5.7 GREENHOUSE GAS EMISSIONS

This section of the EIR describes the affected environment and regulatory setting for greenhouse gases (GHGs) and global climate change. It also describes the GHG and global climate change impacts that would result from implementation of the project along with mitigation measures that would reduce these impacts. This section is based on the following document (Appendix C): *Air Quality and Greenhouse Gas Technical Report for the La Brea Tar Pits Master Plan* (SWCA 2022).

5.7.1 Existing Conditions

Global climate change refers to the changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of GHGs that keep the Earth's surface warm by trapping heat in the Earth's atmosphere, in much the same way as glass traps heat in a greenhouse. The Earth's climate is changing because human activities, primarily the combustion of fossil fuels, are altering the chemical composition of the atmosphere through the buildup of GHGs. GHGs are released by the combustion of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect. While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy.

Regarding the adverse effects of global warming, as reported by the Southern California Association of Governments (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 levels, damage to marine and other ecosystems, and an increase in the incidences of infectious diseases" (SCAG 2007:116). 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 carbon dioxide (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 16th 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 a major contributor to the global warming problem" (SCAG 2007:117).

5.7.1.1 Overview of Greenhouse Gases

GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Carbon dioxide is the most abundant GHG. Other GHGs are less abundant but have higher global warming potential than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. The primary GHGs attributed to global climate change are described below.

CARBON DIOXIDE (CO_2)

In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals, and plants, volcanic outgassing, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources of CO_2 include the combustion of fossil

fuels and wood, waste incineration, mineral production, and deforestation. Anthropogenic sources of CO_2 amount to over 30 billion tons per year, globally (Friedlingstein et al. 2022). Natural sources release substantially larger amounts of CO_2. Nevertheless, natural removal processes, such as photosynthesis by land and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO_2, and, consequently, the gas is building up in the atmosphere.

METHANE (CH_4)

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH_4 emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH_4 in California.

NITROUS OXIDE (N_2O)

Nitrous oxide is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion produce N_2O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in California.

HYDROFLUOROCARBONS, PERFLUOROCARBONS, SULFUR HEXAFLUORIDE

Hydrofluorocarbons (HFCs) are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol, an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion. Perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6) are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no primary aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs.

The magnitude of the impact on global warming differs among the GHGs. The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential (GWP). GWP is one type of simplified index based upon radiative properties used to estimate the potential future impacts of emissions of different gases upon the climate system, expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e). GWP is based on a number of 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) 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 period. HFCs, PFCs, and SF_6 have a greater GWP than CO_2. In other words, these other GHGs have a greater contribution to global warming than CO_2 on a per-mass basis. However, CO_2 has the greatest impact on global warming because of the relatively large quantities of CO_2 emitted into the atmosphere. A summary of the atmospheric lifetime and GWP of selected gases is presented in Table 5.7-1. As shown in Table 5.7-1, GWPs range from 1 to 23,500. The IPCC has released three assessment reports (AR4, AR5, and AR6) with updated GWPs; however, the California Air Resources Board (CARB) reports the statewide GHG inventory using the AR4 GWPs, which is consistent with

international reporting standards. By applying the GWP ratios, project-related equivalent mass of CO_2 (denoted as CO_2e emissions) can be shown in metric tons per year.

Table 5.7-1. Global Warming Potentials

Greenhouse Gas	GWP Values for 100-year Time Horizon		
	AR4*	AR5	AR6
Carbon dioxide (CO_2)	1	1	1
Methane (CH_4)	25	28	Fossil origin – 29.8 Non-fossil origin – 27.2
Nitrous oxide (N_2O)	298	265	273
Select hydrofluorocarbons (HFCs)	124–14,800	4–12,400	–
Sulfur hexafluoride (SF_6)	22,800	23,500	–

Sources: IPCC (2007, 2013, 2022).

* For consistency with the U.S. Environmental Protection Agency and its inventory of greenhouse gas reporting (2022), we have represented values from AR4 of the IPCC report in this report.

5.7.1.2 Greenhouse Gas Emissions Inventories

UNITED STATES GHG EMISSIONS

Per the EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020* (EPA 2022), total U.S. GHG emissions have decreased by 6.6% from 1990 to 2020; 2005 emissions were 15.8% above 1990 levels. The largest source of GHG emissions from human activities in the United States is from burning of fossil fuels for electricity, heat, and transportation. The latest national GHG emissions are for calendar year 2020, in which total gross U.S. GHG emissions were reported at 5,981.4 million metric tons carbon dioxide equivalent (MMT CO_2e). Emissions decreased from 2019 to 2020 by 543.4 MMT CO_2e and net emissions (including sinks) were 5,222.4 MMT CO_2e.

STATEWIDE GHG EMISSIONS

According to California's 2000–2019 GHG emissions inventory, California emitted 409.3 MMT CO_2e in 2019 (CARB 2021). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high global-warming potential substances, and recycling and waste. The California GHG emission source categories (as defined in CARB's 2008 Scoping Plan) and their relative contributions in 2019 are presented in Table 5.7-2. Total GHG emissions in 2019 were approximately 22.9 MMT CO_2e less than 2016 emissions. Based on data presented, the 2016 statewide GHG inventory fell below 1990 levels, consistent with Assembly Bill (AB) 32 (CARB 2018). The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California will continue to reduce emissions below the 2020 target of 431 metric tons CO_2e ($MTCO_2e$) (CARB 2022a).

Table 5.7-2. California Greenhouse Gas Inventory

		Year				
Parameter	**Unit***	**2015**	**2016**	**2017**	**2018**	**2019**
Transportation	MMT CO_2e	166.2	169.8	171.2	169.6	166.1
	Percentage	38.5%	40.4%	41.2%	40.7%	40.6%
Electric power	MMT CO_2e	84.8	68.6	62.1	63.1	58.8
	Percentage	19.6%	16.3%	14.9%	15.2%	14.4%
Industrial	MMT CO_2e	90.3	89	88.8	89.2	88.2
	Percentage	20.9%	21.2%	21.4%	21.4%	21.5%
Commercial and residential	MMT CO_2e	38.8	40.6	41.3	41.4	43.8
	Percentage	9.0%	9.7%	9.9%	9.9%	10.7%
Agriculture	MMT CO_2e	33.5	33.3	32.5	32.7	31.8
	Percentage	7.8%	7.9%	7.8%	7.9%	7.8%
High global warming potential (GWP)	MMT CO_2e	18.6	19.2	20	20.4	20.6
	Percentage	4.3%	4.6%	4.8%	4.9%	5.0%
Total Net Emissions	MMT CO_2e	**432.2**	**420.5**	**415.9**	**416.4**	**409.3**

Source: California GHG Inventory for 2000–2019 (CARB 2021)

* MMT CO_2e = million metric tons carbon dioxide equivalent

COUNTY OF LOS ANGELES EMISSIONS

In 2015, emissions generated by community activities occurring in the county amounted to 5.5 MMT CO_2e. The transportation and stationary energy sectors were the largest contributors to the inventory. The transportation sector accounts for approximately 2.8 MMT CO_2e (51%) of total GHG emissions, while the stationary energy sector accounts for approximately 1.9 MMT CO_2e (35%) of total GHG emissions. The transportation sector includes emissions from on-road passenger vehicles, trucks, and railways. The stationary energy sector includes emissions from residential, commercial, and institutional uses; industrial buildings; and stationary equipment. The remaining emissions sources include waste and wastewater (8%), refrigerants and other industrial products (5%), and other land-related activities including forestry and agriculture (1%).

To capture the latest emissions profile and emissions trends in Los Angeles County since 2015, the County prepared an updated inventory for the year 2018, given the availability in that year of the most recent complete data set of emissions-generating activity. Both the 2015 and the updated 2018 inventory are discussed in detail in the *Revised Draft 2045 Los Angeles County Climate Action Plan* (County of Los Angeles 2023a). The 2018 inventory relies on the same protocol and data sources that were used in the 2015 GHG emissions inventory. In 2018, communitywide emissions totaled 5.2 MMT CO_2e.
The transportation sector was the greatest contributor, accounting for 52% of emissions and 2.7 MMT CO_2e. The stationary energy sector was the second greatest contributor at 33% and 1.7 MMT CO_2e. Total GHG emissions decreased approximately 7% between 2015 and 2018. The stationary energy sector saw the greatest decrease (11%), followed by the industrial processes and product use sector (6%) and the transportation sector (5%). Emissions from stationary energy decreased primarily because of the increasing level of renewable energy supplied by Southern California Edison into the electricity grid and because certain power-generating facilities decreased their fossil fuel combustion in the intervening years. Emissions from transportation decreased primarily because of vehicle turnover to more fuel-efficient vehicles.

5.7.2 Regulatory Setting

5.7.2.1 Federal

The Supreme Court of the United States (SCOTUS) 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 EPA must regulate if it determines they pose an endangerment to public health or welfare. SCOTUS did not mandate that the EPA enact regulations to reduce GHG emissions. Instead, SCOTUS found that the EPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

On April 17, 2009, the EPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the *Federal Register* under Docket ID No. EPA-HQ-OAR-2009~0171. The EPA stated that high atmospheric levels of GHGs "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." The EPA further found that "atmospheric concentrations of GHGs endanger public health and welfare within the meaning of Section 202 of the Clean Air Act." The findings were signed by the EPA Administrator on December 7, 2009. The final findings were published in the *Federal Register* on December 15, 2009. The final rule was effective on January 14, 2010. While these findings alone do not impose any requirements on industry or other entities, this action is a prerequisite to regulatory actions by the EPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

On July 20, 2011, the EPA published its final rule deferring GHG permitting requirements for CO_2 emissions from biomass-fired and other biogenic sources until July 21, 2014. Environmental groups challenged the deferral. In September 2011, EPA released the *Accounting Framework for Biogenic CO_2 Emissions from Stationary Sources*, which analyses accounting methodologies and suggests implementation strategies to address biogenic CO_2 emitted from stationary sources.

On April 4, 2012, the EPA published a proposed rule to establish, for the first time, a new source performance standard for GHG emissions. Under the proposed rule, new fossil fuel–fired generating units larger than 25 megawatts are required to limit emissions to 1,000 pounds of CO_2 per megawatt-hour on an average annual basis, subject to certain exceptions.

On April 17, 2022, the EPA issued emission rules for oil production and natural gas production and processing operations, which are required by the CAA under Title 40 of the Code of Federal Regulations (CFR) Parts 60 and 63. The final rules include the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the federal level.

5.7.2.2 State

ENERGY INDEPENDENCE AND SECURITY ACT

The Energy Independence and Security Act of 2007 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 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% greater efficiency for lightbulbs by phasing out incandescent lightbulbs between 2012 and 2014; requiring approximately 200% greater efficiency with lightbulbs, or similar energy savings, by 2020; and
- while superseded by the EPA and National Highway Traffic Safety Administration, 1) establishing miles-per-gallon targets for cars and light trucks, and 2) directing the National Highway Traffic Safety Administration to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of the Energy Independence and Security Act 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."

EXECUTIVE ORDER S-3-05, EXECUTIVE ORDER B-30-15, AND EXECUTIVE ORDER B-55-18

In 2005, the governor issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets, as well as a process to ensure the targets are met. The order directed the Secretary of the California Environmental Protection Agency (CalEPA) to report every 2 years on the State's progress toward meeting the governor's GHG emission reduction targets. The statewide GHG targets established by EO S-3-05 are as follows:

- By 2010, reduce to 2000 emission levels,
- By 2020, reduce to 1990 emission levels, and
- By 2050, reduce to 80 percent below 1990 levels.

EO B-30-15, issued by Governor Brown in April 2015, established an additional statewide policy goal to reduce GHG emissions 40% below their 1990 levels by 2030. Reducing GHG emissions by 40% below 1990 levels in 2030 and by 80% below 1990 levels by 2050 (consistent with EO S-3-05) aligns with scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius.

The State Legislature adopted equivalent 2020 and 2030 statewide targets in the California Global Warming Solutions Act of 2006 (also known as AB 32) and Senate Bill (SB) 32, respectively, both of which are discussed below. However, the legislature has not yet adopted a target for the 2050 horizon year. As a result of EO S-3-05, the California Action Team (CAT), led by the Secretary of CalEPA, was formed. The CAT is made of representatives from a number of state agencies and was formed to implement global warming emission reduction programs and to report on the progress made toward meeting statewide targets established under the EO. The CAT reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the EO.

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, 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. "Intelligent transportation systems" is the application of advanced technology systems and management

strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.

EO B-55-18, issued by Governor Brown in September 2018, establishes a new statewide goal to achieve caron 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 toward this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

ASSEMBLY BILL 32 — CALIFORNIA GLOBAL WARMING SOLUTION ACT

The California Global Warming Solutions Act of 2006 (also known as AB 32) commits the State to achieving the following:

- By 2010, reduce to 2000 GHG emission levels, and
- By 2020, reduce to 1990 levels.

To achieve these goals, which are consistent with the California CAT GHG targets for 2010 and 2020, AB 32 mandates that the 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 reductions, AB 32 requires CARB to adopt rules and regulations in an open, public process that achieves the maximum technologically feasible and cost-effective GHG reductions.

SB 32, signed September 8, 2016, updates AB 32 to include an emissions reduction goal for the year 2030. Specifically, SB 32 requires CARB to ensure that statewide GHG emissions are reduced to 40% below the 1990 level by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

CLIMATE CHANGE SCOPING PLAN

In 2008, CARB approved a Climate Change Scoping Plan, as required by AB 32. Subsequently, CARB approved updates of the Climate Change Scoping Plan in 2014 (First Update) and 2017 (2017 Update), with the 2017 Update considering SB 32 (adopted in 2016) in addition to AB 32 (CARB 2014, 2017). The First Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals (to the level of 427 MMT CO_2e) defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use. In May 2022, a draft 2022 Scoping Plan Update was circulated for review, with an errata issued by CARB September 21, 2022, to correct several typographical errors. This draft 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update, which will likely be adopted by the end of 2022, focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

ASSEMBLY BILL 197

AB 197, signed September 8, 2016, is a bill linked to SB 32 that prioritizes efforts to reduce GHG emissions in low-income and minority communities. AB 197 requires the 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 also creates the Joint Legislative Committee on Climate Change Policies to ascertain facts and make recommendations to the legislature concerning the State's programs, policies, and investments related to climate change.

CAP-AND-TRADE PROGRAM

The 2008 Climate Change Scoping Plan identified a cap-and-trade program as one of the strategies for California to reduce GHG emissions. The cap-and-trade program is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85% of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013, and apply to large electric power plants and large industrial plants. In 2015, fuel distributors, including distributors of heating and transportation fuels, also became subject to the cap-and-trade rules. At that stage, the program will encompass around 360 businesses throughout California and nearly 85% of the state's total GHG emissions. Covered entities subject to the cap-and-trade program are sources that emit more than 25,000 $MTCO_2e$ per year. 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).

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first two auctions of GHG allowances on November 14, 2012, and February 19, 2013. The State has continued conducting tightly controlled auctions for GHG allowances every quarter, and released the four quarterly dates for 2023 in December 2022 (CARB 2022b). California's GHG cap-and-trade system is projected to reduce GHG emissions to 1990 levels by the year 2020 and would achieve an approximate 80% reduction from 1990 levels by 2050.

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

The California Renewable Portfolio Standard (RPS) program (SB 1078; 2002) requires that 20% of the available energy supplies come from renewable energy sources by 2017. In 2006, SB 1078 accelerated the 20% mandate to 2010. These mandates apply directly to investor-owned utilities. On April 12, 2011, Governor Brown signed into law SB 2X, which modified the California RPS program to require that both public- and investor-owned utilities in California receive at least 33% of their electricity from renewable sources by the year 2020. SB 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25% of their energy supply from certified renewable sources by 2016. These levels of reduction are consistent with the Los Angeles Department of Water and Power's (LADWP's) commitment to achieve 35% renewables by 2020. LADWP indicated that 35.2% of its electricity came from renewable resources in year 2021 (LADWP 2021). Therefore, under SB 2X, LADWP currently meets its RPS requirement. Nearly all residents and businesses in unincorporated Los Angeles County receive 50% of their energy from renewable sources as part of the County's commitment to reducing GHG emissions (County of Los Angeles 2021). At its December 7, 2021, meeting, the Los Angeles County Board of Supervisors approved a measure that changed the default energy offering in unincorporated homes to 100% renewable, and most of the renewable energy will be produced in California. This is consistent with one of the targets set by the OurCounty Sustainability Plan (County of

Los Angeles 2019), which calls for eliminating all fossil fuels in the county by 2050, supporting policies and programs to reduce air and climate pollution, and preparing communities for the damaging impacts of climate change.

SENATE BILL 350

SB 350, signed October 7, 2015, is the clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are 1) to increase the procurement of electricity from renewable sources from 33% to 50% by the end of 2030; and 2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

SENATE BILL 100

SB 100, signed September 10, 2018, is the 100 Percent Clean Energy Act of 2018. SB 100 updates the goals of California's RPS and SB 350, as discussed above, to the following: achieve a 50% renewable resources target by December 31, 2026, and achieve a 60% target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% procured to serve all state agencies by December 31, 2045.

SENATE BILL 1368

SB 1368, signed September 29, 2006, is a companion bill to AB 32, which requires the California Public Utilities Commission and the California Energy Commission (CEC) to establish GHG emission performance standards for the generation of electricity. These standards also generally apply to power that is generated outside of California and imported into the state. SB 1368 provides a mechanism for reducing the emissions electricity providers, thereby assisting CARB to meet its mandate under AB 32. On January 25, 2007, the California Public Utilities Commission adopted an interim GHG emissions performance standard, which is a facility-based emission standard requiring that all new long-term commitments for baseload generation to serve California customers be with power plants that have GHG emissions no greater than a combined-cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour. Furthermore, on May 23, 2007, the CEC adopted regulations that establish and implement an identical emissions performance standard of 1,100 pounds of CO_2 per megawatt-hour.

ASSEMBLY BILL 1493 (PAVLEY REGULATIONS)

AB 1493, passed in 2002, requires the development and adoption of regulations to achieve the maximum feasible reduction in GHG emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the state. CARB originally approved regulations to reduce GHGs from passenger vehicles in September 2004, which took effect in 2009. On September 24, 2009, CARB adopted amendments to these regulations that reduce GHG emissions from new passenger vehicles from 2009 through 2016. Although setting emission standards on automobiles is solely the responsibility of the EPA, the federal CAA allows California to set state-specific emission standards on automobiles, and the State first obtains a waiver from the EPA. The EPA granted California that waiver until July 1, 2009. The comparison between the AB 1493 standards and the federal Corporate Average Fuel Economy standards was completed by CARB, and the analysis determined the California emission standards were 16% more stringent through the 2016 model year and 18% more stringent for the 2020 model year. CARB is also committed to further strengthening these standards beginning with 2020 model year vehicles, to obtain a 45% GHG reduction in comparison to 2009 model years.

In March 2020, the EPA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule which would roll back fuel economy standards and revoke California's waiver. Under this rule, the EPA would amend certain average fuel economy and GHG standards for passenger cars covering model years 2021 through 2026. In September 2019, the EPA withdrew the waiver it had previously provided in California for the State's GHG and Zero Emission Vehicle (ZEV) programs under Section 209 of the Clean Air Act. The withdrawal of the waiver was effective on November 26, 2019. In response, several States including California have a lawsuit challenging the withdrawal of the EPA waiver. These actions continue to be challenged in court. On January 20, 2021, President Biden issued an executive order directing all executive departments and agencies to take action, as appropriate, to address federal regulations and other actions taken during the last 4 years that conflict with the administration's climate and environmental justice goals, which include the SAFE Vehicles Rule.

EXECUTIVE ORDER S-01-07 (CALIFORNIA LOW CARBON FUEL STANDARD)

EO S-01-07, the Low Carbon Fuel Standard (LCFS) (issued January 18, 2007), requires a reduction of at least 10% in the carbon intensity of California transportation fuels by 2020. Regulatory proceedings and implementation of the LCFS was directed to CARB. CARB released a draft version of the LCFS in October 2008. 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.

The 2017 update has identified LCFS as a regulatory measure to reduce GHG emission to meet the 2030 emissions target. In calculating statewide emissions and targets, the 2017 update has assumed the LCFS be extended to an 18% reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the LCFS to relax the 2020 carbon intensity reduction from 10% to 7.5%, and to require a carbon intensity reduction of 20% by 2030.

ADVANCED CLEAN CAR REGULATIONS

In 2012, CARB approved the Advanced Clean Cars program, a new emissions control program for model years 2015 through 2025. The components of the advance clean car standards include the Low-Emission Vehicle regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero Emission Vehicle regulation, which requires manufacturers to produce an increasing number of pure ZEVs, with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years period. In March 2017, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV programs for cars and light trucks sold in California through 2025.

SENATE BILL 375

This bill requires CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a Sustainable Communities Strategy (SCS) that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region. If the SCS is unable to achieve the regional GHG emissions reductions targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

As required under SB 375, CARB is required to update regional GHG emission targets every 8 years, with the last update formally adopted March 2018. As part of the 2018 update, CARB adopted a passenger vehicle–related GHG reduction target of 19% by 2035 for the SCAG region, which is more stringent than the previous reduction target of 13% by 2035.

CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24, PART 6)

California's Energy Efficiency Standards for Residential and Nonresidential Buildings, codified in Title 24, Part 6 of the California Code of Regulations (CCR) and commonly referred to as "Title 24", were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

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. The 2019 Title 24 Standards ensure that builders use the most energy-efficient and energy-conserving technologies and construction practices. Nonresidential buildings are projected to use approximately 30% less energy, due mainly to lighting upgrades. Compliance with Title 24 is enforced through the building permit process.

CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN CODE)

The California Green Building Standards Code—Part 11, Title 24, CCR—known as CALGreen, is the first-in-the-nation mandatory green building standards code. In 2007, the California Building Standards Commission developed green building standards in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective GHG reductions to 1990 levels by 2020.

The California Building Standards Commission has the authority to propose CALGreen standards for nonresidential structures that include new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies.

SENATE BILL 97

SB 97 was enacted in 2007, and required the Governor's Office of Planning and Research to develop, and the California Natural Resources Agency to adopt, amendments to the State CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those State CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including using efficient transportation alternatives.

As part of the administrative rulemaking process, the California Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the State CEQA Guidelines amendments. The amendments to the State CEQA Guidelines implementing SB 97 became

effective on March 18, 2010. SB 97 applies to any EIR, Negative Declaration, Mitigated Negative Declaration, or other document required by CEQA, which has not been finalized.

5.7.2.3 Regional

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform, carbon tetrachloride, and halons by December 1995;
- Phase out the large-quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. Within its October 2008 document, SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit more than 3,000 $MTCO_2e$ per year. Under this proposal, commercial/residential projects that emit less than 3,000 $MTCO_2e$ per year would be assumed to have a less-than-significant impact on climate change. On December 5, 2008, the SCAQMD governing board adopted the staff proposal for an interim GHG significance threshold of 10,000 $MTCO_2e$ per year for stationary source/industrial projects where SCAQMD is the Lead Agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects such as commercial/residential projects; the proposed commercial/residential thresholds were never formally adopted.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development, and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including applicable federal, state, and air district laws and regulations. As the federally designated MPO for the six-county Southern California region, SCAG is required by law to ensure that transportation activities conform to, and are supportive of, the goals of regional and state air quality plans to attain the National Ambient Air Quality Standards. In addition, SCAG is a co-producer, with SCAQMD, of the transportation strategy and transportation control measure sections of the 2016 Air Quality Management Plan (AQMP). The development of the 2016 AQMP relies on population and transportation growth projections contained in SCAG's 2016-2040 RTP/SCS.

On September 3, 2020, SCAG's Regional Council adopted an updated RTP/SCS known as the 2020-2045 RTP/SCS, or Connect SoCal. As with the 2016-2040 RTP/SCS, the purpose of the 2020-2045 RTP/SCS is to meet the mobility needs of the six-county SCAG region over the subject planning period through a

roadmap identifying sensible ways to expand transportation options, improve air quality, and bolster Southern California long-term economic viability. On October 30, 2020, the CARB accepted SCAG's determination that the SCS met the applicable state GHG emissions targets. The goals and policies of the 2020-2045 RTP/SCS are similar to, and consistent with, those of the 2016-2040 RTP/SCS. In addition, CARB's new target requiring a 19% reduction in per-capita GHG emissions has been included in the 2020-2045 RTP/SCS, to fulfill SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

5.7.2.4 County of Los Angeles

This section provides a summary of the most relevant County plans and policies. An analysis of the project's consistency with the plans and policies in this section is provided in Section 5.7.5 under threshold (b).

COUNTY OF LOS ANGELES GENERAL PLAN

The County Board of Supervisors adopted the County General Plan on October 6, 2015. The adopted County General Plan represents a compromise comprehensive update intended to reflect changing demographics, growth, and infrastructure conditions in the county. The County General Plan contains an Air Quality Element that addresses air quality and related issues. Included in the Air Quality Element are goals encouraging mixed-use development, the use of "green building" principles, energy and water efficiency, reducing vehicle miles traveled and vehicle trips, and promoting alternative modes of transportation.

The Air Quality Element of the County General Plan establishes the following goals that are relevant to the project:

Goal AQ3: Implementation of plans and programs to address the impact of climate change.

> ***Policy AQ 3.2***: Reduce energy consumption of County operations by 20% by 2015.
>
> ***Policy AQ 3.3***: Reduce water consumption of County operations.
>
> ***Policy AQ 3.5***: Encourage energy conservation in new development and municipal operations.
>
> ***Policy AQ 3.6***: Support rooftop solar facilities on new and existing buildings.

OURCOUNTY – LOS ANGELES COUNTYWIDE SUSTAINABILITY PLAN

OurCounty is a regional sustainability plan for the County of Los Angeles and was adopted by the Board of Supervisors on Tuesday, August 6, 2019. It outlines what local governments and stakeholders can do to enhance the well-being of every community in the county while reducing damage to the natural environment and adapting to the changing climate, particularly focusing on those communities that have been disproportionately burdened by environmental pollution. This plan envisions streets and parks that are accessible, safe, and welcoming to everyone; air, water, and soil that are clean and healthy; affordable housing that enables all residents to thrive in place; and a just economy that runs on renewable energy instead of fossil fuels. OurCounty is organized around 12 goals for a sustainable Los Angeles County, discussed below.

Goal 1. *Resilient and healthy community environments where residents thrive in place.* The County will protect low-income communities and communities of color from pollution, reduce health and economic inequities, and support more resilient and inclusive communities.

Goal 2. *Buildings and infrastructure that support human health and resilience.* The buildings and infrastructure of both yesterday and tomorrow will use more efficient technologies and practices that reduce resource use, improve health, and increase resilience.

Goal 3. *Equitable and sustainable land use and development without displacement.* With policy tools such as anti-displacement measures, existing community members can remain in and strengthen their neighborhoods and networks while accepting new residents through more compact, mixed-use development.

Goal 4. *A prosperous LA County that provides opportunities for all residents and businesses and supports the transition to a green economy.* We will support the growth of green economy sectors through our procurement practices, land use authority, and various economic and workforce development incentives.

Goal 5. *Thriving ecosystems, habitats, and biodiversity.* The region's ecosystems, habitats, and biodiversity are under stress from urbanization and climate change. Careful planning will ensure that our ecosystems, including urban habitats, thrive even as our region becomes increasingly urbanized.

Goal 6. *Accessible parks, beaches, recreational waters, public lands, and public spaces that create opportunities for respite, recreation, ecological discovery, and cultural activities.* The County will help make parks and public lands more accessible and inclusive and will manage them carefully so that all residents may enjoy their benefits.

Goal 7. *A fossil fuel-free LA County.* By supporting an efficient transition to a zero emission energy and transportation system, the County will be a leader in taking action to address the climate crisis.

Goal 8. *A convenient, safe, clean, and affordable transportation system that enhances mobility while reducing car dependency.* By developing programs that focus on reducing the number of miles people travel in private vehicles, the County will help people choose alternatives to single-occupancy vehicles. These programs will expand residents' mobility, including those residents whose limited automobile access translates to stifled economic opportunity.

Goal 9. *Sustainable production and consumption of resources.* The County will effectively manage our waste, water, energy, and material resources by improving our ability to promote integrative and collaborative solutions at the local and regional scale.

Goal 10. *A sustainable and just food system that enhances access to affordable, local, and healthy food.* The County of Los Angeles will leverage its capital assets, public services, and regulatory authority to improve access to healthy food within County boundaries while optimizing its purchasing power and business services to make food production more sustainable.

Goal 11. *Inclusive, transparent, and accountable governance that facilitates participation in sustainability efforts, especially by disempowered communities.* The County will act to create a more inclusive and accountable governance structure, in order to build stronger communities and better-informed policy and programs.

Goal 12. *A commitment to realize OurCounty sustainability goals through creative, equitable, and coordinated funding and partnerships.* The County will seek to strengthen partnerships, establish new funding techniques, and leverage its own purchasing power to advance the goals of OurCounty.

5.7.2.5 City of Los Angeles

Although the project site is located within the city of Los Angeles, the site is owned by the County of Los Angeles. Accordingly, the project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the project. An analysis of the project's consistency with the plans and policies in this section is provided in Section 5.7.5 under threshold (b).

CITY OF LOS ANGELES GENERAL PLAN

The Air Quality Element of the City General Plan was adopted on November 24, 1992, and sets forth the goals, objectives, and policies which guide the City of Los Angeles (City) in the implementation of its air quality improvement programs and strategies. The Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City's mobility and air quality goals. The Air Quality Element of the City General Plan establishes six goals:

Goal 1: Good air quality in an environment of continued population growth and healthy economic structure.

> ***Objective 1.1:*** It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.
>
> ***Objective 1.3:*** It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas. parking lots, and construction sites.
>
> > ***Policy 1.3.1:*** Minimize particulate emissions from construction sites.
> >
> > ***Policy 1.3.2:*** Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.

Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.

> ***Objective 2.1:*** It is the objective of the City of Los Angeles to reduce work trips as a step toward attaining trip reduction objectives necessary to achieve regional air quality goals.
>
> > ***Policy 2.1.1:*** Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling–related facilities in order to reduce Vehicle Trips and/or Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.
> >
> > ***Policy 2.2.2:*** Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.

Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

> ***Objective 4.1:*** It is the objective of the City of Los Angeles to include regional attainment of ambient air quality standards as a primary consideration in land use planning.

Policy 4.1.1: Coordinate with all appropriate regional agencies in the implementation of strategies for the integration of land use, transportation, and air quality policies.

Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.

Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.

Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.

Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels, and the implementation of conservative measures including passive measures such as site orientation and tree planting.

Objective 5.1: It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.

Policy 5.1.2: Effect a reduction in energy consumption and shift to nonpolluting sources of energy in its buildings and operations.

Policy 5.1.4: Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.

Objective 5.3: It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources.

Policy 5.3.1: Support the development and use of equipment powered by electric or low-emitting fuels.

In accordance with CEQA requirements, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses SCAQMD's CEQA Air Quality Handbook (1993) and SCAQMD's supplemental online guidance/information (2023) for the environmental review of plans and development proposals within its jurisdiction.

CITY OF LOS ANGELES GREEN LA ACTION PLAN

The City of Los Angeles began addressing the issue of global climate change by publishing *Green LA, An Action Plan to Lead the Nation in Fighting Global Warming* ("LA Green Plan") in 2007. This document outlined the goals and actions the City has established to reduce the generation and emission of GHGs from both public and private activities. According to the LA Green Plan, the City is committed to the goal of reducing CO_2 emissions to 35% below 1990 levels by the year 2030. To achieve this, the City has been implementing the following:

- Increase the generation of renewable energy;
- Improve energy conservation and efficiency; and
- Change transportation and land use patterns to reduce dependence on automobiles.

CITY OF LOS ANGELES GREEN NEW DEAL/SUSTAINABLE CITY PLAN

Rather than an adopted plan, the City of Los Angeles Green New Deal/Sustainable City Plan (Sustainable City pLAn) is a mayoral initiative released in 2015 that includes both short-term and long-term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.

In 2019, the first 4-year update to the 2015 Sustainable City pLAn was released. While not a plan intended solely to reduce GHG emissions. this updated document, known as the City's Green New Deal, expands upon the City's vision for a sustainable future and provides accelerated targets and new goals, including climate mitigation. The Green New Deal has established targets such as 100% renewable energy by 2045, installation of 10,000 publicly available electric vehicle chargers by 2022 and 28,000 by 2028, diversion of 100% of waste by 2050, and recycling 100% of wastewater by 2035.

5.7.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the State CEQA Guidelines. A project would result in significant adverse impacts related to greenhouse gas emissions if it would:

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

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the State of California, County of Los Angeles, nor the SCAQMD has adopted applicable emission-based thresholds of significance for GHG emissions under CEQA. However, SCAQMD guidance provides that construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008).

5.7.4 Impact Assessment Methodology

For the project, Los Angeles County, as the Lead Agency, has selected a 3,000 $MTCO_2e$ per year quantitative threshold to evaluate significance for GHG emissions. This is the interim GHG screening-level significance threshold. SCAQMD recommended this interim GHG screening-level threshold for projects that are in residential and commercial sectors[1] (SCAQMD 2008). It is important to note that the GHG threshold of 3,000 $MTCO_2e$ per year is based on an interim threshold developed in 2008 to address the State's year 2020 and 2050 GHG reduction goals established under AB 32, which does not address the State's more recent GHG-reduction target of achieving carbon neutrality by 2045, per Executive Order B-55-18 (2018).

To achieve carbon neutrality by 2045, it is recommended that future development include measures to support building decarbonization, including the replacement of natural gas service with other alternatives, such as use of electrically powered equipment (CARB 2022c; CEC 2021). Based on recent GHG

[1] While the La Brea Tar Pits Master Plan contemplates development that is not considered residential or commercial, the construction and operational attributes of the project (e.g., energy demand, water demand, offroad and stationary sources) are like that of development in the residential and commercial sectors. GHG emissions of residential, commercial, and museum facilities are similar in they are focused on mobile sources, energy sources, and off-road and stationary sources. Also, approaches to reducing GHGs will be similar for all these land use types and will center around efficiency improvements of the buildings, efficiency improvements of equipment, and switching to energy sources with lower GHG emissions.

threshold updates and supportive documentation prepared by the Bay Area Air Quality Management District and Sacramento Metropolitan Air Quality Management District, it is recommended that future development prohibit the installation of natural gas infrastructure and the use of natural gas–fired appliances, to the maximum extent possible, and incorporate electric-vehicle charging stations beyond what is required by current building standards in order to contribute its "fair share" of what would be required for the State to achieve its carbon neutrality goal (Bay Area Air Quality Management District 2022; Sacramento Metropolitan Air Quality Management District 2020). As a result, in addition to the GHG threshold of 3,000 $MTCO_2e$ per year noted above, project-generated GHG emissions would also be considered to have a potentially significant impact if the project would not prohibit the installation of natural gas–fired appliances and equipment, to the maximum extent possible, or prohibit the installation of electric-vehicle charging stations beyond what is required by current building standards. For this reason, the analysis of the project uses the SCAQMD interim screening-level threshold of 3,000 $MTCO_2e$ per year and also provides for an assurance that the project would prohibit the installation of natural gas infrastructure and use of natural gas–fired appliances and incorporate electric-vehicle charging stations beyond what is required by current building standards to contribute its "fair share" of what would be required for the State to achieve its carbon neutrality goal.

As an additional significance criterion, consistency with the applicable plans and policies to reduce GHG emissions—including the emissions reduction policies, strategies, and measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and the County of Los Angeles General Plan—is also evaluated.

5.7.5 Environmental Impact Analysis

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

CONSTRUCTION

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The SCAQMD *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (2008:3-9) recommends that, "construction emissions be amortized over a 30year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." Therefore, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions.

The California Emission Estimator Model (CalEEMod) was used to calculate the GHG emissions that would occur during proposed construction activities, which are anticipated to last a total of approximately 4 years. Project construction would consist of different activities undertaken in phases, through to the operation of the project. Typical construction equipment would be used during all phases of project construction, would be stored within the staging area, and would potentially include excavators, bulldozers, backhoes, dump trucks, water trucks, jackhammers, sandblasters, rollers, pavers, generators, scrapers, forklifts, delivery trucks, paving equipment, cranes, and air compressors. There is no blasting anticipated during construction. Table 7 of the Air Quality and Greenhouse Gas Technical Report (Appendix C) (SWCA 2022) shows the project's anticipated construction schedule, presents an estimate of the maximum number of pieces of equipment for each construction phase, and conservatively assumes equipment would be operating 8 hours per day, 6 days per week for the duration of the construction phase. Table 5.7-3 shows construction emissions for the project from on-site and off-site emission sources.

As shown in Table 5.7-3, the estimated total GHG emissions during construction would be approximately 3,962 $MTCO_2e$ over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 132 $MTCO_2e$ per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would only occur when construction is active, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Due to the potential persistence of GHGs in the environment, impacts are based on the estimated annual operational project-generated GHG emissions, as well as the construction GHG emissions which have been amortized over the estimated life of the project. Based on the project's estimated total GHG emissions during construction, impacts associated with project construction would be *less than significant*.

Table 5.7-3. Estimated Annual Greenhouse Gas Emissions during Project Construction

	CO_2	CH_4	N_2O	CO_2e
Construction Year	**Metric Tons per Year**			
2024	1,492	0.06	0.05	1,513
2025	889	0.04	0.04	902
2026	895	0.04	0.04	908
2027	632	0.02	0.02	639
Total	**3,908**	**0.16**	**0.15**	**3,962**
		Amortized construction emissions		***132.07***

Source: SWCA (2022).

Note: Appendix C provides the modeling inputs.

OPERATION

Operation of the project would generate GHG emissions through motor vehicle trips to and from the project site, landscape maintenance equipment operation, energy use (natural gas and generation of electricity consumed by the project), natural gas–fueled emergency generator maintenance and testing, solid waste disposal, off-road and stationary equipment, and generation of electricity associated with water supply, treatment, distribution, and wastewater treatment. The estimated motor vehicle trip assumptions were derived from the Transportation Assessment prepared by Kittelson and Associates (see Appendix J). Other inputs for modeling purposes used a combination of feedback from County staff and modeling defaults. CalEEMod was used to calculate the annual operational GHG emissions, and the results are shown in Table 5.7-4.

Table 5.7-4. Estimated Annual Greenhouse Gas Emissions during Project Operation

	CO_2	CH_4	N_2O	CO_2e
Operations Type	**Metric Tons per Year**			
Mobile	1,314	0.07	0.06	1,335
Area Sources (e.g., architectural coatings, landscaping equipment)	2.15	< 0.005	< 0.005	2.16
Energy	940	0.08	< 0.005	943
Water	8.12	0.11	< 0.005	11.6
Waste	8.76	0.88	0.00	30.6
Refrigeration	0	0	0.00	0.07

Operations Type	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Off-road	8.99	< 0.005	< 0.005	9.02
Stationary	19.4	< 0.005	< 0.005	19.5
Total	**2,301**	**1.13**	**0.07**	**2,351**
		Amortized construction emissions		*132.07*
		Total operational + amortized construction GHGs		***2,483.07***

Source: SWCA (2022)

Note: These emissions reflect operational year 2028. Appendix C provides the modeling inputs.

As shown in Table 5.7-4, estimated annual project-generated GHG emissions would be approximately 2,351 $MTCO_2e$ per year because of project operations only. After summing the amortized project construction emissions, total GHGs generated by the project would be approximately 2,483 $MTCO_2e$ per year, which is less than the SCAQMD interim screening-level threshold of 3,000 $MTCO_2e$ per year.

As noted above, it is also important to assure that the project provides a "fair share" contribution to achieve the State's carbon neutrality goal. Given the project plans have not been fully developed, it is not yet determined whether the project includes the installation of natural gas infrastructure and/or the use of natural gas–fired appliances. Further, while a commitment to electric vehicle charging stations has been made, the number of charging stations that would be installed is not known. For these reasons, impacts related to GHG emissions during operation of the project could be *significant*.

GHG Impact 1	
During project construction, the project would not generate greenhouse gas emissions, either directly or indirectly, that would result in a significant impact on the environment. Project construction impacts would be less than significant. During project operation, the project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Project operation impacts could be significant. (CEQA Checklist Appendix G Threshold VIII. a)	
Mitigation Measures	
GHG/mm-1.1.	*The modifications to the George C. Page Museum and the development of the new museum shall not include the installation of natural gas infrastructure. Future operation of the new facilities shall not use natural gas–fired appliances. In addition, the project shall provide more electric vehicle charging stations than the mandatory requirements in the Los Angeles County Code, Title 31, Green Building Standards, electric vehicle charging space and charging station calculations (Code Section 5.106.5.3.3).*
Impacts Following Mitigation	
Implementation of GHG/mm-1.1 would reduce operation impacts related to GHG emissions to less than significant.	

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Relevant plans and policies to reduce GHG emissions include the emissions reduction policies, strategies, and measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS,

and the County of Los Angeles General Plan. The project's consistency with the identified plans for reducing GHG emissions considers the project holistically. This approach is consistent with these plans and policies, which also consider the project holistically (i.e., the plans and policies generally do not segregate impacts by construction and operation). The project's consistency analysis is described below.

CARB'S CLIMATE CHANGE SCOPING PLAN

The Climate Change Scoping Plan outlines a framework that relies on a broad array of GHG reduction actions, including direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms, such as the cap-and-trade program. The Climate Change Scoping Plan builds off of a wide array of regulatory requirements that have been promulgated to reduce statewide GHG emissions, particularly from energy demand and mobile sources. While these regulatory requirements are not targeted at specific land use development projects, they would indirectly reduce a development project's GHG emissions. A discussion of these regulatory requirements that would reduce the project's GHG emissions is provided below.

California Renewable Portfolio Standard Program and SB 100 and SB 350

While this action does not directly apply to individual projects, the project complies with the RPS program inasmuch as its electricity is provided by LADWP, which, in compliance with the RPS program, is required to obtain 33% renewable power by 2020, and has committed to achieving 50% renewable power by 2025. Furthermore, per the updated requirements of SB 100 (2018), LADWP would be required to procure eligible renewable electricity for 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, and should plan to achieve 100% eligible renewable energy resources and zero carbon resources by December 31, 2045. Thus, the project would be supplied with electricity via renewable sources at increasing rates over time, reducing the project's electricity-related GHG emissions. As required under SB 350, doubling of the energy efficiency savings from end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 and utility-sponsored programs such as rebates for high-efficiency appliances; heating, ventilation, and air conditioning (HVAC) systems; and insulation. The project would comply with Title 24 Standards.

Senate Bill 1368/Assembly Bill 398, CCR Title 20, Cap-and-Trade Program

The State's cap-and-trade program reduces GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve emission reduction targets. While the cap-and-trade program does not directly apply to individual projects, the project would benefit from the program since the project's electricity usage and mobile source emissions would be covered by the cap-and-trade program since LADWP and California fuel suppliers are covered entities, resulting in an indirect reduction of GHG emissions from the project's energy consumption and mobile source emissions.

Title 24 Building Energy Efficiency Standards, and the CALGreen Code

The project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards, the CALGreen Code, and County of Los Angeles Green Building Standards Code (County of Los Angeles 2023b) and would implement project design features, including solar photovoltaic panels on the roof of the project building to reduce the amount of electricity drawn from City utilities. Additionally, the project would provide sustainability features, such as rainwater collection leading to bioswales; a sloped green roof; rooftop solar photovoltaic panels; HVAC systems that would be sized and designed in compliance with the CALGreen Code and County of Los Angeles Green Building Standards Code to

maximize energy efficiency caused by heat loss and heat gain; new and existing tree canopies to protect building walls from sun exposure and provide shade for the ground area; and the use of drought-tolerant landscaping to reduce water demand and avoid the use of pesticides. All these features would reduce the project's outdoor and indoor water demand, which would reduce the project's GHG emissions associated with water conveyance and wastewater treatment. As stated previously, the 2008 Climate Change Scoping Plan notes that water use requires significant amounts of energy, comprising approximately one-fifth of statewide electricity.

Assembly Bill 1493 (Pavley Regulations)

The State's Pavley Regulations apply to new passenger vehicles from model year 2012 through 2016 (Phase I) and model years 2017 through 2025 (Phase II). While this action does not apply to individual projects, future employees and visitors to the project site would purchase new vehicles in compliance with this regulation. Mobile source emissions generated by future visitors and employees would be reduced with implementation of AB 1493. However, it is noted that the vehicle emissions standards beyond model year 2020 may not occur if the federal SAFE Vehicles Rule and the One National Program on Federal\Preemption of State Fuel Economy Standards are upheld by the Advanced Clean Cars program. The Advanced Clean Cars program includes low-emission vehicle regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel-cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. While this action does not directly apply to individual projects, the standards would apply to all vehicles purchased or used by visitors and employees to the project. The project would designate electric vehicle charging stations and alternative transportation parking consistent with the County of Los Angeles Green Building Standards Code. Therefore, the project would support compliance with this regulation.

Advanced Clean Truck Regulation

The Advanced Clean Truck Regulation has two components, a manufacturer sales requirement and a reporting requirement. The manufacturer component of the regulation requires manufacturers that certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b-3 truck sales, 75% of Class 4-8 straight truck sales, and 40% of truck tractor sales. The reporting component of the regulation requires large employers, including retailers, manufacturers, brokers, and others, to report information about shipments and shuttle services. Fleet owners (with 50 or more trucks) would be required to report on their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs. This would be applicable to occasional delivery trucks to the project.

Low Carbon Fuel Standard (EO S-01-07)

This regulation establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 7.5% by 2020, and a 20% reduction in carbon intensity from a 2010 baseline by 2030. While this action does not directly apply to individual projects, future employees and visitors to the project would use transportation fuels in compliance with this regulation. GHG emissions related to project-related vehicular travel would benefit from this regulation and mobile source emissions generated by future employees and visitors to the project would be reduced with implementation of the LCFS.

Senate Bill 375

SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's MPOs, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. While this action does not directly apply to individual projects, the project would not conflict with the SCAG 2020-2045 RTP/SCS goals and objectives under SB 375 to implement "smart growth." The project would not conflict with the SCAG 2020-2045 RTP/SCS. The project would support a reduction in vehicle miles traveled (VMT) given its location at an urban infill location with nearby access to public transportation within 0.25 mile of the project. In addition, the project site is well served by public transit. Specifically, the Los Angeles County Metropolitan Transportation Authority (Metro) 20 and 720 bus lines on Wilshire Boulevard and the Metro 217, 218, and 780 bus lines on Fairfax Avenue all stop within half a block of the project site. In addition, Metro is currently constructing an extension of the Metro system D Line (Purple). This Metro project will construct three new heavy-rail subway stations along Wilshire Boulevard, which will serve the project site. The new stations will be located at Wilshire Boulevard/ La Brea Avenue, Wilshire Boulevard/Fairfax Avenue, and Wilshire Boulevard/La Cienega Boulevard. They are slated to open for service in 2024.

California Integrated Waste Management Act of 1989 and Assembly Bill 341

The Integrated Waste Management Act mandated that State agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50% of their solid waste from disposal facilities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75% disposal reduction by the year 2020. In addition, 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, the goal of which is to lead the City toward being a "zero waste" city by 2030. While this action does not directly apply to individual projects, the project would benefit from the Integrated Waste Management Act and the Solid Waste Integrated Resources Plan inasmuch as it would be served by a solid waste collection and recycling service that would include mixed-waste processing, and that yields waste diversion results comparable to source separation and consistent with citywide recycling targets. According to the City of Los Angeles Zero Waste Progress Report (March 2013), the City achieved a landfill diversion rate of approximately 76% by year 2012.

As demonstrated above, the project would not conflict with the future anticipated statewide GHG reduction goals. CARB has outlined a number of potential strategies for achieving the 2030 statewide reduction target of 40% below 1990 levels, as mandated by SB 32. These potential strategies include using renewable resources for half of the State's electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting other alternative transportation options, and use of high-efficiency appliances, water heaters, and HVAC systems. The project would benefit from statewide and utility-provider efforts toward increasing the portion of electricity provided from renewable resources. The utility provider for the project, LADWP, provided 35% of 2021 electricity purchases from renewable sources and is required to provide 50% by 2025, 60% by 2030, and 100% by 2045.

Post-2030 Analysis

The 2017 and 2022 Scoping Plan also outline strategies to reduce GHG emissions to achieve the 2030 target from sectors that are not directly controlled or influenced by the project, but nonetheless contribute to project-related GHG emissions. For instance, the project itself is not subject to the cap-and-trade regulation; however, project-related emissions would decline pursuant to the regulation as utility providers and transportation fuel producers are subject to renewable energy standards, cap-and-trade,

and the LCFS. While CARB is in the process of expanding the regulatory framework to meet the 2030 reduction target based on the existing laws and strategies in the 2022 Scoping Plan, the project would support or not impede implementation of these potential GHG reduction strategies identified by CARB for all the reasons summarized above.

A report was published on the California PATHWAYS model that determined that "meeting the state's 2030 climate goals requires scaling up and using technologies already in the market such as energy efficiency and renewables, while pursing aggressive market transformation of new technologies that have not yet been utilized at scale in California (for example, zero-emission vehicles and electric heat pumps)" (CEC 2018:3). Priority GHG reduction strategies include energy efficiency in buildings, renewable energy, and smart growth through increased use of public transit, walking, biking, telepresence, and denser, mixed-use community design. The project would not conflict with these strategies, given it would incorporate renewable energy measures, including solar photovoltaic panels to reduce the amount of electricity drawn from City utilities, and energy efficient measures, including water demand reduction measures, minimizing energy use to support efforts by its utility provider, LADWP, to obtain renewable energy pursuant to State mandates. Furthermore, the project would support the priority market transformation strategy of zero-emission light-duty vehicles by providing for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations. Therefore, the project would not conflict with the findings relevant to the project from the updated California PATHWAYS model report (CEC 2018).

With statewide efforts underway to facilitate the State's achievement of those goals, it is reasonable to expect the project's GHG emissions to decline from their early operational years, as the regulatory initiatives identified by CARB in the 2022 Scoping Plan are implemented, and other technological innovations occur. Stated differently, the project's emissions at buildout likely represent the maximum emissions for the project, as anticipated regulatory developments and technology advances are expected to reduce emissions associated with the project, such as emissions related to electricity use and vehicle use.

Even though the 2022 Scoping Plan and supporting documentation do not provide an exact regulatory and technological roadmap to achieve 2050 goals, they demonstrate that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study or not currently feasible at the time the 2022 Scoping Plan was adopted could enable the State to meet the 2050 targets. For example, the 2022 Scoping Plan states some policies are not feasible at this time, such as Net Zero Carbon Buildings, but that this type of policy would be necessary to meet the 2050 target.

Based on the above, the project would not conflict with CARB's Climate Change Scoping Plan nor the State's GHG reduction targets for 2030 and 2050, and there would be an anticipated decline in project emissions once fully constructed and operational.

SCAG'S 2020-2045 RTP/SCS

The 2020-2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. While the project does not propose residential uses, new employees would be introduced by the project. According to the 2020-2045 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2021 is approximately 1,897,883 employees. In 2028, the projected first operation year of the project, the City of Los Angeles Subregion is anticipated to have 1,937,552 employees. As such, the project's estimated 42 employees would constitute a very small

percentage of the city's employment growth forecasted between 2021 and 2028. Accordingly, the project's generation of employees would not conflict with employment generation projections contained in the 2020-2045 RTP/SCS.

The project site is well served by public transit. Specifically, the Metro 20 and 720 bus lines on Wilshire Boulevard and the Metro 217, 218, and 780 bus lines on Fairfax Avenue all stop within half a block of the project site. In addition, Metro is currently constructing an extension of the Metro system D Line (Purple), which will include construction of three new heavy-rail subway stations along Wilshire Boulevard, which will serve the project site. The new stations will be located at Wilshire Boulevard/ La Brea Avenue, Wilshire Boulevard/Fairfax Avenue, and Wilshire Boulevard/La Cienega Boulevard. They are slated to open for service in 2024. By locating the project's land uses within an area that has existing high-quality public transit (with access to existing regional bus and rail service) and employment opportunities within walking distance, and by including features that support and encourage pedestrian activity and other non-vehicular transportation in the Los Angeles area, the project would support the reduction of vehicle trips and VMT and resulting air pollution and GHG emissions.

In addition, the project was reviewed to determine potential inconsistencies with GHG reduction targets forecasted in the SCAG RTP/SCS. The project was analyzed using a total VMT threshold (as opposed to an efficiency-based impact threshold). Additional detail on this analysis is included in the Transportation Assessment prepared by Kittelson and Associates (see Appendix J). The project site functions as a regional attraction and the proposed project would result in a net increase in regional VMT. Since the project would result in a net increase in VMT, further evaluation was necessary to determine whether this project would be inconsistent with the VMT and GHG reduction goals of the SCAG RTP/SCS.

It was determined that, without mitigation measures, the project may be inconsistent with SCAG's goals related to improving mobility and accessibility, ensuring safety, maximizing transportation productivity, encouraging active transportation, and improving air quality. The project does not include transportation improvements to encourage and improve active transportation and public transit outside of on-site access and circulation improvements.

In conclusion, the project may conflict with the following relevant RTP/SCS goals:

- Improve mobility, accessibility, reliability, and travel safety for people and goods
- Enhance the preservation, security, and resilience of the regional transportation system
- Increase person and goods movement and travel choices within the transportation system
- Reduce greenhouse gas emissions and improve air quality
- Leverage new transportation technologies and data-driven solutions that result in more efficient travel

COUNTY OF LOS ANGELES GENERAL PLAN

The project would meet the County of Los Angeles's General Plan goals to address the impact of GHGs and climate change. The project would implement project design features, including solar photovoltaic panels on the roof of the project building to reduce energy consumption and encourage energy conservation. Additionally, HVAC systems that would be sized and designed in compliance with the CALGreen Code and the County of Los Angeles Green Building Standards Code to maximize energy efficiency caused by heat loss and heat gain; new and existing tree canopies would protect building walls from sun exposure and provide shade for the ground area. The project would provide sustainability features, such as rainwater collection leading to bioswales; a sloped green roof; and the use of drought-tolerant landscaping to reduce water consumption. All of these features would reduce the project's energy

consumption, reduce water consumption, and encourage energy conservation. Therefore, the project would not conflict with the goals of the County of Los Angeles General Plan.

OURCOUNTY – LOS ANGELES COUNTYWIDE SUSTAINABILITY PLAN

The project would be consistent with the OurCounty regional sustainability plan, which consists of 12 goals. The project would implement project design features, including solar photovoltaic panels on the roof of the project building to reduce energy consumption and encourage energy conservation. Additionally, HVAC systems would be sized and designed in compliance with the CALGreen standards and the County of Los Angeles Green Building Standards Code to maximize energy efficiency caused by heat loss and heat gain. New and existing tree canopies would protect building walls from sun exposure and provide shade for the ground area. The project would also provide sustainability features, such as rainwater collection leading to bioswales, a sloped green roof, and the use of drought-tolerant landscaping to reduce water consumption. All these features would use efficient technologies and practices that reduce resource use, improve health, and increase resilience and would effectively manage waste, water, energy, and material resources consistent with the goals of OurCounty. For these reasons, the project would not conflict with the goals of OurCounty.

CITY OF LOS ANGELES GENERAL PLAN

The project would meet the City of Los Angeles's General Plan goals, objectives, and policies to address the air quality improvement programs and strategies (City of Los Angeles 1992). Consistent with the six goals of the City of Los Angeles General Plan, the project would reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites by complying with the SCAQMD Rule 403 required fugitive dust control measures. The project would also provide visitors with the ability to access nearby public transit and opportunities for walking and biking, which would facilitate minimization of VMT and related vehicular GHG emissions, and would not conflict with the goals to reduce VMT. Bicycle parking and connections to walking and biking paths would also be provided. The project would implement project design features to reduce energy consumption and encourage energy conservation. Features of the project would reduce the project's energy consumption, reduce water consumption, and encourage energy conservation, supporting the City General Plan goals for a reduction in energy consumption, a shift to nonpolluting sources of energy in its buildings and operations, and reducing energy consumption and associated air emissions by encouraging waste reduction and recycling. For these reasons, the project would not conflict with the City of Los Angeles General Plan.

CITY OF LOS ANGELES GREEN LA ACTION PLAN

The project would be consistent with the City of Los Angeles Green LA Action Plan by including project design features, including solar photovoltaic panels on the roof of the project building, to reduce energy consumption and encourage energy conservation (City of Los Angeles 2007). Additionally, HVAC systems would be sized and designed in compliance with the CALGreen standards and the County of Los Angeles Green Building Standards Code to maximize energy efficiency caused by heat loss and heat gain. New and existing tree canopies would protect building walls from sun exposure and provide shade for the ground area. Similarly, the features described under the previous consistency analyses would also further the implementation of the City of Los Angeles Green LA Action Plan goals.

CITY OF LOS ANGELES GREEN NEW DEAL/SUSTAINABLE CITY PLAN

The City's Green New Deal 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 (Garcetti 2019). While not a plan adopted solely to reduce GHG emissions, within the City's Green New Deal, climate mitigation is one of eight explicit benefits that help define its strategies and goals. Although the Green New Deal mainly targets GHG emissions related to City-owned buildings and operations, certain reductions associated with the project would promote the Green New Deal's goals. Such measures include increasing renewable energy usage, reduction of per-capita water usage, promotion of walking and biking, promotion of educational and recreational uses close to transit, and various recycling and trash diversion goals.

Although the City's Green New Deal is not an adopted plan or directly applicable to private development projects, the project would not conflict with these aspirations as it is an infill development consisting of educational and recreational uses on a project in proximity to transit. In addition, the project would comply with Title 24 Standards and would implement measures to reduce overall energy usage compared to baseline conditions. Furthermore, the project would also result in GHG reductions beyond those specified by the City and would minimize its GHG emissions by implementing project design features that reduce electricity and water consumption. The project would be serviced by providers who comply with the City of Los Angeles Solid Waste Management Policy Plan (Los Angeles Sanitation and Environment 2015) and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) to further the aspirations included in the Green New Deal with regard to energy-efficient buildings, waste, and landfills. The project would also provide bicycle parking and connections to walking and biking paths to further reduce VMT and decrease GHG emissions.

Therefore, as the project's GHG emissions would be generated in connection with a development located within the city and designed to be consistent with the applicable City plan goals and actions for reducing GHG emissions, the project would not conflict with these City plans adopted for the purpose of reducing GHG emissions, and the project's GHG emissions would result in less-than-significant impacts.

CONCLUSION

Through the analysis above, it was determined that the project may be inconsistent with regional plans related to mobility and GHG reductions, specifically in relation to SCAG's 2020-2045 RTP/SCS. It was determined that without mitigation measures, the project may be inconsistent with SCAG's goals related to improving mobility and accessibility, transportation productivity, and encouraging active transportation. The project does not include transportation improvements to encourage and improve active transportation and public transit outside of on-site access and circulation improvements. However the project does include design features that would reduce the project's energy consumption, reduce water consumption, and encourage energy conservation, as well as provide visitors with public transportation incentives, with the ability to access nearby public transit and opportunities for walking and biking, all of which are consistent with the County of Los Angeles General Plan, OurCounty, City of Los Angeles General Plan, City of Los Angeles Green LA Action Plan, and the City's Green New Deal. Thus, the project could result in a *significant impact* related to consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

GHG Impact 2
The project could result in a significant impact related to consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, specifically the potential conflict with the SCAG 2020-2045 RTP/SCS in relation to improving mobility and accessibility, transportation productivity, and encouraging active transportation. Impacts could be significant. (CEQA Checklist Appendix G Threshold VIII. b)

GHG Impact 2
Mitigation Measures
Implement Mitigation Measures TRA/mm-1.1.
Impacts Following Mitigation
With implementation of TRA/mm-1.1, impacts related to the project's consistency with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions would be less than significant.

5.7.6 Cumulative Impact Analysis

The geographic scope considered in the cumulative impact analysis for GHG emissions is global. Adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant.

The analysis of a project's GHG emissions is inherently a cumulative impact analysis because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. The GHG emissions from an individual development project are not typically going to have a noticeable impact on the global climate, but individual projects contribute to the significant cumulative problem of global warming and climate change. As the California Supreme Court has indicated, "an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is 'cumulatively considerable' in light of the global problem" (Cleveland National Forest Foundation v. San Diego Association of Governments 2017:14).

Consistent with the inherent consideration of GHG emissions as a cumulative contribution to a global environmental condition, the analysis presented above in Section 5.7.5 considers the potential for the project to contribute considerably to the cumulative impact of global climate change.

The analysis provided in the previous sections demonstrates that the project includes many design features that support the reduction of GHG emissions, including features that would reduce the project's energy consumption, reduce water consumption, and encourage energy conservation, as well as provide visitors with public transportation incentives, the ability to access nearby public transit, and opportunities for walking and biking. However, it has also been determined that, without additional measures, the project may be inconsistent with SCAG's goals related to improving mobility and accessibility, transportation productivity, and encouraging active transportation. This is because the project does not include transportation improvements to encourage and improve active transportation and public transit outside of on-site access and circulation improvements. Also, since detailed design plans have not been developed for the project at this stage, it is also not known whether natural gas use would be included in the final design. As a fossil fuel, natural gas production and use are significant contributors to GHG emissions. For the building sector to achieve carbon neutrality, natural gas usage will need to be phased out and replaced with electricity usage, and electrical generation will need to shift to 100% carbon-free sources. Thus, without mitigation, the project could cause a *significant* contribution to the cumulative impact of GHG emissions and global climate change.

GHG Impact 3 (Cumulative)
The project could result in a significant contribution to the cumulative impact of GHG emissions and global climate change.
Mitigation Measures
Implement Mitigation Measures GHG/mm-1.1 and TRA/mm-1.1.
Impacts Following Mitigation
With implementation of the identified mitigation measures to reduce project-specific impacts, impacts would be less than significant.

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