures to reduce storm water pollution, provide designated parking for bicycles and low-emission vehicles, have wiring for electric vehicles, reduce light pollution, and design grading and paving to keep surface water from entering buildings, (2) meeting Title 24 standards, (3) providing plumbing fixtures and fixture fittings that reduce potable water use, provide irrigation controllers that are weather- or soil moisture-based and automatically adjust in response to weather conditions and plants' needs, and implementing wastewater reduction measures to reduce outdoor potable water use, and (4) diverting 75 percent of solid waste to landfills through source reduction, recycling, and composting., and providing adequate storage areas for collection and storage of recyclable waste materials, and (5) meeting strict standards for any fireplaces and woodstoves, covering of duct openings and protection of mechanical equipment during constructions, and meeting other requirements for reducing emissions from flooring systems, any CFC and halon use, and other project amenities.

To be conservative, GHG emission reductions associated with compliance with the City's Green Building Ordinance were not accounted for in the As Proposed scenario for the Project (refer to Tables 4.F-5A and B) except for compliance with State regulations that are incorporated into the Green Building Ordinance.

CUMULATIVE IMPACTS

The emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. The State has mandated goals of reducing statewide emissions to 1990 levels, even though statewide population and commerce is predicted to continue to expand. In order to achieve this goal, CARB has adopted various plans and regulations to reduce statewide GHG emissions.

Currently, there are no applicable CARB, SCAQMD, or City of Los Angeles significance thresholds or specific numeric reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative levels. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3), the City as Lead Agency has determined that the Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and policies to reduce GHG Emissions: Executive Orders S-3-05 and B-30-15, AB 32, SB 32, CARB's Scoping Plans, the 2020-2045 RTP/SCS, the City of Los Angeles Green Building Ordinance, the City of Los Angeles Green New Deal and the City of Los Angeles Mobility 2035 Plan.

Implementation of the Project's regulatory compliance measures and Project design features, including State mandates, would contribute to GHG reductions. These reductions represent a reduction from the 2020 NAT scenario and would support State goals for GHG emissions reduction. The methods used to establish this relative reduction are consistent with the approach used in CARB's *Climate Change Scoping Plan* for the implementation of AB 32.

The Project is consistent with the approach outlined in CARB's Scoping Plans, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. In addition, as recommended by CARB, the Project would use "green building" features as a framework for achieving cross-cutting emissions reductions as new buildings and infrastructure would be designed to achieve the standards of CALGreen.

As part of SCAG's 2020-2045 SCS/RTP, a reduction in VMT within the region is a key component to achieve the GHG emission reduction targets established by CARB. The Project results in significant VMT reduction in comparison to the 2020 NAT scenario and would be consistent with the SCS/RTP.

The Project also would comply with the City of Los Angeles Green Building Code, which emphasizes improving energy conservation and energy efficiency, increasing renewable energy generation, and changing transportation and land use patterns to reduce auto dependence. The Project's regulatory compliance measures and Project design features provided above and throughout this analysis would advance these objectives. Further, the related projects would also be anticipated to comply with many of these same emissions reduction goals and objectives (e.g., City of Los Angeles Green Building Code).

Additionally, the Project has incorporated sustainability design features in accordance with regulatory requirements as provided in the regulatory compliance measures throughout this analysis and project design features to reduce VMT and to reduce the Project's potential impact with respect to GHG emissions. With implementation of these features, the Project results in a range from 40 percent to 64 percent reduction in GHG emissions relative to the 2020 NAT scenario. The Project's GHG reduction measures make the Project consistent with AB 32 and SB 32.

As discussed above, the Project is consistent with the applicable GHG reduction plans and policies. The 2020 NAT scenario comparison demonstrates the efficacy of the measures contained in these policies. Moreover, while the Project is not directly subject to the Cap-and-Trade Program, that Program would indirectly reduce the Project's GHG emissions by regulating "covered entities" that affect the Project's GHG emissions, including energy, mobile, and construction emissions. More importantly, the Cap-and-Trade Program would backstop the GHG reduction plans and policies applicable to the Project in that the Cap-and-Trade Program would be responsible for relatively more emissions reductions should California's direct regulatory measures reduce GHG emissions less than expected.

Thus, given the Project's consistency with State, regional, and City of Los Angeles GHG emission reduction goals and objectives, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. In the absence of adopted standards and established significance thresholds, and given this consistency, it is concluded that the Project's impacts are cumulatively less than significant.

MITIGATION MEASURES

None required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to GHG emissions would be less than significant.