

IV. Environmental Impact Analysis

D. Greenhouse Gas Emissions

1. Introduction

This section evaluates the potential impacts of the Project on greenhouse gas (GHG) emissions. The purpose of this analysis is to identify the construction-related and operational GHG emissions that would be generated by the Project as well as identify mandatory and voluntary energy and resource conservation measures that have been incorporated into the Project to reduce GHG emissions and associated impacts. This analysis also evaluates the consistency of the proposed project with the applicable policies that have been adopted to reduce state-wide GHG emissions. The GHG data supporting this section is included as **Appendix E** of this Draft EIR.

GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the earth's temperature. The State of California has undertaken initiatives designed to address the effects of GHGs, and to establish targets and emission reduction strategies for GHG emissions in California.

2. Environmental Setting

a) Global Climate Change

The earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range for life support. The greenhouse effect raises the temperature of the earth's surface by about 60 degrees Fahrenheit. With the natural greenhouse effect, the average temperature of the earth is about 45 degrees Fahrenheit; without it, the earth would be about minus 15 degrees. It is normal for the earth's temperature to fluctuate over extended periods of time. Over the past one hundred years, the earth's average global temperature has generally increased by one degree Fahrenheit. In some regions of the world, the increase has been as much as four degrees Fahrenheit. Scientists studying the particularly rapid rise in global temperatures during the late twentieth century believe that natural variability alone does not account for that rise. Rather, human activity spawned by the industrial revolution has likely resulted in increased emissions of carbon dioxide and other forms of GHGs, primarily from the burning of fossil fuels (i.e., during motorized transport, electricity generation, consumption

of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste.¹

b) GHG Components and Effects

The California Global Warming Solutions Act of 2006 (discussed in the following pages) defined GHGs to include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). A general description of each GHG discussed in this report is provided in **Table IV.D-1, Description of Identified Greenhouse Gases**. CO₂ is the most abundant GHG. Other GHGs are less abundant, but have higher global warming potential (discussed below) than CO₂. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO₂, denoted as CO₂e. 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.

c) Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index based upon radiative properties that is used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO₂, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO₂. A summary of the atmospheric lifetime and GWP of selected gases is presented at **Table IV.D-2, Atmospheric Lifetimes and Global Warming Potentials**.

**Table IV.D-1
Description of Identified Greenhouse Gases**

GHG	General Description
CO ₂	Carbon Dioxide (CO ₂) is an odorless, colorless GHG, which has both natural and man-made sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing; man made sources of CO ₂ are burning coal, oil, natural gas, and wood.
CH ₄	Methane (CH ₄) is a flammable gas and is the main component of natural gas. When one molecule of CH ₄ is burned in the presence of oxygen, one molecule of CO ₂ and two molecules of water are released. There are no ill health effects from CH ₄ . A natural source of CH ₄ is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH ₄ , which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.

¹ *Climate Change 101: Understanding and Responding to Global Climate Change, published by the Pew Center on Global Climate Change and the Pew Center on the States, October 12, 2006.*

**Table IV.D-1
Description of Identified Greenhouse Gases**

GHG	General Description
N₂O	Nitrous Oxide (N ₂ O) is a colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N ₂ O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
NF₃^a	Nitrogen Trifluoride (NF ₃) was not listed initially in the California Global Warming Solutions Act but was subsequently added to the list of major GHGs by Senate Bill 104. NF ₃ is used as a replacement for PFCs (mostly C ₂ F ₆) and SF ₆ in the electronic industry (plasma etching and chamber cleaning), manufacture of semi-conductors and LCD panels (Liquid Crystal Display). Nitrogen trifluoride is also used in the photovoltaic industry (thin-film solar cells) for "texturing, phosphorus silicate glass (PSG) removal, edge isolation and reactor cleaning after deposition of silicon nitrate or film silicon". Nitrogen trifluoride is further used in hydrogen fluoride and deuterium fluoride lasers, which are types of chemical lasers.
HFCs	Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (CFCs) for automobile air conditioners and refrigerants. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987.
PFCs	Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above the Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
SF₆	Sulfur Hexafluoride (SF ₆) is an inorganic, odorless, colorless, non-toxic, and nonflammable gas. SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
<i>Source: Association of Environment Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007.</i>	
<i>^a United Nations Framework Convention on Climate Change, Compilation of technical information on the new greenhouse gases and groups of gases included in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, July 27, 2010.</i>	

**Table IV.D-2
Atmospheric Lifetimes and Global Warming Potentials**

GHG	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide (CO ₂)	100	1	1
Methane (CH ₄)	12	84	28
Nitrous Oxide (N ₂ O)	121	264	265
Nitrogen Trifluoride (NF ₃)	500	12,800	16,100
Hydrofluorocarbons (HFCs)	Uncertain	100-11,000	100-12,000
Perfluorocarbons (PFCs)	3,000-50,000	5,000-8,000	7,000-11,000
Sulfur Hexafluoride (SF ₆)	3,200	17,500	23,500

Source: CARB, First Update to the Climate Change Scoping Plan, May 2014.

d) Regulatory Framework

(1) Federal

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

(a) Federal Clean Air Act

President George W. Bush administration's approach to addressing climate change was challenged in *Massachusetts et al. v. Environmental Protection Agency*, 549 US 497 (2007). In this decision, the U.S. Supreme Court held that the United States Environmental Protection Agency (U.S. EPA) was authorized by the Clean Air Act (CAA) to regulate CO₂ emissions from new motor vehicles. The Court did not mandate that the U.S. EPA enact regulations to reduce GHG emissions, but found that the only instances in which the U.S. EPA could avoid taking action were 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 December 7, 2009, the U.S. EPA issued an "endangerment finding" under the Clean Air Act, concluding that GHGs threaten the public health and welfare of current and future

generations and that motor vehicles contribute to GHG pollution.² These findings provide the basis for adopting new national regulations to mandate GHG emission reductions under the Federal Clean Air Act. The EPA's endangerment finding paves the way for Federal regulation of GHGs.

Under the Consolidated Appropriations Act of 2008 (HR 2764), Congress established mandatory GHG reporting requirements for some emitters of GHGs. In addition, on September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the U.S. EPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 metric tons (MT) or more a year of GHGs.

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President George W. Bush issued an Executive Order on May 14, 2007, directing the U.S. EPA, the U.S. Department of Transportation, and the U.S. Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

The EPA sets greenhouse gas emission standards for vehicles under Section 202 of the Clean Air Act (CAA). In general, the CAA prevents states from setting their own motor vehicle standards. Under Section 209, however, the EPA Administrator may waive preemption and allow a state to adopt its own standards that are "at least as protective of public health and welfare as applicable Federal standards." (42 U.S.C. Sec. 7543) EPA has issued dozens of such waivers to California over the past 40 years³, including, most recently, in 2009 and 2013⁴.

In 2009, EPA and NHTSA announced their intent to harmonize Corporate Average Fuel Economy (CAFÉ) standards and GHG emission standards under a unified National Program. The joint program would ensure that manufacturers could build fleets that comply with EPA, NHTSA, and California requirements. The National Highway Traffic Safety Administration (NHTSA) issued a final rule for model year 2011 vehicles on March 30, 2009.⁵ On May 7, 2010, the U.S. EPA and the NHTSA issued a final rule regulating

² *United States Environmental Protection Agency, Endangerment, and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act.*

³ *Government Accountability Office, Clean Air Act: Historical Information on EPA's Process for Reviewing California Waiver Requests and Making Waiver Determinations (Jan. 16, 2009) (GAO-09-249R).*

⁴ *Environmental Protection Agency, California State Motor Vehicle Pollution Control Standards; Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's Advanced Clean Car Program and a Within the Scope Confirmation for California's Zero Emission Vehicle Amendments for 2017 and Earlier Model Years, 78 Fed. Reg. 2111 (Jan. 9, 2013) (notice).*

⁵ *National Highway Traffic Safety Administration, Laws & Regulations, CAFE - Fuel Economy, Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule, March 23, 2009.*

fuel efficiency and GHG pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016.⁶ The rule surpasses the prior Corporate Average Fuel Economy standards and requires an average fuel economy standard of 35.5 miles per gallon (mpg). In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements). According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle. In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025.

However, on April 2, 2018, the USEPA, under administrator Scott Pruitt, reconsidered the final determination for light-duty trucks and withdrew its previous 2017 determination, stating that the current standards may be too stringent and therefore should be revised as appropriate.⁷

On March 31, 2020, the USEPA and NHTSA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that freezes the CAFE and CO₂ standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 mpg (204 grams of CO₂ per mile) for passenger cars and 31.3 mpg (284 grams of CO₂ per mile) for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The SAFE Vehicles Rule excludes CO₂-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020. It also eliminates the 2013 waiver that allows California to set its own stricter emissions standards. By doing so, it consequently repeals several other states' adopted vehicle standards. California is currently challenging the Safer Affordable Fuel-Efficient Vehicles Rule.⁸

(i) Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the U.S. EPA and the NHTSA announced Phase I fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles from model years 2014 through

⁶ *United States Environmental Protection Agency, Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule, May 7, 2010.*

⁷ *Environmental Protection Agency, Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022-2025.*

⁸ *Lexology, Latest, Challenges to Safer Affordable Fuel-Efficient Vehicles Rule Keep Coming, July 30, 2020.*

2018.⁹ The U.S. EPA and the NHTSA adopted standards for CO₂ emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: (1) combination tractors, (2) heavy-duty pickup trucks and vans, and (3) vocational vehicles. According to the U.S. EPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 6 percent to 23 percent.

Building on the success of the Phase I standards, in August 2016, EPA and NHTSA jointly finalized Phase 2 standards for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution to reduce the impacts of climate change, while bolstering energy security and spurring manufacturing innovation. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons; save vehicle owners fuel costs of about \$170 billion; and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.¹⁰

(b) *Energy Independence and Security Act*

On December 19, 2007, the Federal Energy Independence and Security Act of 2007 (EISA) was signed into law.¹¹ Among other key measures, the EISA would do the following, which would aid in the reduction of national GHG emissions, both mobile and non-mobile:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labelling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
3. While superseded by NHTSA and U.S. EPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

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

⁹ *United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles, August 2011.*

¹⁰ *Environmental Protection Agency, Regulations for Greenhouse Emissions From Commercial Trucks & Buses.*

¹¹ *Government Printing Office, Energy Independence and Security Act of 2007, January 4, 2007.*

(2) State

(a) *Executive Order S-3-05*

Executive Order S-3-05, issued in June 2005, established GHG emissions targets for the State of California, as well as a process to ensure the targets are met. The order directed the Secretary for California's Environmental Protection Agency (CalEPA) to report every two years on the State's progress toward meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team, led by the Secretary of CalEPA, was formed. The California Climate Action Team is made up of representatives from a number of State agencies and was formed to implement global warming emission reduction programs and reporting on the progress made toward meeting statewide targets established under the Executive Order. The California Climate Action Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.¹² The statewide GHG targets 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.

However, with the adoption of the California Global Warming Solutions Act of 2006 (also known as AB 32), discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05.

The California Climate Action Team 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.¹³

¹² *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

¹³ *California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, page 58.*

(b) Senate Bill 100

Senate Bill (SB) 100, signed September 10, 2018, is the 100 Percent Clean Energy Act of 2018. SB 100 updates the goals of California's Renewable Portfolio Standard and SB 350, as discussed above, to the following: achieve 50 percent renewable resources target by December 31, 2026 and achieve a 60 percent target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.¹⁴

(c) Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, establishes an additional Statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. Executive Order B-55-18 directs the California Air Resources Board (CARB) to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

(d) Assembly Bill 32 (Statewide GHG Reductions)

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006. The law instructs the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. AB 32 sets a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

The heart of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 required CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. CARB accomplished the key milestones set forth in AB 32, including the following:

- June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures. These were later supplemented by adding six other discrete early action measures.
- January 1, 2008. Identification of the 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007,

¹⁴ *Senate Bill 100 (2017-2018 Reg. Session) Stats 2018, Ch. 312.*

CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.

- January 1, 2009. Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan), discussed in more detail below. In response to the SB 32's new 2030 GHG reduction target, CARB released the 2017 Climate Change Scoping Plan, adopted by CARB in December 2017.
- January 1, 2010. Adoption and enforcement of regulations to implement the “discrete” actions. Several early action measures have been adopted and became effective on January 1, 2010.
- January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of California's GHG emissions. CARB's Board ordered its Executive Director to prepare a final regulatory package for cap-and-trade on December 16, 2010. The regulations were subsequently adopted in 2011 and became enforceable on January 1, 2012
- January 1, 2012. GHG emissions limits and reduction measures adopted in 2011 became enforceable.

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various categories of emissions. CARB determined that achieving the 1990 emission level by 2020 would require an approximately 28.5 percent reduction of GHG emissions in the absence of new laws and regulations (referred to as “business as usual” or “No Action Taken”). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, and identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following:¹⁵

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;

¹⁵ California Air Resources Board, *Climate Change Scoping Plan, December 2008*.

- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

On May 15, 2014, CARB released the first update to the Scoping Plan. The update recalculates 1990 GHG emissions using *Intergovernmental Panel on Climate Change Fourth Assessment Report* released in 2007. Using the AR4 global warming potentials (GWPs), the 427 MMTCO_{2e} 1990 emissions level and 2020 GHG emissions limit would be slightly higher, at 431 MMTCO_{2e}.¹⁶ Based on the revised estimates of expected 2020 emissions identified in the 2011 supplement to the Functional Environmental Document and updated 1990 emissions levels identified in the draft first update to the Scoping Plan, achieving the 1990 emission level would require a reduction of 76 MMTCO_{2e} (down from 507 MMTCO_{2e}) or a reduction by approximately 15 percent (down from 28.5 percent) to achieve in 2020 emissions levels in the “business as usual” or No Action Taken condition.¹⁷

Since the 2014 Update, Executive Order B-30-15 was issued April of 2015 and established a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030. In 2016, the Legislature passed SB 32 with the companion bill AB 197 which further mandated the 2030 target and provides additional direction to CARB on strategies to reduce GHG emissions. In response to Executive Order B-30-15 and SB 32, CARB released California’s 2017 Climate Change Scoping Plan.¹⁸ The plan showed that California was on track to exceed its 2020 climate target and established a path that will lead California to its 2030 climate goal. On July 11, 2018, CARB announced that “greenhouse gas pollution in California fell below 1990 levels for the first time since

¹⁶ California Air Resources Board, *Climate Change Scoping Plan First Update, Discussion Draft for Public Review and Comment*, October 2013.

¹⁷ California Air Resources Board, *Status of Scoping Plan Recommended Measures*, July 25, 2011. California Air Resources Board, *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document*. California Air Resources Board, *Climate Change Scoping Plan First Update, Discussion Draft for Public Review and Comment*, October 2013.

¹⁸ California Air Resources Board, *California’s 2017 Climate Change Scoping Plan: The Strategy for achieving California’s 2030 greenhouse gas target*, November 2017.

emissions peaked in 2004—an achievement roughly equal to taking 12 million cars off the road or saving 6 billion gallons of gasoline a year.”¹⁹

Per SB 32, the 2030 limit is 260 MMTCO_{2e} a year. However, known commitments are expected to result in emissions that are 60 MMTCO_{2e} above the target in 2030, and have a cumulative emissions reduction gap of about 236 MMTCO_{2e}. This means the known commitments do not decline fast enough to achieve the 2030 target. The remaining 236 MMTCO_{2e} of estimated GHG emissions reductions would not be achieved unless further action is taken to reduce GHGs. However, while there is a potential GHG emissions reduction gap of approximately 236 MMTCO_{2e}, the Cap-and-Trade Program discussion below notes that the California legislature passed AB 398 to extend the cap-and-trade program from January 1, 2021 through December 31, 2030 in order to achieve the necessary GHG reductions associated with SB 32. While the majority of the reductions would result from the continuation of the Cap-and-Trade regulation, additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan.

(i) *Cap-and-Trade Program*

As mentioned above, the Scoping Plan identifies a cap-and-trade program as one of the strategies the State will employ to reduce GHG emissions that cause climate change. The cap-and-trade program is implemented by CARB and “caps” GHG emissions from the industrial, utility, and transportation fuels sections, which account for roughly 85 percent of the State’s GHG emissions. The program works by establishing a hard cap on about 85 percent of total statewide GHG emissions. The cap starts at expected business-as-usual emissions levels in 2012, and declines two to three percent per year through 2020. Fewer and fewer GHG emissions allowances are available each year, requiring covered sources to reduce their emissions or pay increasingly higher prices for those allowances. The cap level is set in 2020 to ensure California complies with AB 32’s emission reduction target of returning to 1990 GHG emission levels.

Under the program, companies do not have individual or facility-specific reduction requirements. Rather, all companies covered by the regulation are required to turn in allowances²⁰ in an amount equal to their total GHG emissions during each phase of the program. The program gives companies the flexibility to either trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies

¹⁹ California Air Resources Board, *Climate pollutants fall below 1990 levels for the first time, July 2018.*

²⁰ “Allowance” means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.

that emit more will have to turn in more allowances. Companies that can cut their emissions will have to turn in fewer allowances. Furthermore, as the cap declines, total GHG emissions are reduced. On October 20, 2011, CARB's Board adopted the final cap-and-trade regulation. The cap-and-trade program began on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions.²¹

On July 17, 2017, California legislature passed AB 398 to extend the cap-and-trade program from January 1, 2021 through December 31, 2030. AB 398 established the Compliance Offsets Protocol Task Force to provide guidance in approving new offset protocols that increase direct environmental benefits in the State. Moreover, AB 398 continues the gradual reduction in the number of allowances given to industries and reduces carbon offset credits to 4 percent from 2021 through 2025 and 6 percent from 2026 through 2030.

(e) *Executive Order B-30-15 & SB 32*

On April 29, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. This new emission reduction target is a step toward the ultimate goal of reducing emissions by 80 percent below 1990 levels by 2050. The measure also calls on State agencies with jurisdiction over sources of GHG emissions to implement measures accordingly and directs the California Air Resources Board (CARB) to update the Climate Change Scoping Plan to express the 2030 target

Senate Bill 32 (SB 32) was approved by Governor Brown on September 8, 2016, and requires the CARB to approve GHG emissions limits equivalent to 40 percent below 1990 levels by 2030 (consistent with Executive Order B-30-15) and 80 percent below the 1990 level by 2050.

(f) *Senate Bill 97*

Senate Bill 97, which was signed into law on August 24, 2007, added Public Resources Code 21083.05, which states, "The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." Pursuant to Public Resources Code 20183.05, the California Natural Resources Agency adopted amendments to the *State CEQA Guidelines*, which addresses the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. These amendments give discretion to the lead agency whether to: (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use; or (2) rely on a

²¹ CARB, *Cap-and-Trade Program*.

qualitative analysis or performance-based standards. The amendments also identify three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.²²

(g) *Senate Bill 375*

In September 2008, the California Legislature adopted Senate Bill 375 (SB 375), legislation which it: (1) relaxes CEQA requirements for some housing projects that meet goals for reducing GHG emissions; and (2) requires the regional governing bodies in each of the State's major metropolitan areas to adopt, as part of their regional transportation plan, "sustainable community strategies" that will meet the region's target for reducing GHG emissions. SB 375 creates incentives for implementing the sustainable community strategies by allocating Federal transportation funds only to projects that are consistent with the emissions reductions.

Local governments would then devise strategies for housing development, road-building and other land uses to shorten travel distances, reduce vehicular travel time and meet the new targets. If regions develop these integrated land use, housing, and transportation plans, residential projects that conform to the sustainable community strategy (and therefore contribute to GHG reduction) can have a more streamlined environmental review process.

Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the final GHG emissions reduction targets for the State's Metropolitan Planning Organizations. For the area under the Southern California Association of Governments' (SCAG) jurisdiction - including the Project area - ARB adopted Regional Targets for reduction of GHG emissions by 8 percent for 2020 and by 13 percent for 2035. Beginning October 1, 2018, these targets changed to 8 percent for 2020 and 19 percent for 2035.

²² 14 Cal. Code Regs. § 15064.4(b).

(h) *Renewable Portfolio Standards (SB 1078, SB 107, and SBX1-2)*

Established in 2002 under Senate Bill (SB) 1078, and accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.^{23,24} The 33 percent standard is consistent with the RPS goal established in the Scoping Plan.²⁵

(i) *Mobile Source Reductions*

In response to the transportation sector accounting for a large percentage of California's CO₂ emissions, Assembly Bill 1493, the "Pavley Standard," required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016. The bill also required the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill authorizes CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the baseline for reduction.²⁶

The federal CAA ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed set its own standards with a federal CAA waiver from the USEPA. In June 2009, the USEPA granted California the waiver. However, as discussed previously, the USEPA and United States Department of Transportation (USDOT) adopted federal standards for model year 2012 through 2016 light-duty vehicles, which corresponds to the vehicle model years regulated under the State's Pavley Phase I standards. In addition, the USEPA and USDOT have adopted GHG emission standards for model year 2017 through 2025 vehicles, which corresponds to the vehicle model years regulated under the State's Pavley Phase II standards. These standards are slightly different from the State's model year 2017 through 2025 standards, but the State of California has agreed not to contest these standards, in part due to the fact that while the national standard would achieve slightly less reductions in California, it would achieve greater reductions nationally and is stringent enough to meet state GHG emission reduction goals. In 2012, CARB adopted regulations that allow manufacturers to comply with the 2017 through 2025 national standards to meet State law (i.e., the State's Pavley Phase II standards still apply by law; however, meeting the national standards for model year 2017 through 2025 also meets State law).

²³ *Legislative Counsel of California, Senate Bill 1078, September 2002.*

²⁴ *Legislative Counsel of California, Senate Bill 1368, September 2006.*

²⁵ *California Air Resources Board, Climate Change Scoping Plan, December 2008.*

²⁶ *CARB, Clean Car Standards - Pavley, Assembly Bill 1493.*

(j) Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009.²⁷ In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified at Title 17, California Code of Regulations, Sections 95480-95490. The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. In September 2018, the standards were amended to by CARB to require a 20 percent reduction in carbon intensity by 2030, aligning with California's 2030 targets set by SB 32.

(k) Clean Cars

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025²⁸. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 40 percent fewer global warming gases and 75 percent less smog-forming pollution compared to 2012 levels. At its 2017 mid-term evaluation, CARB determined that the greenhouse gas standards remain appropriate for 2022 through 2025 model years. In September 2018, the standards were amended by CARB to require a 20 percent reduction in carbon intensity by 2030, aligning with California's 2030 targets set by SB 32.

(l) Green Building Code (California Code of Regulations, Title 24)

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2016 update to the Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as

²⁷ California Air Resources Board, *Initial Statement of Reason for Proposed Regulation for The Management of High Global Warming Potential Refrigerant for Stationary Sources*.

²⁸ California Air Resources Board, *Advanced Clean Cars Program*.

newly constructed buildings and renovations and additions to existing buildings. The major efficiency improvements to the residential Standards involve improvements for attics, walls, water heating, and lighting, whereas the major efficiency improvements to the nonresidential Standards include alignment with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 national standards. Furthermore, the 2016 update requires that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2020.

(3) Regional

(a) *South Coast Air Quality Management District Policies (SCAQMD)*

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

The 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:²⁹

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), 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.^{30,31} On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO₂e per year for stationary source/industrial projects where the SCAQMD is Lead Agency. However, the SCAQMD has not adopted a GHG significance threshold for land use development projects (e.g., mixed-use/commercial projects). A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.³² The aforementioned Working Group has been inactive since 2011, and the SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

(b) Southern California Association of Governments

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016-2040 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment

²⁹ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, April 1993, page 3-7.

³⁰ South Coast Air Quality Management District, *Board Meeting*, December 5, 2008, Agenda No.31.

³¹ South Coast Air Quality Management District, *Greenhouse Gases, CEQA Significance Thresholds, Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, December 5, 2008. *The performance standards primarily focus on energy efficiency measures beyond Title 24 and a screening level of 3,000 MTCO₂e per year for residential and commercial sector projects. The SCAQMD adopted a GHG significance threshold of 10,000 MTCO₂e per year for industrial stationary source projects for which the SCAQMD is the lead agency.*

³² South Coast Air Quality Management District, *Greenhouse Gases CEQA Significance Thresholds*.

development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a “Complete Streets” policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.³³

The 2016-2040 RTP/SCS states that the SCAG region is home to approximately 18.3 million people in 2012 and currently includes approximately 5.9 million homes and 7.4 million jobs. By 2040, the integrated growth forecast projects that these figures will increase by 3.8 million people, with nearly 1.5 million more homes and 2.4 million more jobs. High Quality Transit Areas (HQTAs), which are defined by the 2016-2040 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours, will account for 3 percent of regional total land, but are projected to accommodate 46 percent and 55 percent of future household and employment growth respectively between 2012 and 2040.³⁴ The 2016-2040 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region’s HQTAs. HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by State law to lower regional GHG emissions. California law at the time required the region to reduce per capita GHG emissions in the SCAG region by eight percent by 2020—compared with 2005 levels—and by 13 percent by 2035. The strategies, programs, and projects outlined in the 2016-2040 RTP/SCS are projected to result in GHG emissions reductions in the SCAG region that meet or exceed these targets (i.e., the plan would reduce per capita transportation emissions by 8 percent by 2020, 18 percent by 2035, and 21 percent by 2040).³⁵ Accordingly, CARB has accepted that the 2016-2040 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the State’s GHG emission reduction goals.

On September 3, 2020, SCAG approved and adopted the Connect SoCal 2020–2045 RTP/SCS. The RTP/SCS is currently pending certification by CARB that the RTP/SCS would meet statewide GHG reduction targets. Similar to the 2016-2040 RTP/SCS, the

³³ *Southern California Association of Governments, 2016-2040 RTP/SCS, pages 170-181.*

³⁴ *Southern California Association of Governments, 2016-2040 RTP/SCS, pages 20, 75-77.*

³⁵ *SCAG, The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Executive Summary, Adopted April 2016.*

newly adopted 2020-2045 RTP/SCS encompasses and builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern.—The plan lays out a strategy for the region to meet CARB greenhouse gas reduction targets at eight percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. In addition, the plan anticipates a 25.7 percent decrease in time spent in traffic delay per capita and a five percent decrease in daily miles driven per capita from 2016 to 2045.

(4) Local

(a) *Mayor's Office Green New Deal*

In April 2019, Mayor Eric Garcetti released L.A.'s Green New Deal (Sustainable City pLAn 2019). Rather than an adopted plan, the Green New Deal is a mayoral initiative that consists of a program of actions designed to create sustainability-based performance targets through 2050 that advance economic, environmental, and equity objectives.³⁶ L.A.'s Green New Deal (Sustainable City pLAn 2019) is the first four-year update to the City's first Sustainable City pLAn that was released in 2015. It augments, expands, and elaborates in even more detail L.A.'s vision for a sustainable future and it addresses climate change with accelerated targets and new aggressive goals.

While not a plan adopted solely to reduce GHG emissions, within L.A.'s Green New Deal (Sustainable City pLAn 2019), climate mitigation is one of eight explicit benefits that help define its strategies and goals. These include reducing GHG emissions through near-term outcomes:

- Reduce potable water use per capita by 22.5 percent by 2025; 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Reduce building energy use per square feet for all building types 22 percent by 2025; 34 percent by 2035; and 44 percent by 2050 (from a baseline of 68 mBTU/sqft in 2015).
- All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.
- Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035.
- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025; and 75 percent by 2035.

³⁶ *City of Los Angeles, L.A.'s Green New Deal (Sustainable City pLAn 2019), 2019.*

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

(b) City of Los Angeles Green Building Code

In April 2008, the City adopted the Green Building Program Ordinance to address the impacts of new development. In 2011, 2014, 2016, and 2019 Chapter IX, Article 9, of the Los Angeles Municipal Code (LAMC), referred to as the Los Angeles Green Building Code, was amended to incorporate various provisions of the CALGreen Code. The LA Green Building Code imposes more stringent green building requirements than those contained within the CALGreen Code, and is applicable to the construction of every new building, every new building alteration with a permit valuation of over \$200,000, and every building addition unless otherwise noted. Specific mandatory requirements and elective measures are provided for residential and non-residential developments. The Green Building Ordinance includes measures that would increase energy efficiency on the Project Site, including installing Energy Star rated appliances and installation of water-conserving fixtures.

(c) Transportation Assessment Guidelines

The City of Los Angeles Department of Transportation (LADOT) has developed the City Transportation Assessment Guidelines (TAG) (July 2019) to provide the public, private consultants, and City staff with standards, guidelines, objectives, and criteria to be used in the preparation of a transportation assessment. The TAG establishes the reduction of vehicle trips and VMT as the threshold for determining transportation impacts and thus is

an implementing mechanism of the City's strategy to reduce land use transportation-related GHG emissions consistent with AB 32, SB 32, and SB 375.

e) Existing Conditions

(1) Existing Statewide Greenhouse Gas Emissions Inventory

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. In 2018, the most recent year for which data are available, emissions from statewide emitting activities were 425 million metric tons of CO₂ equivalent (MMTCO₂e), which is 1 MMTCO₂e higher than 2017 levels. 2018 emissions have decreased by 13 percent since peak levels in 2004 and are 6 MMTCO₂e below the 1990 emissions level and the State's 2020 GHG limit. Per capita GHG emissions in California have dropped from a 2001 peak of 14.1 tonnes per person to 10.7 tonnes per person in 2018, a 24 percent decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP) is declining. From 2000 to 2018, the carbon intensity of California's economy has decreased by 43 percent from 2001 peak emissions while simultaneously increasing GDP by 59 percent. In 2018, GDP grew 4.3 percent while the emissions per GDP declined by 0.4 percent compared to 2017.³⁷

The transportation sector remains the largest source of GHG emissions in the State. Direct emissions from vehicle tailpipe, off-road transportation mobile sources, intrastate aviation, rail, and watercraft account for 40 percent of Statewide emissions in 2018. Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Emissions from the electricity sector account for 15 percent of the inventory and show a slight increase in 2018 due to less hydropower. The industrial sector trend has been relatively flat in recent years, and remains at 21 percent of the inventory. Emissions from high-GWP gases have continued to increase as they replace ozone depleting substances (ODS) banned under the 1987 Montreal Protocol. Emissions from other sectors have remained relatively constant in recent years.³⁸

(2) Existing Site Greenhouse Gas Emissions

The Project Site is currently developed with 26,740 square feet of light industrial uses and surface parking. GHG emissions are currently associated with vehicle trips to and from the existing Project Site (on-road mobile sources), on-site combustion of natural gas for

³⁷ CARB. *California Greenhouse Gas Emissions for 2000 to 2018, Trends of Emissions and Other Indicators, 2020 Edition.*

³⁸ CARB. *California Greenhouse Gas Emissions for 2000 to 2018, Trends of Emissions and Other Indicators, 2020 Edition.*

heating and cooking, on-site combustion emissions from landscaping equipment (area source), off-site combustion of fossil fuels for electricity, and off-site emissions from solid waste decomposition, water conveyance, and wastewater treatment.

Existing Project Site GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2. Each source of GHG emissions is described in greater detail below.

(a) Area Sources

Per the CAPCOA Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. Architectural coatings are subject to SCAQMD Rule 1113 which limits the VOC content to 50g/L for paints applied to buildings so defaults were adjusted accordingly. No other changes were made to the default area source parameters.

(b) Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

(c) Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the Project. The emissions from the vehicle trips associated with the Project have been analyzed using both the trip generation rates and vehicle miles traveled (VMT) calculated in the Traffic Impact Study for the 676 Mateo Street Project (Traffic Study), prepared by Linscott, Law & Greenspan, Engineers, February 13, 2020. This report is included as Appendix L.1 of this Draft EIR.

Emissions of GHGs associated with mobile sources from operation of the existing use are based on the average daily trip generation rate, trip distance, the GHG emission factors for the mobile sources, and the GWP values for the GHGs emitted. The existing 26,740 TSF industrial use (to be removed from the Project Site) generated 6.25 trips/TSF weekdays, 6.25 trips/TSF on Saturdays, and 6.25 trips/TSF on Sundays (with incorporation of a 10 percent trip reduction due to transit/multi-modal). The Saturday and Sunday trip generation rates were obtained from the 10th Edition ITE Trip Generation Manual and received the same trip reductions as the weekday rates.

The GHG emissions generated by the existing uses at the Project Site are shown in **Table IV.D-3, Existing Greenhouse Gas Emissions**. As shown, GHG emissions generated by existing conditions at the Project Site are approximately 546.21 CO₂e metric tons per year (MTY).

**Table IV.D-3
Existing Greenhouse Gas Emissions**

Emissions Source	Estimated Project CO₂e Emissions (Metric Tons per Year)
Energy (Electricity & Natural Gas)	215.56
Mobile (Motor Vehicles)	260.62
Solid Waste Generation	16.68
Water/Wastewater	53.35
Existing Project Site Total	546
<i>Calculation data and results provided in Appendix E of this Draft EIR.</i>	

3. Project Impacts

a) Thresholds of Significance

In accordance with the *State CEQA Guidelines* Appendix G (Appendix G), the Project would have a significant impact related to GHG 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.***

As described in Section 15064.4(b) of the *State CEQA Guidelines*, the following factors, among others, should be considered when assessing the significance of impacts from GHG emissions on the environment:

- *The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.*
- *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
- *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.*

Section 15064.4 does not establish a threshold of significance. Lead agencies are called on to establish significance thresholds for their respective jurisdictions in which a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), as long as any threshold chosen is supported by substantial evidence (see *State CEQA Guidelines* Section 15064.7(c)). Although GHG emissions can be quantified, CARB, SCAQMD and the City of Los Angeles have yet to adopt project-level significance thresholds for GHG emissions that would be applicable to the Project.

The *State CEQA Guidelines* amendments also clarify that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Per *State CEQA Guidelines* Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.³⁹ Essentially, the *State CEQA Guidelines* Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with program and/or other regulatory schemes to reduce GHG emissions.

State CEQA Guidelines Appendix G and Section 15064.4, as well as Executive Orders S-3-05 and B-30-15, SB 375, SCAG's 2016-2040 RTP/SCS,⁴⁰ the LA Green Plan, Green New Deal, and the LA Green Building Code all apply to the Project and are all intended to reduce GHG emissions to meet the statewide targets set forth in AB 32 and SB 32. With respect to *State CEQA Guidelines* Appendix G Threshold (a) for greenhouse gas emissions, a quantitative threshold has not been adopted which may determine if a project's greenhouse gas emissions may have a significant impact on the environment. Thus, in the absence of any adopted, quantitative threshold, the following threshold of significance has been developed for purposes of this analysis:

³⁹ 14 California Code of Regulations Section 15064(h)(3).

⁴⁰ As discussed in the regulatory setting above, on September 3, 2020, SCAG approved and adopted the Connect SoCal 2020–2045 RTP/SCS. It should be noted that the circulation of the NOP for the Project was on February 23, 2018, which was prior to the adoption of the 2020-2045 RTP/SCS. In addition, the GHG reduction targets in the 2020-2045 RTP/SCS have not been certified by CARB. Therefore the analysis focuses on the Project's consistency with the 2016-2040 RTP/SCS.

If the Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions, then the Project would result in a less than significant impact with respect to *State CEQA Guidelines Appendix G Threshold (a) and Threshold (b)* for greenhouse gas emissions.

b) Methodology

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors be considered that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see Section 15064(h)(3)).⁴¹

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emissions. Nor have SCAQMD, OPR, CARB, CAPCOA, or any other state or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

Notwithstanding, the analysis also calculates the amount of GHG emissions that would be attributable to the Project using recommended air quality models, as described below. The primary purpose of quantifying the Project's GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the Project's incremental contribution of GHG emissions as a result of

⁴¹ See generally *California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (December 2009)*, pp. 11-13, 14, 16; see also *Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009*.

compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the Project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the Project.

(1) Consistency with Plans

The Project's GHG impacts are evaluated by assessing the Project's consistency with applicable statewide, regional, and local GHG reduction plans and strategies. As discussed previously, the City has established goals and actions to reduce the generation and emission of GHGs from both public and private activities in the LA Green Plan/ClimateLA, and the Mayor's Green New Deal (Sustainable City pLAn).

The Governor's Office of Planning and Research (OPR) encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. Although the City does not have a programmatic mitigation plan to tier from, such as a Greenhouse Gas Emissions Reduction Plan, the City has adopted a number of plans to help reduce GHG emissions, including the LA Green Plan, Green New Deal, and Green Building Code, which encourage and require applicable projects to implement energy efficiency measures. In addition, the California CAT Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05. On a statewide level, the Climate Change Scoping Plan provides measures to achieve AB 32 targets. On a regional level, the SCAG RTP/SCS contains measures to achieve VMT reductions required under SB 375. Thus, if the Project complies with these plans, policies, regulations, and requirements, the Project would result in a less than significant impact because it would be consistent with the overarching state, regional, and local plans for GHG reduction.

A consistency analysis is provided below and describes the Project's compliance with or exceedance of performance-based standards included in the regulations outlined in the applicable portions of the 2008 Climate Change Scoping Plan and subsequent updates, 2016-2040 RTP/SCS, and the Green New Deal.

(2) Quantification of Emissions

In view of the above considerations, this Draft EIR also quantifies the Project's total annual GHG emissions for informational purposes to satisfy State CEQA Guidelines Section 15064.4(a), taking into account the GHG emission reduction features that would be incorporated into the Project's design. However, given the lack of a formally adopted numerical significance threshold or a formally adopted local plan for reducing GHG emissions applicable to this Project, the City has determined to assess the significance

of the Project's GHG emissions by comparing them to SCAQMD's draft performance standards⁴² in the context of an assessment of the Project's consistency with regulatory schemes, comparable to formally adopted local GHG emission reduction plans, that are designed to reduce GHG emissions by encouraging development located and designed to result in the efficient use of resources.

This Draft EIR quantifies the Project's annual GHG emissions and compares them to a Project without Reduction Features scenario, as defined by CARB's most updated projections for AB/SB 32.⁴³ The Project without Reduction Features scenario does not account for energy efficiency measures that would exceed the Title 24 Building Standards Code, and does not account for trip reductions from availability of public transportation within 0.25 mile. This comparison is being done for informational purposes only, in order to disclose the relative carbon efficiency of the Project. The City, as lead agency, is focusing its determination of the significance of the Project's GHG emissions in relation to the Project's location and design and its consistency with local City of Los Angeles regulatory schemes, as explained below.

(3) Estimation of GHG Emissions

The California Climate Action Registry (Climate Registry) General Reporting Protocol provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.⁴⁴ The General Reporting Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."⁴⁵ Although no numerical thresholds of significance have been developed, and no specific protocols are available for land use projects, the General Reporting Protocol provides a basic framework for calculating and reporting GHG emissions from the Project. The

⁴² SCAQMD, *Greenhouse GAS CEQA Significance Threshold Working Group Meeting #15 Presentation, September 28, 2010*,

⁴³ *The comparison to a so-called BAU scenario is not used as a threshold of significance, but is used to provide information and a quantitative metric to measure the Project's GHG emissions and level of reductions from Project Design Features and characteristics. See Center for Biological Diversity v. California Department of Fish and Wildlife (2015) 62 Cal.4th 204. While the California Supreme Court approved the methodology analyzing the significance of the project's GHG emissions in terms of reductions from projected BAU emissions consistent with AB 32's statewide reductions mandate, it held the GHG analysis lacked supporting substantial evidence and a cogent explanation correlating the project-specific reductions to AB 32's mandated state-wide reductions so as to demonstrate consistency with the latter's goals under the approved methodology.*

⁴⁴ *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009.*

⁴⁵ *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009.*

information provided in this section is consistent with the General Reporting Protocol's reporting requirements.

The General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, offsite emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater).⁴⁶

The General Reporting Protocol provides a range of basic calculations methods. However, the General Reporting Protocol calculations are typically designed for existing buildings or facilities. These retrospective calculation methods are not directly applicable to planning and development situations where buildings do not yet exist.

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.⁴⁷ For example, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, OPR has noted that lead agencies should make a “good faith effort, based on available information, to calculate, model or estimate ... GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities.”⁴⁸ Therefore, direct and indirect emissions have been calculated for the Project.

A fundamental difficulty in the analysis of GHG emissions is the global nature of the existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular planning program or project because the planning effort or project may cause a shift in the locale for some type of GHG emissions, rather than causing

⁴⁶ Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use of a product, material, or service.

⁴⁷ CARB, *Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32)*, Planning and Technical Support Division Emission Inventory Branch, October 19, 2007.

⁴⁸ OPR Technical Advisory, *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review*, June 2008.

“new” GHG emissions. As a result, there is frequently an inability to conclude whether a project’s GHG emissions represent a net global increase, reduction, or no change in GHGs that would exist if the project were not implemented. The analysis of the Project’s GHG emissions is particularly conservative in that it assumes all of the GHG emissions are new additions to the atmosphere.

The California Emissions Estimator Model® (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California, which provided data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) to account for local requirements and conditions. The model is considered by SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.⁴⁹

The Project and the Flexibility Option) would generate GHG emissions from area sources, energy usage, mobile sources, waste, water, and construction equipment. Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project. Both the Project and the Flexibility Option would be compliant with the Los Angeles Green Building Code and California Energy/Title 24 requirements. The Project and the Flexibility Option would include, but not be limited to, the following energy-saving compliance features that would reduce emissions:

- Ten (10) percent of the required and proposed parking spaces will have chargers for electric vehicles and twenty (20) percent of the required and provided parking spaces will be pre-plumbed for future electric vehicle charging;
- Low-water use plumbing fixtures;
- Energy-efficient elevator;
- Energy-efficient glazing and window frames;
- Energy-efficient mechanical systems and appliances;
- Energy-efficient lighting; and
- Low-water use landscaping and irrigation.

⁴⁹ *California Air Pollution Control Officers Association, California Emissions Estimator Model, CalEEMod™,*

Moreover, the construction schedule would remain the same under the Flexibility Option. A detailed description of the calculations used in this analysis is provided in **Appendix E** of this Draft EIR.

(a) *GHG Emissions from the Project*

The Project's construction emissions were calculated using CalEEMod Version 2016.3.2. Details of the modeling assumptions and emission factors are provided in **Appendix E** of this Draft EIR. CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecast based on the construction assumptions included in Appendix E and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. Similar to construction, the SCAQMD-recommended CalEEMod was used to calculate potential direct and indirect GHG emissions generated by new land uses on the Project Site, including area sources, electricity, natural gas, mobile sources, stationary sources (i.e., emergency generators), solid waste generation and disposal, and water usage/wastewater generation. CalEEMod default values for generation/usage rates, GHG emission factors, and GWP values were used in the evaluation of operational GHG emissions from the Project. Each source of GHG emissions that is reflected in these calculations is described in greater detail below.

(b) *Area Sources*

Per the CAPCOA Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. Architectural coatings are subject to SCAQMD Rule 1113 which limits the VOC content to 50g/L for paints applied to buildings so defaults were adjusted accordingly. No other changes were made to the default area source parameters.

(c) *Energy Usage*

GHG emissions associated with electricity usage are based on the size of the land uses, the electrical demand factors for the land uses, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for LADWP were selected in CalEEMod. The carbon intensity (lbs/MWh) for electricity generation was calculated for the Project buildout year based on LADWP projections for year 2024 (615 lb. CO₂ per MWh). LADWP's carbon intensity projections also take into account SB 350 RPS requirements for renewable energy.

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

(d) *Mobile Sources*

Mobile sources include emissions from the additional vehicle miles generated from the Project. The emissions from the vehicle trips associated with the Project have been analyzed using both the trip generation rates and vehicle miles traveled (VMT) calculated in the Traffic Impact Study for the 676 Mateo Street Project (Traffic Study), prepared by Linscott, Law & Greenspan, Engineers, July 7, 2020. This report is included as **Appendix L.1** of this Draft EIR.

Emissions of GHGs associated with mobile sources from operation of the Project are based on the average daily trip generation rate, trip distance, the GHG emission factors for the mobile sources, and the GWP values for the GHGs emitted. The types of vehicles that would visit the Project Site include all vehicle types including automobiles, light-duty trucks, delivery trucks, and waste haul trucks. Modeling for the Project was conducted using the vehicle fleet mix for the Los Angeles County portion of the South Coast Air Basin as provided in EMFAC2014 and CalEEMod. Annual mobile source GHG emissions in units of MTCO_{2e} are generally calculated as follows:

$$\text{Annual Emissions [MTCO}_2\text{e]} = (\sum_i (\text{Units} \times \text{ADT} \times \text{DTRIP} \times \text{Days} \times \text{EF} \times \text{GWP})) \div 2204.6$$

Unit	Definition of Unit
Units:	Number of vehicles (same vehicle model year and class)
ADT:	Average daily trip rate [trips/day]
DTRIP:	Trip distance [miles/trip]
Days:	Number of days per year [days/year]
EF:	GHG emission factor [pounds per mile]
GWP:	Global warming potential [CO ₂ = 1, CH ₄ = 25, N ₂ O = 298]
2204.6:	Conversion factor [pounds/MT]
i:	Summation index

For the trip generation rate-based analysis, the Traffic Study found that the Project will generate approximately 2,092 total daily trips (includes reductions for internal, transit/multi-modal, and pass-by). Trip generation rates include: 5.27 trips per dwelling unit (DU) per weekday, 5.86 trips/DU for Saturdays and 4.52 trips/DU for Sundays for the apartment use (with incorporation of 10 percent trip reduction due to transit/multi-modal and 20 percent reduction for internal capture); 8.72 trips per thousand square feet (TSF) weekdays, 1.98 trips/TSF for Saturdays, and 0.63 trips/TSF for Sundays for general office (live/work) (with incorporation of 10 percent trip reduction due to transit/multi-modal and

20 percent reduction for internal capture); 64.65 trips/TSF per weekday, 70.55 trips/TSF for Saturdays and 82.22 trips/TSF for Sundays for the restaurant (with incorporation of 20 percent internal trip reduction, 20 percent pass-by reduction and 10 percent trip reduction due to transit/multi-modal); and 13.49 trips/TSF per weekday, 16.49 trips/TSF for Saturdays and 7.55 trips/TSF for Sundays for the shopping center (with incorporation of 20 percent internal trip reduction, 50 percent pass-by reduction and 10 percent trip reduction due to transit/multi-modal). The Saturday and Sunday trip generation rates were obtained from the 10th Edition ITE Trip Generation Manual and received the same trip reductions as the weekday rates.

(e) *Waste*

Waste includes the GHG emissions generated from the processing of waste from the Project as well as the GHG emissions from the waste once it is interred into a landfill. According to the City of Los Angeles Zero Waste Progress Report (March 2013), the City achieved a landfill diversion rate of approximately 76 percent by year 2012.⁵⁰ AB 341 requires that 75 percent of waste be diverted from landfills by 2020, reductions for this are shown in the mitigated CalEEMod output values. No other changes were made to the default waste parameters.

(f) *Water*

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. California Green Building Standards require a 20 percent reduction in indoor water usage, reductions for this are shown in the mitigated CalEEMod output values. No other changes were made to the default water usage parameters.

(g) *Construction*

The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment that would be used to demolish existing buildings, remove existing pavement, grade, and excavate the Project Site, construct the proposed building and related improvements, and plant new landscaping within the Project Site.

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

⁵⁰ *City of Los Angeles, Department of Public Works, LA Sanitation, Zero Waste Progress Report, March 2013.*

SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.⁵¹ Thus, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions.

(h) *Sequestration*

The analysis includes reduction of GHG emissions from the planting of at least 46 new trees. The California Air Pollution Control Officers Association (CAPCOA) states that trees sequester carbon dioxide over 20 years of their life, after that, sequestration is nominal and outweighed by tree maintenance-related emissions. The total sequestration value given in the Annual CalEEMod output (see **Appendix E** of this Draft EIR for details) was divided by 20 years to yield an annual value, which was then subtracted from the Project's emissions.

c) **Project Design Features**

See Project Design Feature (PDF) TR-1 outlined in **Section IV.K., Transportation**, of this Draft EIR which would reduce air quality impacts by developing a Construction Staging and Traffic Management Plan. The Construction Staging and Traffic Management Plan would reduce impacts to sensitive receptors by ensuring haul trucks follow a specified haul route, and do not travel through residential neighborhoods. The Construction Staging and Traffic Management Plan would also include coordination with nearby projects that have potential overlapping construction timeframes. While this PDF would be beneficial, this air quality analysis does not account for quantitative reductions of air quality emissions which discloses a worst-case scenario.

d) **Impact Analysis**

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 22,493 square feet to 45,873 square feet and, in turn, there would be a reduction in the number of live/work units from 185 to 159 units. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination

⁵¹ SCAQMD, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, 2008.

presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

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

Numerical differences exist between the Project and Flexibility Option; therefore, these analyses are presented separately.

(1) Project

The Project involves the demolition of 26,740 square feet of existing industrial uses and the construction of a mixed-use development including 185 Live-Work apartments, 3,900 square feet of office space, 15,005 square feet of restaurant space, and 8,375 square feet of retail space. A minimum of 270 parking spaces would be provided in three subterranean levels. The Project would be constructed over approximately 24 months. Demolition activities are anticipated to start in 2021, and construction completion and occupancy is anticipated in 2023. Construction activities associated with the Project would be undertaken in four main steps: (1) demolition, (2) grading/excavation/foundation preparation, (3) building construction, and (4) architectural coating. The open space/landscaping areas will include the planting of approximately 46 new trees. The building footprint is estimated to be 1.03 acres.

Demolition would occur for approximately one month and include the removal of the existing uses. Grading, excavation, and foundation preparation would occur for approximately three months and this analysis assumes 74,500 cubic yards (CY) of soil will be exported with a maximum of no more than 1,500 CY being exported per day during grading. Building construction would occur for approximately 20 months, and would include the construction of the proposed structure, connection of utilities, laying irrigation for landscaping, then installation of landscaping. Application of architectural coatings would occur for approximately 2 months and would overlap the building construction phase.

GHG emissions are calculated for the purpose of providing an estimate of the Project's GHG emissions in order to satisfy State CEQA Guidelines Section 15064.4(a). The GHG emissions have been calculated based on the parameters described above. A summary of the results (using the trip generation rates-based mobile source analysis) are shown below in **Table IV.D-4, Project-Related GHG Emissions** and the CalEEMod Model runs

for the both the existing use (to be removed) and the Project are provided in **Appendix E** of this Draft EIR.

Table IV.D-4, Project-Related GHG Emissions shows that the subtotal for the Project's emissions (without incorporation of design features/regulations) would be 4,444.80 MTCO₂e per year. With the removal of the existing uses, the emissions are reduced to 3,898.59 MTCO₂e per year. The data provided in **Table IV.D-5, Project-Related GHG Emissions With Incorporation of Design Features and Regulations** shows that the Project's total "mitigated" emissions (incorporation of design features and compliance with regulation, shown as "mitigation" in the CalEEMod output) would be reduced to 2,848.13 MTCO₂e per year resulting in a reduction of 26.9 percent. The 26.9 percent reduction comes from incorporation of the following project design features and regulatory compliance: utilizing low-flow fixtures that would reduce indoor water demand by 20 percent per CalGreen Standards, using water-efficient irrigation systems on-site per City requirements, recycling programs that reduces waste to landfills by a minimum of 75 percent (per AB 341); use of Energy Star® appliances on-site, installation of energy efficient LED lighting, energy efficient glazing and energy efficient window frames; incorporation of the CAPCOA-based land use and site enhancement reduction measures: LUT-1 Increased Density⁵², LUT-3 Increased Diversity⁵³, LUT-6 Integrate Below Market Housing Rate⁵⁴, PDT-1 Limit Parking Supply⁵⁵, and PDT-2 Unbundle Parking Costs⁵⁶. The Project would be required by LAMC to provide approximately 46 new trees. The reduction demonstrates that material reductions in Project GHG emissions would be achieved through conformance with regulations designed to reduce GHG emissions.

⁵² *Project is more dense than typical developments and provides 179.61 dwelling units/acre and 131 jobs/job acre.*

⁵³ *Different types of land uses are near each other.*

⁵⁴ *11% of the DUs will be reserved for low income residents.*

⁵⁵ *Per the TIA, the Project will have 39% reduction in parking spaces.*

⁵⁶ *Per the TIA, a parking fee of \$100 per month will be charge to residents.*

**Table IV.D-4
Project-Related GHG Emissions**

Emissions Source	Estimated Project Generated CO₂e Emissions (Metric Tons per Year)
Area Sources	43.42
Energy Usage (Electricity & Natural Gas)	1,535.81
Mobile Sources (Motor Vehicles)	2,465.47
Solid Waste Generation	138.88
Water/Wastewater	208.56
Construction Emissions	54.30
Sequestration	-1.63
Project Subtotal	4,444.80
-Existing Uses being removed	-546.21
Project total	3,898.59
<i>Calculation sheets are provided in Appendix E of this Draft EIR. Source: CalEEMod Version 2016.3.2 for Opening Year for the Project and Existing Uses.</i>	

**Table IV.D-5
Project-Related GHG Emissions With Incorporation of Design Features and
Regulations**

Emissions Source	Estimated Project Generated CO₂e Emissions (Metric Tons per Year)
Area Sources	43.42
Energy Usage (Electricity & Natural Gas)	1,427.09
Mobile Sources (Motor Vehicles)	1,658.82
Solid Waste Generation	34.72
Water/Wastewater	177.63
Construction Emissions	54.30
Sequestration	-1.63
Project Subtotal	3,394.35
-Existing Uses being removed	-546.21
Project total	2,848.13
<i>Calculation sheets are provided in Appendix E of this Draft EIR. Source: CalEEMod Version 2016.3.2 for Opening Year for the Project "Mitigated" values and Existing Uses.</i>	

The results shown in Tables **IV.D-4** and **IV.D-5** are conservative since they do not incorporate additional VMT reduction features that would be incorporated as part of the Project's TDM program. Specifically, they do not give full emissions reductions credit for: reducing parking spaces by 39 percent (which is beyond LAMC requirements), increasing the diversity of the Project (mixed commercial and residential uses in close proximity to each other), increased

dwelling and jobs density, and the integration of below market rate housing (11 percent of the DUs will be low income).

As stated above, because there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the primary basis for determining the significance of the Project's GHG-related impacts on the environment.

(2) Flexibility Option

Under the Flexibility Option, the proposed land uses and size under the Project would remain the same, however, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. The construction activities and schedule would be similar under both scenarios.

The GHG emissions have been calculated based on the parameters described above. A summary of the results (using the trip generation rates-based mobile source analysis) are shown below in **Table IV.D-6, Project-Related GHG Emissions Flexibility Option** and the CalEEMod Model runs for the Flexibility Option are provided in **Appendix E** of this Draft EIR. **Table IV.D-6** shows that the subtotal for the Flexibility Option's emissions (without incorporation of design features/regulation) would be 4,572.37 MTCO₂e per year. With the removal of the existing uses, the emissions are reduced to 4,026.16 MTCO₂e per year. The data provided in **Table IV.D-7, Project-Related GHG Emissions Flexibility Option With Incorporation of Design Features and Regulations** shows that the Increased Commercial Flexibility Option's total "mitigated" emissions (incorporation of design features and compliance with regulation is shown as "mitigation" in the CalEEMod output) would be reduced to 2,956.01 MTCO₂e per year resulting in a reduction of 26.9 percent. The 26.9 percent reduction comes from incorporation of the following project design features and regulatory compliance: utilizing low-flow fixtures that would reduce indoor water demand by 20 percent per CalGreen Standards, using water-efficient irrigation systems on-site per City requirements, recycling programs that reduces waste to landfills by a minimum of 75 percent (per AB 341); use of Energy Star® appliances on-site, installation of energy efficient LED lighting, energy efficient glazing and energy efficient window frames; incorporation of the CAPCOA-based land use and site enhancement reduction measures: LUT-1 Increased Density⁵⁷, LUT-3 Increased

⁵⁷ Flexibility Option is more dense than typical developments and provides 154 dwelling units/acre and 141 jobs/job acre.

Diversity⁵⁸, LUT-6 Integrate Below Market Housing Rate⁵⁹, PDT-1 Limit Parking Supply⁶⁰, and PDT-2 Unbundle Parking Costs⁶¹. The Flexibility Option would also be required by LAMC to provide approximately 46 new trees. The reduction demonstrates that material reductions in Project GHG emissions would be achieved through conformance with regulations designed to reduce GHG emissions.

Similar to the Project, the results shown in Tables IV.D-6 and IV.D-7 are conservative since they do not incorporate additional VMT reduction features that would be incorporated as part of the Project's TDM program. Specifically, they do not give full emissions reductions credit for: reducing parking spaces by 39 percent (which is beyond LAMC requirements), increasing the diversity of the Project (mixed commercial and residential uses in close proximity to each other), increased dwelling and jobs density, and the integration of below market rate housing (11 percent of the DUs will be low income).

**Table IV.D-6
Project-Related GHG Emissions Flexibility Option**

Emissions Source	Estimated Project Generated CO₂e Emissions (Metric Tons per Year)
Area Sources	37.32
Energy Usage (Electricity & Natural Gas)	1,634.96
Mobile Sources (Motor Vehicles)	2,468.45
Solid Waste Generation	143.24
Water/Wastewater	236.34
Construction Emissions	53.69
Sequestration	-1.63
Project Subtotal	4,572.37
-Existing Uses being removed	-546.21
Project total	4,026.16
<i>Calculation sheets are provided in Appendix E of this Draft EIR. Source: CalEEMod Version 2016.3.2 for Opening Year for the Flexibility Option (Alternative) and Existing Uses.</i>	

⁵⁸ Different types of land uses are near each other.

⁵⁹ 11% of the DUs will be reserved for low income residents.

⁶⁰ Per the TIA, the Flexibility Option will have 39% reduction in parking spaces.

⁶¹ Per the TIA, a parking fee of \$100 per month will be charge to residents.

**Table IV.D-7
Project-Related GHG Emissions Flexibility Option With Incorporation of Design
Features and Regulations**

Emissions Source	Estimated Project Generated CO₂e Emissions (Metric Tons per Year)
Area Sources	37.32
Energy Usage (Electricity & Natural Gas)	1,514.48
Mobile Sources (Motor Vehicles)	1,661.02
Solid Waste Generation	35.81
Water/Wastewater	201.53
Construction Emissions	53.69
Sequestration	-1.63
Project Subtotal	3,502.23
-Existing Uses being removed	-546.21
Project total	2,956.01
<i>Calculation sheets are provided in Appendix E of this Draft EIR. Source: CalEEMod Version 2016.3.2 for Opening Year for the Flexibility Option (Alternative) "Mitigated" values and Existing Uses.</i>	

As stated above, because there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Flexibility Option's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the primary basis for determining the significance of the Project's GHG-related impacts on the environment.

Accordingly, the Project and the Flexibility Option would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

(3) Mitigation Measures

The Project and the Flexibility Option would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, no mitigation measures are required.

(4) Level of Significance After Mitigation

The Project and the Flexibility Option would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would be less than significant without mitigation.

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

(1) Impact Analysis

The following describes the Project's consistency with applicable regulatory plans and policies intended to reduce GHG emissions, including Executive Orders S-3-05 and B-30-15, AB 32 Scoping Plan, SCAG's 2016-2040 RTP/SCS, the LA Sustainable City pLAN, and the LA Green Building Code. As shown below, the Project would be consistent with the applicable GHG reduction plans, policies, and regulations.

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option, the impacts of the project and the Flexibility Option related to consistency with GHG reduction plans and programs would be essentially the same. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

(a) *Executive Orders S-3-05 and B-30-15*

The Executive Orders establish goals to reduce GHG emissions to 80 percent below 1990 levels by 2050. This goal has not been codified by the Legislature and CARB has not adopted a strategy or regulations to meet the 2050 goal. However, studies have shown that, in order to meet the 2050 goal, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its original *Climate Change Scoping Plan*, CARB acknowledged that the "measures needed to meet the 2050 goal are too far in the future to define in detail."⁶² In the First Update, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."⁶³ The 2017 Scoping Plan recognizes that additional work is needed to achieve the more stringent 2050 target: "While the Scoping Plan charts the path to achieving the 2030 GHG emissions reduction target, we also need momentum to propel us to the 2050 statewide GHG target (80 percent below 1990 levels). In developing this Scoping Plan, we considered what policies are needed to meet our mid-term and long-term goals."⁶⁴ For example, the 2017 Scoping Plan acknowledges that "though Zero

⁶² California Air Resources Board, *Climate Change Scoping Plan*, December 2008, page 117.

⁶³ California Air Resources Board, *First Update*, May 2014, page 32.

⁶⁴ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.

Net Carbon Buildings are not feasible at this time and more work needs to be done in this area, they will be necessary to achieve the 2050 target. To that end, work must begin now to review and evaluate research in this area, establish a planning horizon for targets, and identify implementation mechanisms.”⁶⁵

- Energy Sector: Continued improvements in California’s lighting, appliance, and building energy efficiency programs and initiatives, such as the State’s building energy efficiency standards and zero net energy building goals, would serve to reduce the Project’s emissions level.⁶⁶ Additionally, further technological improvements and additions to California’s renewable resource portfolio would favorably influence the Project’s emissions level.⁶⁷
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project’s emissions level.⁶⁸
- Water Sector: The Project’s emissions level will be reduced as a result of further enhancements to water conservation technologies.⁶⁹
- Waste Management Sector: Plans to further improve recycling, reuse, and reduction of solid waste will beneficially reduce the Project’s emissions level.⁷⁰

The GHG analysis was prepared after thorough investigation of feasible methodologies to determine the potential GHG impacts associated with the Project. Due to the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the Project’s impacts further relative to the 2050 goal is speculative for purposes of CEQA. Nonetheless, statewide efforts are underway to facilitate the State’s achievement of those goals and it is reasonable to expect the Project’s emissions level to decline as the regulatory initiatives identified by CARB in the 2017 Scoping Plan are implemented, and other technological innovations occur.

Many of the emission reduction strategies recommended by ARB would serve to reduce the Project’s post-2020 emissions level to the extent applicable by law and help lay the foundation “...for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050,” as called for in ARB’s First Update to the AB 32 Scoping Plan. As such, the Project’s post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050

⁶⁵ California Air Resources Board, *California’s 2017 Climate Change Scoping Plan*.

⁶⁶ California Air Resources Board, *First Update*, pages 37-39 and 85.

⁶⁷ California Air Resources Board, *First Update*, pages 40-41

⁶⁸ California Air Resources Board, *First Update*, pages 55-56.

⁶⁹ California Air Resources Board, *First Update*, page 65.

⁷⁰ California Air Resources Board, *First Update*, page 69.

targets and Executive Order S-3-05 and B-30-15. The Project's consistency with the AB 32 Scoping Plan is examined below.

(b) *AB 32 Scoping Plan*

Emission reductions in California alone would not be able to stabilize the concentration of greenhouse gases in the earth's atmosphere. However, California's actions set an example and drive progress towards a reduction in greenhouse gases elsewhere. If other states and countries were to follow California's emission reduction targets, this could avoid medium or higher ranges of global temperature increases. Thus, severe consequences of climate change could also be avoided.

At the state level, Executive Orders S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. Executive Order S-3-05's goal to reduce GHG emissions to 1990 levels by 2020 was adopted by the Legislature as the 2006 Global Warming Solutions Act (AB 32) and codified into law in Health & Safety Code (HSC) Division 25.5. Executive Order B-30-15's goal to reduce GHG emissions to 40 percent below 1990 levels by 2030 was adopted by the Legislature in SB 32 and also codified into law in HSC Division 25.5. In support of HSC Division 25.5, the State has promulgated specific laws and strategies aimed at GHG reductions applicable to the Project. The primary focus of many of the statewide and regional plans, policies and regulations is to address worldwide climate change. Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the Project's increase in annual GHG emissions would cause a measurable change in global GHG emissions necessary to influence global climate change. Newer construction materials and practices, energy efficiency requirements, and newer appliances tend to emit lower levels of air pollutant emissions, including GHGs, as compared to those built years ago; however, the net effect is difficult to quantify. The GHG emissions of the Project alone would not likely cause a direct physical change in the environment. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."⁷¹ It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone.

Table IV.D-8, Project and Flexibility Option Consistency with AB 32 Scoping Plan, contains a list of GHG-reducing measures and strategies applicable to the Project. The analysis describes the consistency of the Project with these measures and strategies outlined in the State's 2017 Climate Change Scoping Plan to reduce GHG emissions. The Climate Change Scoping Plan outlines a framework that relies on a broad array of GHG

⁷¹ *California Air Pollution Control Officers Association, CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, 2008.*

reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program. As discussed below, the Project would implement PDFs and incorporate characteristics to reduce energy use, conserve water, reduce waste generation, and reduce vehicle travel consistent with statewide strategies and regulations.

As the latest 2017 Scoping Plan builds upon previous versions, Project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in **Table IV.D-8, Project Consistency with AB 32 Scoping Plan**. As shown in **Table IV.D-8**, the Project would not conflict with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

**Table IV.D-8
Project and Flexibility Option Consistency with AB 32 Scoping Plan**

Strategies for Reducing GHG Emissions	Project Consistency
2008 Scoping Plan Measures	
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the system. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	No Conflict. The Project and Flexibility Option would not conflict with implementation of the vehicle emissions standards. The Project and Flexibility Option further the measure's goals through incorporation of EV spaces on-site.
Energy Efficiency. Maximize energy efficiency building and appliance standards and pursue additional efficiency efforts including new technologies, and new policy and mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	No Conflict. Compliance with the LA Green Building Code and CALGreen Code would ensure energy efficiency. The Project and Flexibility Option would also include: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting. Furthermore, the Project and Flexibility Option would use electricity provided by LADWP, which is required to obtain 33 percent renewable power by 2020 and has committed to achieving 50 percent renewables by 2025. ⁷²
Low-Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	No Conflict. The Project and Flexibility Option would not conflict with implementation of the transportation fuel standards. Additionally, patrons of the Project would be utilizing the fuels available to the public upon Project commencement, including the State-regulated Low-Carbon Fuel Standard.

⁷² Los Angeles Department of Water and Power, 2016 Power Integrated Resource Plan, page ES-1.

**Table IV.D-8
Project and Flexibility Option Consistency with AB 32 Scoping Plan**

Strategies for Reducing GHG Emissions	Project Consistency
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	No Conflict. These are CARB enforced standards; vehicles that access the Project and Flexibility Option are required to comply with the standards and will comply with the strategy.
Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	No Conflict. These are CARB enforced standards; vehicles that access the Project and Flexibility Option are required to comply with the standards and will comply with the strategy.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	No Conflict. The Project and Flexibility Option would be compliant with the Los Angeles Green Building Code and California Energy/Title 24 requirements. The Project and Flexibility Option would include, but not be limited to: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting.
High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	No Conflict. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the Project and Flexibility Option are required to comply with the CARB measures and will therefore comply with the strategy.
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials and mandate commercial recycling. Move toward zero waste.	No Conflict. The Project and Flexibility Option would be consistent with AB 341 which sets forth a mandate to divert 75 percent of solid waste from landfills (see the discussion in the Initial Study, Appendix A.2 , to this DEIR).
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	No Conflict. The Project and Flexibility Option would include the use of low-flow fixtures. The Project and Flexibility Option will comply with all applicable City ordinances and CAL Green requirements. Further, the Project and Flexibility Option include the design feature of low-water use plumbing fixtures, low-water use landscaping and water-wise irrigation.
2017 Scoping Plan Measures	
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	No Conflict. These are CARB enforced standards; vehicles that access the Project and Flexibility Option (that are required to comply with the standards) will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in	No Conflict. These are CARB enforced standards; vehicles that access the Project and

**Table IV.D-8
Project and Flexibility Option Consistency with AB 32 Scoping Plan**

Strategies for Reducing GHG Emissions	Project Consistency
<p>hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.</p>	<p>Flexibility Option (that are required to comply with the standards) will comply with the strategy. Furthermore, the Project and Flexibility Option will be comply with applicable City Building Code requirements for charging station prewiring in new multifamily construction/installation of charging stations at multi-unit dwellings and workplaces. Thirty (30) percent of the Project's and Flexibility Option's required parking spaces will be electric-vehicle ready, ten (10) percent of the Project's parking spaces would be provided chargers for electric vehicles, thereby further reducing consumption of petroleum-based fuels.</p>
<p>Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.</p>	<p>No Conflict. These are CARB enforced standards; vehicles that access the Project and Flexibility Option (that are required to comply with the standards) will comply with the strategy.</p>
<p>Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3-7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.</p>	<p>No Conflict. These are CARB enforced standards; vehicles that access the Project and Flexibility Option (that are required to comply with the standards) will comply with the strategy.</p>
<p>Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.</p>	<p>No Conflict. The Project will be compliant with the current Title 24 standards. Further, the Project and Flexibility Option would include, but not be limited to: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting.</p>

**Table IV.D-8
Project and Flexibility Option Consistency with AB 32 Scoping Plan**

Strategies for Reducing GHG Emissions	Project Consistency
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	No Conflict. The Project and Flexibility Option will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
<i>Source: CARB Scoping Plan (2008 and 2017).</i>	

Furthermore, in addition to the Project's and Flexibility Option's consistency with applicable GHG reduction laws and strategies, the Project would not conflict with the future anticipated statewide GHG reductions goals. CARB has outlined a number of potential strategies for achieving the 2030 reduction target of 40 percent below 1990 levels, as mandated by SB 32. These potential strategies include 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 high-speed rail and other alternative transportation options, and use of high-efficiency appliances, water heaters, and HVAC systems.⁷³ The Project would benefit from statewide and utility-provider efforts towards increasing the portion of electricity provided from renewable resources. As previously discussed, the utility provider for the Project, LADWP, currently provides 20 percent of electricity via renewable sources but has committed to providing an increasing percentage from renewable sources that exceed the Renewables Portfolio Standard requirements by providing 50 percent by 2025, 55 percent by 2030, and 65 percent by 2036.⁷⁴ Project and Flexibility Option would include, but not be limited to: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting. The Project would also benefit from statewide efforts towards increasing the fuel economy standards of vehicles. The Project Site is served by several bus lines including Metro Local Lines 18, 53, 60, 62, and 66, and Metro Rapid Lines 720 and 760. The proximity of the Project Site to these transit stops would support reducing VMT growth and would provide employees and residents easy access to the new development on the Project Site. The Project would provide 154 bicycle parking spaces, comprised of 24 bicycle spaces for commercial uses (including 12 short-term spaces and 12 long-term spaces) and 130 spaces for the live/work uses (including 12 short-term and 118 long-term), which complies with LAMC requirements set forth in Ordinance No. 185,480.

⁷³ *Energy + Environmental Economics, Summary of the California State Agencies' PATHWAYS Project: Long-Term Greenhouse Gas Reduction Scenarios, April 6, 2015.*

⁷⁴ *Los Angeles Department of Water and Power, 2016 Power Integrated Resource Plan, page ES-1.*

As discussed in **Table IV.D-12** above, the Project would be consistent with applicable GHG reduction strategies in the 2017 Climate Change Scoping Plan. The 2017 Scoping Plan also outlines 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. The 2017 Scoping Plan also calls for the doubling of the energy efficiency savings, including utility demand-response flexibility for 10 percent of residential and commercial electric space heating, water heating, air conditioning and refrigeration. The strategy is in the process of being designed specifically to accommodate existing residential and commercial uses under the CEC’s Existing Building Energy Efficiency Action Plan.⁷⁵ 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 2017 Scoping Plan, the Project would support or not impede implementation of these potential GHG reduction strategies identified by CARB.

(c) *2016-2040 RTP/SCS*

The purpose of the 2016-2040 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. SCAG’s Program EIR for the 2016-2040 RTP/SCS, released in December 2015, states that “[e]ach [Metropolitan Planning Organization] is required to prepare an SCS in conjunction to [sic] with the RTP in order to meet these GHG emissions reduction targets by aligning transportation, land use, and housing strategies with respect to [Senate Bill] 375.”⁷⁶ As part of the 2016-2040 RTP/SCS, “transportation network improvements would be included, and more compact, infill, walkable and mixed-use development strategies to accommodate new region’s growth would be encouraged to accommodate increases in population, households, employment, and travel demand.”⁷⁷ Moreover, the 2016-2040 RTP/SCS states that while “[p]opulation and job growth would induce land use change (development projects) and increase VMT, and would result in direct and indirect GHG emissions,” the 2016-2040 RTP/SCS would “support sustainable growth through a more compact, infill, and walkable development pattern.”⁷⁸

⁷⁵ *California Energy Commission, 2016 Existing Buildings Energy Efficiency Plan Update, December 2016.*

⁷⁶ *Southern California Association of Governments, Program Environmental Impact Report – 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, 2015, page 3.8-37.*

⁷⁷ *Southern California Association of Governments, Program Environmental Impact Report – 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, page 3.8-35.*

⁷⁸ *Southern California Association of Governments, Program Environmental Impact Report – 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, page 3.8-36.*

At the regional level, the 2016-2040 RTP/SCS represent the region's Climate Action Plan that defines strategies for reducing GHGs. In order to assess the Project's potential to conflict with the 2016-2040 RTP/SCS, this section analyzes the Project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

Consistent with SCAG's 2016-2040 RTP/SCS alignment of transportation, land use, and housing strategies, the Project would accommodate increases in population, households, employment, and travel demand. As discussed previously, the Project Site is an urban center location close to jobs, off-site housing, shopping and entertainment uses and in close proximity to public transit stops, which would result in reduced VMT, as compared to a project of similar size and land uses at a location without close and walkable access to off-site destinations and public transit stops. The 2016-2040 RTP/SCS projects that these urban center/infill areas, while comprising only three percent of land area in the region make up 46 percent of future household growth and 55 percent of future job growth.

The Project and Flexibility Option would also be consistent with the following key GHG reduction strategies in the 2016-2040 RTP/SCS, which are based on changing the region's land use and travel patterns:

- Compact growth in areas accessible to transit;
- Construction of an up to 197,355-square-foot mixed-use building including up to 185 live/work units in an urban center/infill location, with up to 23,380 square feet of art-production and neighborhood-serving retail/commercial space.
- Jobs and housing closer to transit;
- New housing and job growth focused in HQTAs (defined by the 2016 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours); and
- Biking and walking infrastructure to improve active transportation options and transit access.

Further, the vertical integration of land uses on the Project Site will produce substantial reductions in auto mode share to and from the Project Site that will help the region accommodate growth and promote public transit ridership that minimizes GHG emission increases and reduces per capita emissions consistent with the 2016-2040 RTP/SCS.

Additionally, the inclusion of electric vehicle charging infrastructure (per LA Green Building Code) will support the penetration of electric zero-emission vehicles into the vehicle fleet.

For a discussion of the Project's consistency with the 2016-2040 RTP/SCS, please refer to **Section IV.G., Land Use and Planning**, of this Draft EIR. As demonstrated therein, the Project would be consistent with the applicable goals, including those pertaining to reductions in GHG emissions, in the 2016-2040 RTP/SCS.

It should be noted that the circulation of the Notice of Preparation (NOP) for the Project was on February 23, 2018 which was prior to the adoption of the 2020-2045 RTP/SCS, and therefore the analysis focuses on the Project's consistency with the 2016-2040 RTP/SCS. However, as the 2020-2045 RTP/SCS encompasses and builds upon the previous RTP/SCS, many of the same goals and strategies are similar between the two plans. As demonstrated above, the Project would be located in an area well-served by public transit provided by Metro, as well as is in proximity to several transit investment projects in planning and construction phases, including the Regional Connector and Gold Line Arts District station relocation, expansion of the West Santa Ana line into the Arts District, and recently added DASH stops by LADOT to improve service in the Arts District; the Project is comprised of a mix of uses, including commercial uses and 185 live/work units, including eleven percent set aside for (approximately 20 live/work units) deed restricted Very Low Income households; and would create a pedestrian-friendly environment through an active and transparent ground-floor design and by providing a landscaped paseo connecting Mateo Street and Imperial Street. Furthermore, the integration of land uses on the Project Site would produce substantial reductions in auto mode share to and from the Project Site that would help the region accommodate growth and promote public transit ridership that minimizes GHG emission increases and reduces per capita emissions, and would therefore not conflict with the goals of the 2020-2045 RTP/SCS.

(d) LA Green New Deal (Sustainable City pLAN 2019)

The significance of the Project's GHG emissions is next evaluated based on whether they would be generated in connection with a design that is consistent with and would not conflict with relevant City goals and actions designed to encourage development that results in the efficient use of public and private resources. One such set of goals and actions is contained in the Mayor's Green New Deal. While not a plan adopted solely to reduce GHG emissions, within L.A.'s Green New Deal (Sustainable City pLAN 2019), climate mitigation is one of eight explicit benefits that help define its strategies and goals. **Table IV.D-9, Project and Flexibility Option Consistency with the LA Sustainable City pLAN**, contains a list of GHG emission-reducing strategies applicable to the Project.

**Table IV.D-9
Project and Flexibility Option Consistency with the LA Sustainable City pLAN**

Targets	Project Consistency
<p>Local Water. 20% reduction in water use per capita by 2017; 22.5% by 2025; and 25% by 2035.</p>	<p>No Conflict. The Project and Flexibility Option would be consistent with the LAMC to reduce water consumption by 20 percent. The Project includes: low-water use plumbing fixtures, low-water use landscaping and water-wise irrigation. The Project is required to follow CalGreen Standards which mandates a 20 percent reduction in indoor water use.</p>
<p>Solar Power. Increase cumulative total megawatts of local solar photovoltaic power to between 900-1,500 megawatts by 2025 and 1,500 to 1,800 megawatts by 2035 as well as increasing the cumulative total megawatts of energy storage capacity to at least 1,654 to 1,750 megawatts by 2025.</p>	<p>No Conflict. Building rooftop areas without landscaping, pool, open space/terrace or other improvements will be constructed as solar-ready for the future installation of on-site solar photovoltaic (PV) or solar water heating (SWH) systems as required by the 2016 Title 24 Building Energy Efficiency Standards or applicable version at the time of building permit issuance.</p>
<p>Energy Efficient Buildings. Reduce energy use per square foot below 2013 baseline levels for all building types by at least 14% by 2025 and 30% by 2035 and use energy efficiency to deliver 15% of all of the City's projected electricity needs by 2020.</p>	<p>No Conflict. Compliance with the LA Green Building Code and CALGreen Code would ensure energy efficiency (see also Section IV.N., Energy, of this Draft EIR). Project would include, but not be limited to: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting.</p>
<p>Carbon and Climate Leadership. Reduce GHG emissions below 1990 baseline by at least 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050. Improve GHG efficiency of the City from 2009 levels by 55 percent by 2025 and 75 percent by 2035.</p>	<p>No Conflict. The Project and Flexibility Option would be designed to incorporate energy and water efficient design that meet or exceed the 2016 Title 24 Building Energy Efficiency Standards and CALGreen Code standards and incorporate energy and water efficiency measures. The Project and Flexibility Option includes design features and compliance with Code measures that will assist in the reduction of Project-related GHG emissions. Some of these measures include: an air-tight and insulated envelope, energy-efficient windows and elevator, Energy Star appliances, and energy-efficient lighting. The Project is an "infill site" located within a TPA pursuant to Senate Bill 743, due to its proximity to a "major transit stop," as defined in Public Resources Code Section 21064.3, which is located at E. 6th Street and Alameda Street approximately 0.50 mile from the Project Site. The Project includes pedestrian access points directly to sidewalks on the adjacent streets, including</p>

**Table IV.D-9
Project and Flexibility Option Consistency with the LA Sustainable City pLAN**

Targets	Project Consistency
	Mateo Street and Imperial Street. Specifically, walk-in entrances are proposed via Mateo Street and Imperial Street. Additionally, the Project and Flexibility Option will provide a paseo connecting Mateo Street and Imperial Street along the southern boundary of the Project Site. All building structures are to meet or exceed 2016 Title 24, Part 6 Standards and meet Green Building Code Standards, all faucets, toilets and showers installed in the proposed structures are to utilize low-flow fixtures that would reduce indoor water demand by 20 percent per CalGreen Standards, use of water-efficient irrigation systems, and recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341).
Waste and Landfills. Increase land fill diversion rates to at least 90 percent by 2025 and 95 percent by 2035, as well as increasing proportion of waste products and recyclable commodities productively reused and repurposed within the County of Los Angeles to at least 25 percent by 2025 and 50 percent by 2035.	No Conflict. The Project and Flexibility Option would be required to implement recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341). The Project and Flexibility Option would be served by a solid waste collection and recycling service that may include mixed waste processing, and that yields waste diversion results comparable to source separation and consistent with citywide recycling targets. The Project would also comply with the City of Los Angeles Space Allocation Ordinance (171,687) which requires that developments include a recycling area or a room of a specified size on the Project Site.
Housing and Development. Increase cumulative new housing unit construction to 100k by 2021, 150k by 2025, and 275k by 2035. Ensure proportion of new housing units built within 1,500 feet of transit is at least 57 percent by 2025 and 65 percent by 2035.	No Conflict. The Project includes the development of up to 197,355-square-foot mixed-use building including up to 185 live/work units, approximately 15,320 square feet of open space for residents, up to 23,380 square feet of art-production and commercial/retail space, and associated parking facilities. Under the Flexibility Option, the proposed land uses and size under the Project would remain the same, however, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. The Project is also an urban center/infill development located in close proximity to transit.

**Table IV.D-9
Project and Flexibility Option Consistency with the LA Sustainable City pLAN**

Targets	Project Consistency
<p>Mobility and Transit. Reduce daily VMT per capita by at least 5 percent by 2025 and 10 percent by 2035. Increase the percentage of all trips made by walking, biking, or transit to at least 35 percent by 2025 and 50 percent by 2035.</p>	<p>No Conflict. The Project is an urban center/infill development located in close proximity to transit. Additionally, the Project includes the development of up to 197,355-square-foot mixed-use building including up to 185 live/work units, approximately 15,320 square feet of open space for residents, up to 23,380 square feet of art-production and commercial/retail space, and associated parking facilities. Under the Flexibility Option, the proposed land uses and size under the Project would remain the same, however, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. The Project is an “infill site” located within a TPA pursuant to Senate Bill 743, due to its proximity to a “major transit stop,” as defined in Public Resources Code Section 21064.3, which is located at E. 6th Street and Alameda Street approximately 0.50 mile from the Project Site. The Project would provide 154 bicycle parking spaces, comprised of 24 bicycle spaces for commercial uses (including 12 short-term spaces and 12 long-term spaces) and 130 spaces for the live/work uses (including 12 short-term and 118 long-term), which complies with LAMC requirements set forth in Ordinance No. 185,480.</p>
<p>Air Quality. Increase the percentage of electric and zero emissions vehicles in the city to 10 percent by 2025 and 25 percent by 2035 as well as increasing the percentage of port-related goods movement trips that use zero-emissions technology to at least 15 percent in 2025 and 25 percent in 2035.</p>	<p>No Conflict. The Project and Flexibility Option will be comply with applicable City of Los Angeles Building Codes pertaining to building code requirements for charging station prewiring in new multifamily construction/installation of charging stations at multi-unit dwellings and workplaces. Thirty percent of the Project’s required parking spaces will be electric-vehicle ready, ten percent of the Project’s parking spaces would be provided chargers for electric vehicles, thereby further reducing consumption of petroleum based fuels.</p>
<p><i>Note: This analysis focuses on the Sustainable City pLAN targets most applicable to the Project. Source: City of Los Angeles Sustainable City pLAN, April 2015 and L.A.’s Green New Deal Sustainable City pLAN 2019.</i></p>	

The analysis above describes the consistency of the Project and Flexibility Option with the City's *Sustainable City pLAN*. As discussed in **Table IV.D-9**, generally consistency of the Project and the Flexibility Option with the plans and policies should be demonstrated by a combination of regulatory compliance (green building code etc.) as well as project-specific characteristics and voluntary measures (e.g. PDFs). The Project and Flexibility Option would implement PDFs and incorporate water conservation, energy conservation, tree-planting, and other features consistent with these plans. Therefore, the Project would be consistent with the City's applicable plans, policies, or regulations for the reduction of GHG emissions.

(e) *LA Green Building Code*

The Los Angeles Green Building Ordinance requires that all projects filed on or after January 1, 2020 comply with the current Los Angeles Green Building Code as amended to comply with the 2019 CALGreen Code. Mandatory measures under the Green Building Ordinance that would help reduce GHG emissions include: five percent of the required and proposed parking spaces will have chargers for electric vehicles and 30 percent of the required and provided parking spaces will be pre-plumbed for future electric vehicle charging; an air-tight and insulated envelope; low-E windows; low-water use plumbing fixtures; energy Star appliances; energy-efficient lighting and elevator; low-water use landscaping and smart irrigation. As previously discussed, the Project and the Flexibility Option will comply with the City's Green Building Ordinance standards which will reduce emissions through compliance with existing regulations.

(f) *Conclusion*

Although the Project and Flexibility Plan would generate GHG emissions, GHGs would be reduced in a manner consistent with applicable regulatory plans and policies to reduce GHG emissions, including: Executive Orders S-3-05 and B-30-15; AB 32 Scoping Plan; SCAG's 2016-2040 RTP/SCS; the LA Sustainable City pLAN; and the LA Green Building Code.

As shown above, the Project and Flexibility Option would be consistent with the applicable GHG reduction plans, policies, and regulations. In support of this consistency analysis quantitative calculations are provided above, which show that the Project and Flexibility Option would generate incrementally increased GHG emissions over existing conditions that would be reduced through consistency with existing regulations and requirements adopted to implement plans for the reduction or mitigation of greenhouse gas emissions. The significance of the Project's GHG impacts is not based on the amount of GHG emissions resulting from the Project, but rather supplements and supports the conclusion that the Project would not conflict with GHG reduction plans, policies, and regulations.

The Project and Flexibility Option's consistency with these applicable regulatory plans and policies to reduce GHG emissions, along with implementation of project design features discussed in this and other sections of this Draft EIR, would minimize the Project and Flexibility Option's GHG emissions. **Therefore, the Project and Flexibility Option would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to greenhouse gas emissions would be less than significant.**

(2) Mitigation Measures

The Project and the Flexibility Option would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project and the Flexibility Option would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and would be less than significant without mitigation.

4. Cumulative Impacts

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option, the impacts of the project and the Flexibility Option related to cumulative GHG emissions would be essentially the same. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

A cumulatively considerable impact would occur where the impact of the Project, in addition to the Related Projects, would be significant. However, in the case of global climate change, the proximity of the Project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."⁷⁹ As noted above, the analysis of the Project's impact is a cumulative analysis and no further discussion is required. Given that the analyses above

⁷⁹ *California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, 2008.*

found that the Project GHG impacts would be less than significant, the Project's and Flexibility Option's cumulative impacts would be less than significant.

a) Mitigation Measures

Under both the Project and the Flexibility Option, cumulative impacts to GHG would be less than significant; no additional mitigation would be required.

b) Level of Significance After Mitigation

Under both the Project and the Flexibility Option, cumulative impacts to GHG would be less than significant; no additional mitigation would be required.