

## **IV. Environmental Impact Analysis**

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### **E. Greenhouse Gas Emissions**

#### **1. Introduction**

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

#### **2. Environmental Setting**

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. Global climate change attributable to anthropogenic (human) GHG emissions is currently one of the most important and widely debated scientific, economic and political issues in the United States and the world. The extent to which increased concentrations of GHGs have caused or will cause climate change and the appropriate actions to limit and/or respond to climate change are the subject of significant and rapidly evolving regulatory efforts at the federal and state levels of government.

GHGs are those compounds in the Earth's atmosphere which play a critical role in determining temperature near the Earth's surface. More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Not all GHGs possess the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the units of equivalent mass of carbon dioxide (CO<sub>2</sub>e). Mass emissions are calculated by converting pollutant specific emissions to CO<sub>2</sub>e emissions by applying the proper global warming

potential (GWP) value.<sup>1</sup> These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4).<sup>2</sup> Compounds that are regulated as GHGs are discussed below.<sup>3,4</sup>

**Carbon Dioxide (CO<sub>2</sub>):** CO<sub>2</sub> is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO<sub>2</sub> is the reference gas (GWP of 1) for determining the GWPs of other GHGs.<sup>5</sup>

**Methane (CH<sub>4</sub>):** CH<sub>4</sub> is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH<sub>4</sub> is 21 in the IPCC SAR and 25 in the IPCC AR4.<sup>6</sup>

**Nitrous Oxide (N<sub>2</sub>O):** N<sub>2</sub>O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N<sub>2</sub>O is 310 in the IPCC SAR and 298 in the IPCC AR4.<sup>7</sup>

**Hydrofluorocarbons (HFCs):** HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWP of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR and 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4.<sup>8</sup>

**Perfluorocarbons (PFCs):** PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR and 7,390 to 17,700 in the IPCC AR4.<sup>9</sup>

<sup>1</sup> GWPs and associated CO<sub>2</sub>e values were developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its Second Assessment Report (SAR) in 1996. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's SAR. The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). The California Air Resources Board (CARB) has begun reporting GHG emission inventories for California using the GWP values from the IPCC AR4. Therefore, the analysis below reflects the GWP values from IPCC AR4. Although the IPCC has released its Fifth Assessment Report (AR5) with updated GWPs, CARB reports the Statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards.

<sup>2</sup> Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Working Group I Report: The Physical Science Basis*, 2007.

<sup>3</sup> IPCC, *Second Assessment Report, Working Group I: The Science of Climate Change*, 1995.

<sup>4</sup> IPCC, *Fourth Assessment Report (AR4), Working Group I Report: The Physical Science Basis*, 2007.

<sup>5</sup> IPCC, *AR4, Working Group I Report: The Physical Science Basis*, 2007, Table 2.14.

<sup>6</sup> IPCC, *AR4, Working Group I Report: The Physical Science Basis*, 2007, Table 2.14.

<sup>7</sup> IPCC, *AR4, Working Group I Report: The Physical Science Basis*, 2007, Table 2.14.

<sup>8</sup> IPCC, *AR4, Working Group I Report: The Physical Science Basis*, 2007, Table 2.14.

<sup>9</sup> IPCC, *AR4, Working Group I Report: The Physical Science Basis*, 2007, Table 2.14.

**Sulfur Hexafluoride (SF<sub>6</sub>):** SF<sub>6</sub> is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF<sub>6</sub> has a GWP of 23,900 in the IPCC SAR and 22,800 in the IPCC AR4.<sup>10</sup>

**Nitrogen Trifluoride (NF<sub>3</sub>):** NF<sub>3</sub> is an inorganic, non-flammable, non-toxic odorless gas. NF<sub>3</sub> is used as an oxidizer of high energy fuels, for the preparation of tetrafluorohydrazine, as a fluorine source in high power chemical lasers, in semi-conductor manufacturing, and as an etchant gas in the electronic industry. The GWP of NF<sub>3</sub> is 17,200 in the IPCC AR4.<sup>11</sup>

## a) Regulatory Framework

### (1) Federal

#### (a) Federal Clean Air Act

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-CO<sub>2</sub> 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.

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the United States Supreme Court held in April of 2007 that the USEPA has statutory authority under Section 202 of the Clean Air Act (CAA) to regulate GHGs. The Court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by

<sup>10</sup> IPCC, AR4, Working Group I Report: *The Physical Science Basis*, 2007, Table 2.14.

<sup>11</sup> IPCC, AR4, Working Group I Report: *The Physical Science Basis*, 2007, Table 2.14.

themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

(b) *Energy Independence and Security Act*

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

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and National Highway Traffic Safety Administration (NHTSA) actions described below in Subsection 2.a.1.d, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.<sup>12</sup>

(c) *Executive Order 13432*

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

(d) *Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards*

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard

<sup>12</sup> A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)<sup>13</sup> and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO<sub>2</sub> per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. 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) and 163 grams of CO<sub>2</sub> per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.<sup>14</sup> In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022–2025.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE and CO<sub>2</sub> standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO<sub>2</sub> standards for model year 2020 are 43.7 mpg and 204 grams of CO<sub>2</sub> per mile for passenger cars and 31.3 mpg and 284 grams of CO<sub>2</sub> 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 USEPA also published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards that finalizes critical parts of the SAFE Vehicles Rule and makes clear that federal law preempts state and local tailpipe GHG emissions standards as well as zero emission vehicle (ZEV) mandates. On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the State's GHG and ZEV programs under Section 209 of the CAA.<sup>15</sup> The withdrawal of the waiver became effective November 26, 2019. In November 2019, California and 23 other states, environmental groups, and the cities of Los Angeles and New York, filed a petition with the U.S. Court of Appeals for the District of Columbia Circuit, for the EPA to reconsider the published rule.<sup>16</sup> In April 2020, the final USEPA and NHTSA SAFE Vehicles Rule was published in the Federal Register, setting fuel economy and carbon dioxide standards that increase 1.5% in stringency each year from model years 2021 through 2026.<sup>17</sup> On February 8, 2021, the United States Court of Appeals for the District of Columbia Circuit issued an order granting the Biden Administration's motion to stay litigation over Part 1 of SAFE Rule. Consistent with President Biden's executive order on Protecting Public Health and the Environment and Restoring Science to Tackle

<sup>13</sup> The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S. Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

<sup>14</sup> United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks, August 2012.

<sup>15</sup> Federal Register, *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program*, 84 FR 51310, September 27, 2019.

<sup>16</sup> United States District Court for the District Court of Columbia, *State of California v. Chao*, Case 1:19-cv-02826, 2019.

<sup>17</sup> Federal Register, *Final Rule, The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks*, 85 FR 24174, April 30, 2020.

the Climate Crisis, USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.<sup>18</sup>

On January 20, 2021, President Biden issued Executive Order 13990 “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis” which directed the USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks,” promulgated in April 2020. On April 28, 2021, the USEPA reconsidered this action of the withdrawal of the waiver of preemption for California's zero emission vehicle ZEV programs and GHG emission standards within California's Advanced Clean Car program for purposes of rescinding that action under the CAA. The Advanced Clean Car program waiver, as it pertains to the GHG emission standards and ZEV mandates, will become effective should USEPA rescind the prior action. The USEPA held a public comment period on this reconsideration from June 2 through July 6, 2021.<sup>19</sup> As of November 1, 2021, the USEPA has not yet taken final action on the reconsideration of the withdrawal of the waiver.

The USEPA is also proposing to revise and strengthen federal GHG emissions standards for passenger cars and light trucks by setting stringent requirements for reductions through model year 2026 through the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.<sup>20</sup> The proposed 2023 through 2026 model year standards would achieve GHG emissions reductions along with reductions in other pollutants by revising the current GHG standards beginning in model year 2023 and increasing the stringency year-over-year through model year 2026. The proposed standards would increase in stringency from model year 2022 to model year 2023 by 10 percent, followed by a nearly five percent stringency increase in each model year from 2024 through 2026. In comparison, the standards in the SAFE Vehicles Rule only required a 1.5 percent increase in stringency each year from model year 2021 through 2026. However, it should be noted that the USEPA is not proposing to revise GHG emissions standards for model year 2021 and model year 2022. The estimated Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards CO<sub>2</sub> standards for model year 2026 are 52.0 mpg and 171 grams of CO<sub>2</sub> per mile for combined passenger cars and light trucks, as compared to 43.3 mpg and 205 grams of CO<sub>2</sub> per mile under the 2020 Final Rule standard (currently in effect), and 50.1 mpg and 177 grams of CO<sub>2</sub> per mile standards issued in 2012. Public comments on the proposed standards were due on or before September 27, 2021 after which time a decision may be made after consideration of the comments.

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<sup>18</sup> United States District Court for the District Court of Columbia, *Union of Concerned Scientists, et al., Petitioners v. National Highway Traffic Safety Administration, Respondent*, USCA Case #19-1230, 2021.

<sup>19</sup> Federal Register, Proposed Rule, *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 Federal Register 43726, August 10, 2021.

<sup>20</sup> Federal Register, Proposed Rule, *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 Federal Register 43726, August 10, 2021.

## (2) State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State.

### (a) California Greenhouse Gas Reduction Targets

#### (i) Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32 (Emissions Limit)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub> and represents the first enforceable Statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, the California Air Resources Board (CARB) has the primary responsibility for reducing GHG emissions. AB 32 required CARB to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 Statewide levels by 2020.

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown to update AB 32 and include an emissions reductions goal for the year 2030. SB 32 and AB 197 amend AB 32, and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and include provisions to ensure the benefits of State climate policies reach into disadvantaged communities.

### (a) Climate Change Scoping Plan (2008)

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (Health and Safety Code Section 38561 (h)). CARB developed an AB 32 Climate Change Scoping Plan (2008 Scoping Plan) that contained strategies to achieve the 2020 emissions cap.<sup>21</sup> The 2008 Scoping Plan was approved in 2008, and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 Statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.<sup>22</sup>

As required by AB 32, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was originally set at

<sup>21</sup> California Air Resources Board (CARB), *Climate Change Scoping Plan*, December 2008.

<sup>22</sup> CARB, *Climate Change Scoping Plan Document*, December 2008.

427 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e) using the GWP values from the IPCC SAR. CARB also projected the State's 2020 GHG emissions under No-Action-Taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the State's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO<sub>2</sub>e (using GWP values from the IPCC SAR). Therefore, under the original projections, the State must reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 MMTCO<sub>2</sub>e.

(b) First Update to the Climate Change Scoping Plan (2014)

The First Update to the Climate Change Scoping Plan (2014 Scoping Plan) was approved by CARB in May 2014 and built upon the 2008 Scoping Plan with new strategies and recommendations.<sup>23</sup> In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 MMTCO<sub>2</sub>e. CARB also updated the State's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were adopted for motor vehicles and renewable energy. CARB's projected Statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO<sub>2</sub>e.

Therefore, under the 2014 Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 MMTCO<sub>2</sub>e would be 78.4 MMTCO<sub>2</sub>e, or a reduction of GHG emissions by approximately 15.4 percent.

(c) 2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan (2017 Scoping Plan) at a public meeting held in December 2017.<sup>24</sup> The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target, which build on the Cap-and-Trade Regulation,<sup>25</sup> the Low Carbon Fuel Standard (LCFS),<sup>26</sup> improved vehicle, truck and freight movement emissions standards, increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. CARB's projected Statewide 2030 emissions take into account 2020 GHG reduction policies and programs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and continuing the Cap-and-Trade Program. This Scoping Plan Scenario was modified from

<sup>23</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014.

<sup>24</sup> CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

<sup>25</sup> Refer to Subsection 2.a.2.f, *Cap-and-Trade Program*, for a detailed description of the Cap-and-Trade Program.

<sup>26</sup> Refer to Subsection 2.a.2.e, *Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)*, for a detailed discussion of the LCFS.



the January 2017 Proposed Scoping Plan to reflect AB 398,<sup>27</sup> including removal of the 20 percent refinery measure.

CARB states that the Scoping Plan Scenario “is the best choice to achieve the State’s climate and clean air goals.”<sup>28</sup> Under the Scoping Plan Scenario, 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. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

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

A summary of the GHG emissions reductions required under AB 32 is provided in **Table IV.E-1, *Estimated Greenhouse Gas Emissions Reductions Required by AB 32 and SB 32.***

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34 to 79 MMTCO<sub>2e</sub> of the 2030 reduction obligation.<sup>31</sup> The short-lived GHG strategy is expected to cover approximately 17 to 35 MMTCO<sub>2e</sub>. The Renewables Portfolio Standard (RPS) with 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO<sub>2e</sub> (see subsection IV.E.2(d), *Energy*, for additional details regarding the Renewables Portfolio Standard program). The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero emission vehicles, and improving the freight system efficiency, and is expected to cover approximately 11 to 13 MMTCO<sub>2e</sub>. Under the Scoping Plan Scenario, CARB expects that the doubling of the energy efficiency savings by 2030 would cover approximately 7 to 9

<sup>27</sup> AB 398 was enacted in 2017 to extend and clarify the role of the State’s Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

<sup>28</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017.

<sup>29</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017, p. 97.

<sup>30</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017, p. 97.

<sup>31</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017, Table G-2.1 Ranges of Estimated GHG and Air Pollution Reductions for the Scoping Plan Scenario in 2030 (after passage of AB 398), November 2017, Appendix G.

MMTCO<sub>2</sub> of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

**TABLE IV.E-1**  
**ESTIMATED GREENHOUSE GAS EMISSIONS REDUCTIONS REQUIRED BY AB 32 AND SB 32**

Emissions Scenario	GHG Emissions (MMTCO <sub>2</sub> e)
<b>2008 Scoping Plan (IPCC SAR)</b>	
2020 NAT Forecast (CARB 2008 Scoping Plan Estimate)	596
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	427
<b>Reduction below NAT necessary to achieve 1990 levels by 2020</b>	<b>169 (28.4%)<sup>a</sup></b>
<b>2014 Scoping Plan (GHG Estimates Updated in 2014 to Reflect IPCC AR4)</b>	
2020 NAT Forecast (CARB 2014 Scoping Plan Estimate)	509.4
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	431
<b>Reduction below NAT necessary to achieve 1990 levels by 2020</b>	<b>78.4 (15.4%)<sup>b</sup></b>
<b>2017 Scoping Plan Update</b>	
2030 NAT Forecast (“Reference Scenario” which includes 2020 GHG reduction policies and programs)	389
2030 Emissions Target Set by AB 32 (i.e., 40% below 1990 Level)	260
<b>Reduction below NAT Necessary to Achieve 40% below 1990 Level by 2030</b>	<b>129 (33.2%)<sup>c</sup></b>

NOTE(S):

MMTCO<sub>2</sub>e = million metric tons of carbon dioxide equivalents

<sup>a</sup>  $596 - 427 = 169 / 596 = 28.4\%$

<sup>b</sup>  $509.4 - 431 = 78.4 / 509.4 = 15.4\%$

<sup>c</sup>  $389 - 260 = 129 / 389 = 33.2\%$

SOURCE(S): CARB, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011; CARB, GHG 2020 Business-as-Usual (BAU) Emissions Projection, 2014 Edition, 2017, <https://ww2.arb.ca.gov/ghg-bau>. Accessed February 27, 2020. CARB, California’s 2017 Climate Change Scoping Plan, November 2017.

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

Governor Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05,<sup>32</sup> the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels;<sup>33</sup> and

<sup>32</sup> Center for Climate Strategies, Executive Order S-3-05.

<sup>33</sup> CARB, Climate Pollutants Fall Below 1990 Levels for First Time, <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>. Accessed February 27, 2020.

- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

In accordance with Executive Order S-3-05, the Secretary of California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various agencies, which comprise the California Climate Action Team (CAT), in order to collectively and efficiently reduce GHGs. These agencies include CARB, the Secretary of the Business, Transportation and Housing Agency, Department of Food and Agriculture, the Resources Agency, the California Energy Commission, and the Public Utilities Commission. The CAT provides periodic reports to the Governor and Legislature on the State of GHG reductions in the State as well as strategies for mitigating and adapting to climate change. The first CAT Report to the Governor and the Legislature, in 2006, contained recommendations and strategies to help meet the targets in Executive Order S-3-05. The 2010 CAT Report, finalized in December 2010, expands on the policies in the 2006 assessment.<sup>34</sup>

(iii) *Executive Order B-30-15*

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which involved the following:

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

(iv) *Executive Order B-55-18*

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional Statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed 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.

(v) *Executive Order N-79-20*

Executive Order N-79-20 was signed by Governor Newsom on September 23, 2020. The order directs CARB to develop and propose regulations that would require a ramp up to 100% in-state sales of new zero-emission passenger vehicles (cars and trucks) and drayage trucks by 2035. The Executive Order further directs CARB to promulgate regulations that would require a ramp up to 100% in-state sales of medium- and heavy-duty trucks by 2045 “for all operations where feasible.” The Executive Order also instructs

<sup>34</sup> California Environmental Protection Agency (CalEPA), Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2010.

CARB to develop and propose “strategies” (as opposed to regulations) to achieve zero emissions from off-road vehicles and equipment operations in the state by 2035. The order also directs state agencies to take a number of actions focused on the oil and gas industry, including, but not limited to, a direction to CARB to strengthen and extend the Low Carbon Fuel Standard program beyond 2030.

(b) *Land Use and Transportation Planning*

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG, was adopted by the State on September 30, 2008. 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 GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for SCAG, which is the Metropolitan Planning Organization for the region in which the City is located.<sup>35</sup> Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

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

On September 3, 2020, SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS), which is an update to the previous 2016–2040 RTP/SCS. Using growth forecasts and economic trends, the 2020–2045 RTP/SCS provides a vision for transportation throughout the region for the next 25 years. The 2020–2045 RTP/SCS successfully achieves and exceeds the GHG emission-reduction targets set by CARB.

The 2020–2045 RTP/SCS includes the CARB updated the SB 375 targets from March 2018 to require 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.<sup>36</sup>

(c) *Transportation Fuel*

In response to the transportation sector accounting for a large percentage of California’s CO<sub>2</sub> emissions, AB 1493 (HSC Section 42823 and 43018.5) (also referred to as the Pavley standards), enacted on July 22, 2002, required CARB to set GHG emission

<sup>35</sup> SCAG, Greenhouse Gases, <http://www.scag.ca.gov/programs/Pages/GreenhouseGases.aspx>. Accessed February 27, 2020.

<sup>36</sup> CARB, SB 375 Regional Greenhouse Gas Emissions Reduction Targets.

standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The federal CAA ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed to 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 August 2012, the USEPA and USDOT adopted GHG emission standards for model year 2017 through 2025 vehicles; however, these standards were rescinded and replaced under the SAFE Vehicles Rule as discussed above in Subsection 2.a.1, *Regulatory Framework – Federal*. Prior to the SAFE Vehicles Rule, the standards corresponded to the vehicle model years regulated under the State's Pavley Phase II standards and were determined to be stringent enough to meet State GHG emission reduction goals. As mentioned above, in line with President Biden's Executive Order 13990 "Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis", the USEPA is proposing to revise and strengthen federal greenhouse gas (GHG) emissions standards for passenger cars and light trucks by setting stringent requirements for reductions through model year 2026 through the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards signed on July 29, 2021.<sup>37</sup>

In January 2007, Governor Brown enacted Executive Order S-01-07, which mandates the following: (1) establish a Statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) adopt an LCFS for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. The LCFS regulations were approved by CARB in 2009 and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 with implementation beginning on January 1, 2011. In September 2015, CARB approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In April 2017, the LCFS was brought before the Court of Appeal challenging the analysis of potential nitrogen dioxide impacts from biodiesel fuels. The Court directed CARB to conduct an analysis of nitrogen dioxide impacts from biodiesel fuels and froze the carbon intensity targets for diesel and biodiesel fuel provisions at 2017 levels until CARB has completed this analysis. On March 6, 2018 CARB issued its Draft Supplemental Disclosure Discussion of Oxides of Nitrogen Potentially Caused by the Low Carbon Fuel Standard Regulation.<sup>38</sup> CARB posted modifications to the amendments on August 13, 2018, with a public comment period through August 30, 2018. Final approval

<sup>37</sup> Federal Register, *Proposed Rule, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 FR 43726, August 10, 2021.

<sup>38</sup> CARB, *Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation*.

of regulatory changes from CARB's analysis of nitrogen dioxide impacts from biodiesel fuels was made on January 4, 2019.<sup>39</sup> The 2017 Climate Change Scoping Plan also calls for increasing the mandatory reduction in carbon intensity of transportation fuels from 10 percent to 18 percent by 2030.

(d) *Energy*

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [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 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 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 standards require that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.<sup>40</sup>

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."<sup>41</sup> The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.<sup>42</sup> The CALGreen Code was most

<sup>39</sup> CARB, *Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation*.

<sup>40</sup> California Energy Commission (CEC), *2016 Building Energy Efficiency Standards*, June 2015, <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2016-building-energy-efficiency>. Accessed February 27, 2020.

<sup>41</sup> California Building Standards Commission, *2010 California Green Building Standards Code*, 2010.

<sup>42</sup> California Building Standards Commission, *2010 California Green Building Standards Code*, 2010.

recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2020.

The State has adopted regulations to increase the proportion of electricity from renewable sources. The Renewables Portfolio Standard (RPS) Program was established in 2002 by SB 1078 with the initial requirement that 20 percent of electricity utility provider retail sales must be served by renewable resources by 2017. The program was subsequently accelerated by SB 350, which mandated a 33 percent RPS by 2020 and 50 percent RPS by 2030.<sup>43</sup> On September 10, 2018, Governor Brown signed SB 100, which further increased California's prior RPS from 33 percent by 2020 renewable resources to 50 percent renewable resources by December 31, 2026, and 60 percent by December 31, 2030, while requiring retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. In addition, SB 100 requires that CARB plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. Electricity providers, including the provider for the Project Site, the Los Angeles Department of Water and Power (LADWP), is required to update future plans to meet applicable SB 100 requirements.

(e) *Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)*

SB 97 (Chapter 185, Statutes of 2007), enacted in 2007, directed the State Office of Planning and Research (OPR) to develop California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines) "for the mitigation of GHG emissions or the effects of GHG emissions." In December 2009, OPR adopted amendments to the CEQA Guidelines, (Guidelines Amendments), Appendix G, Environmental Checklist, which created a new resource section for GHG emissions and indicated criteria that may be used to establish significance of GHG emissions.<sup>44</sup>

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the Guidelines Amendments. The Guidelines Amendments require a lead agency to make a good-faith effort, based on scientific and factual data to the extent possible, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The Guidelines Amendments give discretion to the lead agency, and allow the lead agency to choose whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Furthermore, the Guidelines Amendments 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;

<sup>43</sup> California Public Utilities Commission, *Renewables Portfolio Standard (RPS) Program*.

<sup>44</sup> *California Code of Regulations (CCR)*, Title 14, Section 15064.4.

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.

The administrative record for the Guidelines Amendments also clarifies “that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of California Environmental Quality Act’s requirements for cumulative impact analysis.”<sup>45</sup>

(f) *Cap-and-Trade Program*

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB will employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on Statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020.<sup>46</sup> Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO<sub>2</sub>e per year) and declines over time, and facilities subject to the cap may trade permits to emit GHGs. The Statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program’s duration.<sup>47</sup> On July 17, 2017 the California legislature passed Assembly Bill 398, extending the Cap-and-Trade Program through 2030.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 and 2030 Statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. In other words, as climate change is a global occurrence and the effects of GHG emissions are considered cumulative in nature, a focus on aggregate GHG emissions reductions, rather than source-specific reductions, is warranted.

If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In sum, the Cap-and-Trade Program will achieve aggregate, rather

<sup>45</sup> State of California Governor’s Office of Planning and Research, Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, dated April 13, 2009.

<sup>46</sup> 17 CCR Sections 95800 to 96023.

<sup>47</sup> See generally 17 CCR Sections 95811, 95812.



than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

(g) *California Air Resources Board*

CARB, a part of the CalEPA, is responsible for the coordination and administration of both federal and State air pollution control programs within California. Some of the regulations and measures that CARB has adopted to reduce particulate matter, nitrogen oxides, and other emissions have co-benefits of reducing GHG emissions. Regulations and measures include:

- In 2004, CARB adopted an Airborne Toxic Control Measure (ACTM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (13 CCR, Section 2485). This measure generally does not allow diesel-fueled commercial vehicles to idle for more than five (5) minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks.
- In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)).
- In 2020, CARB approved the Advanced Clean Trucks regulation (13 CCR, Sections 1963–1963.5 and 2012–2012.3) to accelerate a large-scale transition of zero-emission medium- and heavy-duty vehicles. The regulation requires manufacturers of medium- and heavy-duty vehicles to sell an increasing percentage of zero-emission models from 2024 to 2035 with up to 55 percent of Class 2b-3 trucks, 75 percent of Class 4-8 trucks, and 40 percent of truck tractor sales. The regulation also includes reporting requirements to provide information that would be used to identify future strategies.
- In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models.

While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies and reduction of idling times.

(h) *Center for Biological Diversity v. California Department of Fish and Wildlife*

The California Supreme Court considered the CEQA issue of determining the significance of GHG emissions in its decision, *Center for Biological Diversity v. California Department*

*of Fish and Wildlife and Newhall Land and Farming* (2015) 62 Cal.4th 204. The Court questioned a then-common CEQA approach to GHG analyses for development projects that compared project emissions to the reductions from NAT that will be needed Statewide to reduce emissions to 1990 levels by 2020, as required by AB 32. The Court upheld the NAT method as a valid approach, but concluded that the NAT method was improperly applied in the case of the Newhall project because the target for the project was incorrectly deemed consistent with the Statewide emission target of a percent below NAT for the year 2020 as specified in the AB 32 Scoping Plan. In other words, the Court said that the percent below NAT target specified in the AB 32 Scoping Plan is intended as a measure of the GHG reduction effort required by the State as a whole, and it cannot necessarily be applied to the impacts of a specific project in a specific location, particularly where the record did not show that the Newhall project had been assumed or considered in the AB 32 Scoping Plan.

The Court provided some guidance to evaluating the cumulative significance of a proposed land use project's GHG emissions, but noted that none of the approaches could be guaranteed to satisfy CEQA for a particular project. The Court did not require that projects must rely on the Court's guidance in an analysis. However, this Draft EIR considers the potential GHG emissions associated with the Project within the context of the Court's guidance.

The Court also addressed project-level GHG emission inventories in the context of Statewide GHG emission inventories and reduction goals. If a project-level inventory were to include additional upstream embedded emissions associated with consumption of goods and services, or downstream transportation emissions, outside of the State, it would no longer be comparable to the State inventory and a threshold based on State reduction targets could not be used to evaluate the project's GHG emissions. Given the California Supreme Court's determination that it is appropriate under CEQA to compare project GHG emissions to a threshold related to the State reduction goals, there is no logical rationale to include GHG emissions in a CEQA project inventory if they are not included in the State's GHG inventory, nor to use methodologies to account for emissions different from those employed in the State's GHG inventory."<sup>48</sup> Thus, consistent with the Court's ruling, a project-level GHG emissions inventory under CEQA need not include additional upstream embedded emissions or downstream emissions to maintain consistency with the Statewide GHG emission inventory methodology.

### (3) Regional

#### (a) South Coast Air Quality Management District

The Project site is located in the South Coast Air Basin (Air Basin), which consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside Counties, in addition to the

<sup>48</sup> Association of Environmental Professionals, *Draft AEP White Paper - Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans*, 2017, p. 1-7.

San Gorgonio Pass area in Riverside County. The South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

SCAQMD adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” on April 6, 1990.<sup>49</sup> The policy commits 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:<sup>50</sup>

- 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.

A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.<sup>51</sup> In 2008, the Working Group released draft guidance regarding interim CEQA GHG significance thresholds.<sup>52,53,54</sup> Within its October 2008 document, the Working Group proposed the use of a percent emission reduction target compared to business as usual to determine significance for commercial/residential projects that emit greater than 3,000 MTCO<sub>2e</sub> per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO<sub>2e</sub> per year would be assumed to have a less-than-significant impact on climate change. In addition, on

<sup>49</sup> South Coast Air Quality Management District (SCAQMD), *SCAQMD’s Historical Activity on Climate Change*, 2014, <http://www.aqmd.gov/nav/about/initiatives/climate-change>. Accessed June 8, 2020.

<sup>50</sup> SCAQMD, *CEQA Air Quality Handbook*, April 1993, pp. 3–7.

<sup>51</sup> SCAQMD, Greenhouse Gases CEQA Significance Thresholds, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>. Accessed February 27, 2020.

<sup>52</sup> SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, Attachment E, October 2008.

<sup>53</sup> SCAQMD, Board Meeting, December 5, 2008, Agenda No. 31, <http://www3.aqmd.gov/hb/2008/December/0812ag.html>. Accessed February 27, 2020.

<sup>54</sup> SCAQMD, 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 MTCO<sub>2e</sub> per year for residential and commercial sector projects. The SCAQMD adopted a GHG significance threshold of 10,000 MTCO<sub>2e</sub> per year for industrial stationary source projects for which the SCAQMD is the lead agency.

December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO<sub>2e</sub> for stationary source/industrial projects where the SCAQMD is the Lead Agency. However, the SCAQMD has not adopted a GHG significance threshold for land use development projects (e.g., mixed-use/commercial projects). 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 September 3, 2020, the SCAG's Regional Council formally adopted the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy* (SCAG 2020–2045 RTP/SCS) also known as the Connect SoCal, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.<sup>55</sup> Using growth forecasts and economic trends, the 2020–2045 RTP/SCS provides a vision for transportation throughout the region for the next 25 years. It considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020–2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and 19 percent reduction in per capita transportation GHG emissions by 2035 compared to the 2005 level on a per capita basis.<sup>56</sup> Compliance with and implementation of 2020–2045 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g. nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita vehicle miles traveled (VMT).

The 2020–2045 RTP/SCS states that the SCAG region was home to approximately 18.8 million people in 2016 and included approximately 6.0 million homes and 8.4 million jobs.<sup>57</sup> By 2045, the integrated growth forecast projects that these figures will increase by 3.7 million people, with approximately 1.6 million more homes and 1.7 million more jobs. High Quality Transit Areas (HQTAs), which are defined by the 2020–2045 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 2.4 percent of regional total land, but are projected to accommodate 51 percent and 60 percent of future household growth respectively between 2016 and 2045.<sup>58,59</sup> The 2020–2045 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs.

<sup>55</sup> Southern California Association of Governments (SCAG), *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS)*, May 2020.

<sup>56</sup> SCAG, *2020–2045 RTP/SCS*, May 2020.

<sup>57</sup> SCAG, *2020–2045 RTP/SCS Demographics and Growth Forecast Technical Report*, May 2020, Table 3, Table 6, and Table 7.

<sup>58</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, Table 2.1.

<sup>59</sup> The Project Site is also located in a Transit Priority Area (TPA), which is defined as an area within 0.5-mile of a major transit stop that is existing or planned. A "major transit stop" is defined as a site containing an existing rail transit station or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

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.

SCAG's 2020–2045 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 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.<sup>60</sup>

In addition, the 2020–2045 RTP/SCS includes strategies to support local planning and projects that serve short trips, promote transportation investments, investments in active transportation, more walkable and bikeable communities, that will result in improved air quality and public health, and reduced greenhouse gas emissions, and supports building physical infrastructure such as local and regional bikeways, sidewalk and safe routes to schools pedestrian improvements, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2020–2045 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determination in the 2020–2045 RTP/SCS and that the 2020–2045 RTP/SCS, if implemented, would achieve the 2020 and 2035 GHG emission reduction targets established by CARB.<sup>61,62</sup>

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2020–2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1-percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2020–2045 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.<sup>63</sup>

<sup>60</sup> SCAG, *2025–2040 RTP/SCS*, May 2020, pp. 48-86.

<sup>61</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, pp. 48-86.

<sup>62</sup> CARB, *Southern California Association of Governments' (SCAG) 2016 Sustainable Communities Strategy (SCS) ARB Acceptance of GHG Quantification Determination*, June 2016.

<sup>63</sup> SCAG, *2020–2045 RTP/SCS Public Health Technical Report*, May 2020, pp. 53.

#### (4) Local

##### (a) *L.A.'s Green New Deal (Sustainable City pLAN 2019)*

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.<sup>64</sup> 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 more detail L.A.'s vision for a sustainable future and it addresses climate change with accelerated targets and new aggressive goals.

While not intended 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/sf 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.
- 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).

<sup>64</sup> City of Los Angeles, *L.A.'s Green New Deal (Sustainable City pLAN 2019)*, 2019.

- 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 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 Los Angeles Green Building Code includes mandatory requirements and elective measures for three categories of buildings: (1) low-rise residential buildings; (2) non-residential and high-rise residential buildings; and (3) additions and alternations to residential and non-residential buildings.

(c) *Transportation Assessment Guidelines*

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

## b) Existing Conditions

### (1) Existing Statewide Greenhouse Gas Emissions

CARB compiles GHG inventories for the State of California. Based on the year 2018 GHG inventory data (the latest year for which data are available), California emitted 425.3 MMTCO<sub>2</sub>e which includes emissions resulting from imported electrical power.<sup>65</sup> Between 1990 and 2018, the population of California grew by approximately 9.7 million (from 29.8 to 39.5 million).<sup>66,67</sup> This represents an increase of approximately 33 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$2.99 trillion in 2018, representing an increase of almost four times the 1990 gross state product.<sup>68</sup> Despite the population and economic growth,

<sup>65</sup> CARB, *Current California GHG Emission Inventory Data – 2000–2018 GHG Inventory (2020 Edition)*.

<sup>66</sup> United States Census Bureau, *National and State Population Estimates: 1990–1994, 1995; 2019 National and State Population Estimates*.

<sup>67</sup> California Department of Finance, *American Community Survey, 2017*, [http://www.dof.ca.gov/Reports/Demographic\\_Reports/American\\_Community\\_Survey/documents/Web\\_ACS2017\\_Pop-Race.xlsx](http://www.dof.ca.gov/Reports/Demographic_Reports/American_Community_Survey/documents/Web_ACS2017_Pop-Race.xlsx). Accessed May 27, 2020.

<sup>68</sup> California Department of Finance, *Gross State Product*, [http://www.dof.ca.gov/Forecasting/Economics/Indicators/Gross\\_State\\_Product/documents/CA\\_GDP.xlsx](http://www.dof.ca.gov/Forecasting/Economics/Indicators/Gross_State_Product/documents/CA_GDP.xlsx). Accessed February 27, 2020. Amounts are based on current dollars as of February 27, 2020.

California's net GHG emissions were reduced to below 1990 levels in 2016. According to CARB, the declining trend coupled with the state's GHG reduction programs (such as the RPS, LCFS, vehicle efficiency standards, and declining caps under the Cap and Trade Program) demonstrate that California is on track to meet the 2020 GHG reduction target codified in HSC, Division 25.5, also known as AB 32 and amended by SB 32.<sup>69</sup> **Table IV.E-2, State of California Greenhouse Gas Emissions**, identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2017 (i.e., the most recent year in which data are available from CARB). As shown in Table IV.E-2, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 40 percent in 2018.

**TABLE IV.E-2  
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS**

Category	Total 1990 Emissions using IPCC SAR (MMTCO <sub>2e</sub> )	Percent of Total 1990 Emissions	Total 2018 Emissions using IPCC AR4 (MMTCO <sub>2e</sub> )*	Percent of Total 2018 Emissions*
Transportation	150.7	35%	169.5	40%
Electric Power	110.6	26%	63.1	15%
Commercial	14.4	3%	25.7	4%
Residential	29.7	7%	15.6	6%
Industrial	103.0	24%	89.2	21%
Recycling and Waste <sup>a</sup>	—	—	9.1	2%
High GWP/Non-Specified <sup>b</sup>	1.3	<1%	20.5	5%
Agriculture/Forestry	23.6	6%	32.6	8%
Forestry Sinks	-6.7	—	— <sup>c</sup>	—
<b>Net Total (IPCC SAR)</b>	<b>426.6</b>	<b>100%</b>	—	—
<b>Net Total (IPCC AR4)<sup>d</sup></b>	<b>431</b>	<b>100%</b>	<b>425.3</b>	<b>100%</b>

## NOTE(S):

\* Totals may not add up exactly due to rounding.

<sup>a</sup> Included in other categories for the 1990 emissions inventory.

<sup>b</sup> High GWP gases are not specifically called out in the 1990 emissions inventory.

<sup>c</sup> Revised methodology under development (not reported for 2015).

<sup>d</sup> CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

SOURCE(S): CARB, Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, 2007; CARB, 2000–2017 Trends Figure Data, Figure 4.

<sup>69</sup> CARB, Frequently Asked Questions for the 2016 Edition California Greenhouse Gas Emission Inventory, 2016.



## (2) Existing Project Site Greenhouse Gas Emissions

The Project Site is located within the Downtown area of the City of Los Angeles, and is currently developed with existing one- to four-story freezer, cold storage, and dry storage warehouses with associated office space, loading docks, and surface parking. The existing warehouses range from approximately 22 to 61 feet in height and total approximately 205,393 square feet. GHG emissions are currently associated with vehicle trips to and from the existing Project Site, on-site combustion of natural gas for heating, off-site combustion of fossil fuels for electricity, and off-site emissions from solid waste decomposition, water conveyance, and wastewater treatment. GHG emissions are estimated using the California Emissions Estimator Model (CalEEMod), which 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 from a variety of land use projects.

CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.<sup>70</sup> CalEEMod was used to estimate existing site GHG emissions from natural gas, solid waste, and landscaping equipment. Building natural gas usage rates are adjusted to account for prior Title 24 Building Energy Efficiency Standards.<sup>71</sup> GHG emissions from electricity, water and wastewater were estimated based on utility usage and prior billing information provided by the facility, as provided in Appendix C of this Draft EIR. The existing cold storage warehouse facility includes a natural gas-fired furnace, which is used on a limited and infrequent basis. Furnace emissions were based on facility provided information on furnace usage and USEPA natural gas combustion emission factors.<sup>72</sup> Mobile source emissions have been estimated based on CARB's on-road vehicle emissions factor (EMFAC) model. Mobile source emissions were based on facility provided information on truck and vehicle trips, truck types, and routes taken to the Project Site, as provided in tabular form in Appendix C of this Draft EIR, and emission factors from the CARB on-road vehicle emissions factor (EMFAC2017) model. In addition, emissions from transportation refrigeration units (TRUs) used to provide refrigeration for cargo transported by trucks were based on four hours of TRU operation per truck per day and emission factors from the CARB OFFROAD model, as provided in Appendix C of this Draft EIR.

Existing operational emissions for the Project Site are presented in **Table IV.E-3, *Estimated Existing Project Site GHG Emissions***. Details regarding the calculation of the existing Project Site emissions are provided in Appendix C of this Draft EIR.

<sup>70</sup> See: <http://www.caleemod.com>.

<sup>71</sup> CARB, *CalEEMod User's Guide*, Appendix E, Section 5, September 2016. Factors for the prior Title 24 standard are extrapolated based on the technical source documentation.

<sup>72</sup> USEPA, *AP-42: Compilation of Air Emission Factors*, Chapter 1.4, Natural Gas Combustion.

**TABLE IV.E-3  
ESTIMATED EXISTING PROJECT SITE GREENHOUSE GAS EMISSIONS**

Emissions Sources	Project CO <sub>2</sub> e (Metric Tons per Year) <sup>a,b</sup>
<b>Existing Operational</b>	
On Road Mobile Sources	443
Area (landscaping)	2
Energy (Electricity and Natural Gas)	1,576
Water Conveyance and Wastewater Treatment	31
Solid Waste	15
<b>Existing Total Emissions</b>	<b>2,067</b>

NOTE(S):

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations

<sup>b</sup> CO<sub>2</sub>e emissions are calculated using the global warming potential values from the IPCC AR4. Although the IPCC has released AR5 with updated GWPs, CARB reports the Statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards.

SOURCE(S): ESA, 2021.

### (3) Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report, Summary for Policy Makers* states that, "it is *extremely likely* that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forces [*sic*] together."<sup>73</sup> A report from the National Academy of Sciences concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.<sup>74</sup>

According to the California EPA, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of

<sup>73</sup> IPCC, *Fifth Assessment Report, Summary for Policy Makers*, 2013, p. 5.

<sup>74</sup> Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider, *Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America*, 2010, 107:12107–12109.

California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.<sup>75</sup> Below is a summary of some of the potential climate change effects and relevant Cal-Adapt data, reported by an array of studies that could be experienced in California as a result of global warming and climate change.

(a) *Air Quality*

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state.<sup>76</sup> In 2018, the California Natural Resources Agency (CNRA) published the *Safeguarding California Plan: 2018 Update*, as a continuation of the policy vision Governor's Executive Order S-13-2008 and the 2009 CNRA California Climate Adaptation Strategy.<sup>77</sup> The CNRA plan lists specific actions and recommendations for State and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the 2009 CNRA California Climate Adaptation Strategy, the CEC developed the Cal-Adapt website, which became operational in 2011, that synthesizes climate change scenarios and impacts to benefit local decision makers.<sup>78,79</sup> As stated in the CNRA *Safeguarding California Plan: 2018 Update*, "the Cal-Adapt.org web portal is at the forefront of resources for specific communities to understand how climate change will raise temperatures and exacerbate extreme heat events, drought, snowpack loss, wildfire, and coastal flooding." The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios. The data are comprised of the average values (i.e., temperature, sea-level rise, snowpack) from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors. According to the Cal-Adapt website, the portion of Los Angeles in which the Project Site is located could result in an average increase in temperature of approximately 2.3°F to 8.5°F by 2070–2099, compared to the baseline 1961–1990 period (75.5°F),

<sup>75</sup> California Environmental Protection Agency, Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

<sup>76</sup> California Energy Commission, *Scenarios of Climate Change in California: An Overview*, February 2006.

<sup>77</sup> California Natural Resources Agency (CNRA), *Safeguarding California Plan: 2018 Update, California's Climate Adaptation Strategy*, January 2018.

<sup>78</sup> CNRA, Climate Action Team, *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*, 2009.

<sup>79</sup> The Cal-Adapt website address is: <http://cal-adapt.org>.

which is a potential increase of approximately 3 to 11 percent.<sup>80</sup> Data suggest that the predicted future increase in temperatures as a result of climate change could potentially interfere with efforts to control and reduce ground-level ozone in the region.

(b) *Water Supply*

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, “Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change.”<sup>81</sup> For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.<sup>82</sup> Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full.<sup>83</sup> Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.<sup>84</sup>

The California Department of Water Resources report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concludes that “climate change will likely have a significant effect on California’s future water resources...[and] future water demand.” It also reports that “much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain.” It also reports that the relationship between climate change and its potential effect on water demand is not well understood, but “[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future.” Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows.<sup>85</sup> In its *Fifth Assessment Report*, the IPCC states “Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and

<sup>80</sup> Cal-Adapt, Annual Average Maximum Temperatures for the Downtown Los Angeles area of the City of Los Angeles, <https://cal-adapt.org/tools/annual-averages/#lat=34.03125&lng=-118.21875&boundary=locagrid&scenario=rcp45&models=HadGEM2-ES,CNRM-CM5,CanESM2,MIROC5&climatevar=tasmax>. Accessed October 6, 2020.

<sup>81</sup> Pacific Institute for Studies in Development, Environment and Security, *Climate Change and California Water Resources: A Survey and Summary of the Literature*, July 2003.

<sup>82</sup> Pacific Institute for Studies in Development, Environment and Security, *Climate Change and California Water Resources: A Survey and Summary of the Literature*, July 2003.

<sup>83</sup> Pacific Institute for Studies in Development, Environment and Security, *Climate Change and California Water Resources: A Survey and Summary of the Literature*, July 2003.

<sup>84</sup> Pacific Institute for Studies in Development, Environment and Security, *Climate Change and California Water Resources: A Survey and Summary of the Literature*, July 2003.

<sup>85</sup> California Department of Water Resources, *Climate Change Report, Progress on Incorporating Climate Change into Planning and Management of California’s Water Resources*, p. 2-75.

dry regions and between wet and dry seasons will increase, although there may be regional exceptions.”<sup>86</sup>

At the local level, as discussed in further detail in Section IV.N.2, *Water Supply*, of this Draft EIR, the Los Angeles Department of Water and Power (LADWP) Water Supply Assessment (WSA), which was approved on April 10, 2018, determined that adequate water supplies exist to meet the Project’s projected water demand between 2015 and 2040, in addition to the existing and planned future demands on LADWP.<sup>87</sup>

(c) *Hydrology and Sea Level Rise*

As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm, and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California’s water supply, and increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

(d) *Agriculture*

California has a \$30 billion agricultural industry that produces one half of the country’s fruits and vegetables. Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase. Crop-yield could be threatened by a less reliable water supply. Also, greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thus affect their quality.<sup>88</sup>

(e) *Ecosystems and Wildlife*

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise by 2 to 11.5°F (1.1 to 6.4°C) by 2100, with significant regional variation.<sup>89</sup> Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as 2 feet along most of the U.S. coastline. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3)

<sup>86</sup> IPCC, *Fifth Assessment Report, Summary for Policy Makers*, 2013, p. 20.

<sup>87</sup> Los Angeles Department of Water and Power (LADWP), *Water Supply Assessment (WSA)*, April 2018, p. 5. Provided in Appendix O-3 of this Draft EIR.

<sup>88</sup> California Climate Change Center, *Our Changing Climate: Assessing the Risks to California*, 2006.

<sup>89</sup> National Research Council, *Advancing the Science of Climate Change*, 2010.

species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage.<sup>90,91</sup>

### 3. Project Impacts

#### a) Thresholds of Significance

Until the passage of AB 32, now codified in HSC Division 25.5, CEQA documents generally did not assess the impacts of GHG emissions. Rather, the primary focus of air pollutant analysis in CEQA documents was the emission of criteria pollutants, or those identified in the California and federal Clean Air Acts as being of most concern to the public and government agencies (e.g., toxic air contaminants). With the passage of AB 32 and SB 97, CEQA documents are now required to contain an analysis of GHG emissions. However, the analysis of GHG emission impacts is different from the analysis of criteria pollutant impacts. Since the half-life of CO<sub>2</sub> is approximately 100 years, the effects of GHG emissions last a relatively long period of time. Conversely, the effects of criteria pollutant impacts last a shorter period of time, and significance thresholds and impacts are based on daily emissions; and the determination of attainment or non-attainment is based on the daily exceedance of applicable ambient air quality standards (e.g., 1-hour and 8-hour exposures). Also, the scope of the impact of criteria pollutants is local and regional, while the scope of the impacts of GHG emissions is global.

Pursuant to SB 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions on December 30, 2009.

#### (1) CEQA Guidelines Appendix G

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

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

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

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce

<sup>90</sup> Parmesan, C., *Ecological and Evolutionary Response to Recent Climate Change*, 2004.

<sup>91</sup> Parmesan, C and Galbraith, H, *Observed Ecological Impacts of Climate Change in North America*. Arlington, VA: Pew. Cent. Glob. Clim. Change, 2004.

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 reduction or mitigation of GHGs). The amendments to CEQA Guidelines Section 15064.4 do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)).

The California Natural Resources Agency has also clarified that the 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 CEQA Guidelines Section 15064(h)).<sup>92</sup>

Although GHG emissions can be quantified as discussed below under Subsection 3.b, *Methodology*, CARB, SCAQMD, and the City have not adopted quantitative project-level significance thresholds for GHG emissions that would be applicable to the Project. The Governor's Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment."<sup>93</sup> Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project."<sup>94</sup>

As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the

<sup>92</sup> See generally CNRA, *Final Statement of Reasons for Regulatory Action*, December 2009, pp. 11–13, 14, and 16; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009.

<sup>93</sup> See generally CNRA, *Final Statement of Reasons for Regulatory Action*, December 2009, pp. 11–13, 14, and 16; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009.

<sup>94</sup> Governor's Office of Planning and Research, *Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*.

project.<sup>95</sup> 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.<sup>96</sup> Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions.”<sup>97</sup>

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

CARB’s Climate Change Scoping Plan, SCAG’s 2020–2045 RTP/SCS, L.A.’s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code all apply to the Project and are all intended to reduce GHG emissions to meet the Statewide targets set forth in AB 32 and amended by SB 32. Thus, in the absence of any adopted quantitative threshold, the significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions, including CARB’s 2017 Climate Change Scoping Plan, SCAG’s 2020–2045 RTP/SCS, L.A.’s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code.

## (2) SCAQMD Thresholds

As discussed above, the SCAQMD has an interim GHG significance threshold of 10,000 MTCO<sub>2e</sub> per year for stationary source/industrial projects where the SCAQMD is the lead agency. This SCAQMD interim GHG significance threshold is not applicable to the Project, as the Project does not include industrial uses with significant stationary sources and the City of Los Angeles is the Lead Agency.

## (3) 2006 L.A. CEQA Thresholds Guide

The 2006 L.A. CEQA Thresholds Guide does not identify any criteria to evaluate GHG emissions impacts. Thus, the potential for the Project to result in impacts from GHG emissions is based on the CEQA Guidelines Appendix G thresholds. For the reasons set forth above, to answer both of the above questions, the City will consider whether the Project is consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2020–2045 RTP/SCS), L.A.’s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code. As discussed above, OPR has noted that lead

<sup>95</sup> CCR, Title 14, Section 15064(h)(3).

<sup>96</sup> CCR, Title 14, Section 15064(h)(3).

<sup>97</sup> CCR, Title 14, Section 15064(h)(3).



agencies “should make a good-faith effort to calculate or estimate GHG emissions from a project.”<sup>98</sup> GHG emissions are quantified below, consistent with OPR guidelines.

## **b) Methodology**

### **(1) Project Consistency with Applicable Plans and Policies**

The Project’s GHG emission impacts are evaluated by assessing the Project’s consistency with applicable GHG reduction strategies and local actions approved or adopted by CARB, SCAG, and the City. As 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.

A consistency analysis is provided and describes the Project’s compliance with performance-based standards included in the regulations outlined in the applicable portions of CARB Scoping Plans (i.e., 2008 Scoping Plan, 2014 Scoping Plan, and 2017 Scoping Plan), the 2020–2045 RTP/SCS, L.A.’s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code. Thus, if a project is designed in accordance with these policies and regulations, it would result in a less than significant impact, because it would be consistent with the overarching State regulations on GHG reduction (AB 32 and SB 32).

### **(2) Quantification of Greenhouse Gas Emissions**

In addition to the evaluation of the Project’s consistency with plans adopted for the purpose of reducing and/or mitigating GHG emissions, for informational purposes, 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 CEQA Guidelines Section 15064.4(a), which requires a good-faith effort by the lead agency 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 compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. The significance of the Project’s GHG emissions impacts is not based on the amount of GHG emissions resulting from the Project.

The California Climate Action Registry (Climate Registry) has prepared the General Reporting Protocol for calculating and reporting GHG emissions from a number of general and industry-specific activities.<sup>99</sup> The GHG emissions provided in this report are consistent with the General Reporting Protocol framework. The General Reporting

<sup>98</sup> Governor’s Office of Planning and Research, *Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*, 2008.

<sup>99</sup> The Climate Registry, General Reporting Protocol Version 2.1, 2016.

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

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site 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.<sup>100</sup>

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility: “As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility and provides information” to CARB to be considered for future strategies by the industrial sector.<sup>101</sup> For these reasons, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research directs lead agencies to “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.”<sup>102</sup> Therefore, direct and indirect emissions have been calculated for the Project.

A fundamental challenge 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 project because the project may cause a shift in the locale for some type of GHG emissions, rather than simply causing “new” GHG emissions. As a result, there is a lack of clarity as to 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. Therefore, the analysis of the Project’s GHG emissions is conservative in that it assumes all of the GHG emissions are new additions to the atmosphere.

It is considered reasonable and consistent with criteria pollutant calculations to consider those GHG emissions resulting from Project-related incremental (net) increases from emissions sources mentioned in the scope categories above such as emissions from the use of on-road mobile vehicles, electricity, and natural gas compared to existing conditions. This includes Project construction activities such as demolition, hauling, and construction worker trips. This analysis also considers indirect GHG emissions from water

<sup>100</sup> Embodied energy includes energy required for water pumping and treatment for end-uses. Third-party vehicles include vehicles used by visitors of the Project Site.

<sup>101</sup> CARB, *Staff Report: Initial Statement of Reasons for Rulemaking, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32)*, 2010, p. 27.

<sup>102</sup> Governor’s Office of Planning and Research, *Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*, 2008, p. 5.

conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

GHG emissions are estimated using the California Emissions Estimator Model (CalEEMod, version 2016.3.2), which 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 from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.<sup>103</sup>

(a) *Construction Emissions*

The emissions of GHGs associated with construction of the Project were calculated for each year of construction activity using CalEEMod and EMFAC. Construction emissions are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date). Project construction was modeled in CalEEMod to start in 2020, but will commence at a later date. While the onset of construction was delayed to a later date than assumed in the modeling analysis, construction emissions would be similar to or less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is because State regulations require construction equipment fleet operators to phase-in less polluting heavy-duty equipment and trucks over time. As a result, since the Project would commence construction on a later date than modeled in this GHG impact analysis, GHG impacts would be less than the impacts disclosed herein.

The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the same construction phasing assumptions used in the criteria pollutant analysis (see Section IV.A, *Air Quality*, of this Draft EIR) to generate GHG emissions values for each construction year. The emissions have been estimated using the CalEEMod software, an emissions inventory software program recommended by SCAQMD, and the CARB on-road vehicle emissions factor model (EMFAC). The SCAQMD guidance, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, recognizes that construction-related GHG emissions from projects “occur over a relatively short-term period of time” and that “they contribute a relatively small portion of the overall lifetime project GHG emissions.”<sup>104</sup>

<sup>103</sup> See: <http://www.aqmd.gov/caleemod/>.

<sup>104</sup> SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

The maximum construction GHG emissions for the Project were estimated for each construction phase. Some individual construction phases could potentially overlap; therefore, the estimated construction GHG emissions include these potential overlaps by combining the relevant construction phase emissions. Detailed emissions calculations are provided in Appendix C of this Draft EIR. In accordance with SCAQMD guidance, GHG emissions from construction have been amortized (i.e., averaged annually) over the lifetime of the Project. The SCAQMD defines the lifetime of a project as 30 years.<sup>105</sup> Therefore, the Project's total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions. A more detailed discussion of the methodology for projecting the Project's construction emissions and descriptions of the Project's construction phasing, including demolition of the existing buildings and associated parking, site clearing, grading, excavation, subterranean parking and building construction and the construction equipment list are available in the Air Quality and Greenhouse Gas Technical Appendix for the Project, which is provided in Appendix C of this Draft EIR.

(b) *Operational Emissions*

Operational impacts were assessed for two scenarios (Project and Project with the Deck Concept) based on whether or not the Project includes a deck that would extend over the adjacent railway. Similar to construction, operational GHG emissions are also estimated using CalEEMod, along with CARB's on-road vehicle emissions factor model (EMFAC). CalEEMod was used to estimate GHG emissions from electricity, natural gas, solid waste, water and wastewater, commercial fireplaces (i.e., for lounge areas), and landscaping equipment. Mobile emissions were estimated based on emission factors from EMFAC along with vehicle miles traveled (VMT) values taken from the Transportation Assessment (TA) were used to estimate on-road mobile source GHG emissions.<sup>106</sup> The Project was analyzed for the two different scenarios, which would generate different mobile source emissions due to the additional special events programming associated with the Deck. For emissions modeling purposes, the Project's emissions were calculated assuming buildout in 2025. However, the Project would be completed as early as 2026. Therefore, the Project's emissions modeling is slightly conservative since operational emissions would be less than those analyzed here due to the improving vehicle technology that would be more fuel-efficient and lead to a cleaner vehicle fleet mix traveling to and from the Project Site as reflected in EMFAC mobile source emission factors. As a result, Project buildout at a later date than analyzed in emissions modeling would result in greenhouse gas emissions impacts that would be lower than the impacts disclosed herein.

A detailed discussion of the methodology used to estimate the GHG emissions from the Project and existing uses is provided in Appendix C of this Draft EIR.

<sup>105</sup> SCAQMD, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, December 5, 2008, p. 5.

<sup>106</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021. Provided in Appendix M-1 of this Draft EIR.

The GHG emissions calculations for the Project include credits or reductions for implementation of relevant project design features set forth in this Draft EIR. The analysis of Project GHG emissions at buildout also takes into account actions and mandates already approved and expected to be in force by Project buildout (e.g., Pavley I and II Standards and implementation of California’s Statewide RPS beyond current levels of renewable energy). In addition, as mobile source GHG emissions are directly dependent on the number of vehicle trips and annual VMT<sup>107</sup>, a decrease in the number of Project-generated trips and vehicle distances traveled as a result of Project characteristics (e.g., close proximity to transit) would provide a proportional reduction in mobile source GHG emissions compared to a generic project without such locational benefits. Emissions reductions regarding Cap-and-Trade were not included in this analysis.

For informational purposes, operational GHG emissions were calculated for the following two GHG conditions to estimate GHG reductions associated with Project GHG reduction characteristics:

- **Project Without GHG Reduction Characteristics, Features, and Measures:** Represents emissions factors based on a scenario consistent with CARB’s Scoping Plan Statewide NAT forecast for the AB 32 target year of 2020 and continued reductions through 2030, with an emission factor for CO<sub>2</sub> of 740.03 lbs/MWh corresponding to year 2025, which represents the State’s RPS law and growth in electricity demand. However, this scenario does not include the project design features, and certain Project-specific VMT reductions from land use characteristics such as increased destination accessibility and increased transit ability, as discussed in the Project’s TA and in the Quantifying Greenhouse Gas Mitigation Measures (CAPCOA guidance document).<sup>108</sup> Specifically, the Project Without GHG Reduction Characteristics, Features, and Measures does not include VMT reductions from the Project’s TDM program, increased Project Site land use diversity, urban infill location in proximity to other uses, and proximity to transit.
- **Project With GHG Reduction Characteristics, Features, and Measures (Project):** Represents emission factors from the Project in the year 2025 consistent with SB 100, which was adopted after the 2017 Scoping Plan and represents the State’s most current Renewable Portfolio Standard (RPS) law and growth in electricity demand with an emission factor for CO<sub>2</sub> of 626.48 lbs/MWh for year 2025 scaled proportionately based on the future year renewable energy targets of 44 percent by 2024 and at least 52 percent by 2027, and includes all

<sup>107</sup> Project annual VMT was calculated by conservatively multiplying the maximum daily VMT (which occurs on a weekday) for 365 days. This is a conservative estimate as maximum daily VMT would not occur for every day of the year, which would likely be lower on many days. Fehr & Peers, Transportation Assessment for the 670 Mesquit Project, April 2021.

<sup>108</sup> California Air Pollution Control Officers Association (CAPCOA), *Quantifying Greenhouse Gas Mitigation Measures*, August 2010, p. 162.

Project design features and VMT reductions from the land use characteristics discussed in the Project's TA<sup>109</sup> and in the CAPCOA guidance document.<sup>110</sup>

As previously noted, operational mobile source GHG emissions are estimated based on CARB's on-road vehicle emissions factor (EMFAC) model. Mobile source emissions are based on VMT from the TA prepared by Fehr & Peers for the Project. The trip lengths are based on the location and urbanized setting of the project area. The average trip length of each land use is the sum of the trip length of each trip type multiplied by the percentage of trip type. The Project's VMT and trip generation rates provided in the Project's TA, which accounts for trip reductions from internal capture,<sup>111</sup> existing public transportation options, and pass-by trips.<sup>112,113</sup>

The operational mobile source GHG emissions estimates are based on GHG emission factors for the mobile sources and the GWP values for the GHGs emitted. Emissions of GHGs from motor vehicles are dependent on specific vehicle types and models that would travel to and from the Project Site. The national policy for fuel efficiency and emissions standards for the United States auto industry requires that new passenger cars and light-duty trucks achieve an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO<sub>2</sub> per mile by model year 2016 (Phase I standards), based on USEPA calculation methods. In August 2012, more stringent phased-in standards were adopted for new model year 2017 through 2025 passenger cars and light-duty trucks. New model year 2020 vehicles are projected to achieve 41.7 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 213 grams of CO<sub>2</sub> per mile (Phase II standards). By 2025, new vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO<sub>2</sub> per mile (Phase II standards).<sup>114</sup> As mentioned above in Subsection 2.a.1, *Regulatory Framework – Federal*, in August 2018, the EPA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE and CO<sub>2</sub> standards applicable in model year 2020 for model years 2021 through 2026. In September 2019, the USEPA published the final rule in the federal register (Federal Register, Vol. 84, No. 188, Friday, September 27, 2019, Rules and Regulations, 51310–51363). The USEPA also published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards that finalizes critical parts of the SAFE Vehicles Rule and asserts that federal law preempts state and local tailpipe GHG emissions standards as well as zero emission vehicle (ZEV) mandates. California and 23 other states and

<sup>109</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>110</sup> The emission factor of 626.48 pounds CO<sub>2</sub>/MWh is calculated based on LADWP's current electricity emission factor and assumed incremental compliance with SB 100 over time. See Appendix C of this Draft EIR for calculation details.

<sup>111</sup> Internal capture is generally defined as the portion of trips generated by a mixed-use development that both begin and end within the development.

<sup>112</sup> Pass-by trips are general defined as traffic already on the way from an origin to a primary trip destination that will make an intermediate stop at the development without a route diversion.

<sup>113</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>114</sup> USEPA, *EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks*, August 2012.

environmental groups in November 2019 in U.S. District Court in Washington, filed a petition for the EPA to reconsider the published rule. The Court has not yet ruled on the lawsuit. The vehicle emissions standards beyond model year 2020 may not occur if the Federal SAFE Vehicles Rules and the One National Program on Federal Preemption of State Fuel Economy Standards are upheld by the Courts. The most current version of the CARB and USEPA-approved EMFAC2017 on-road vehicle emissions model does not account for the effect of the SAFE Vehicles Rules. CARB has provided off-model adjustment factors for criteria pollutant emissions and for GHG emissions.<sup>115,116</sup> These adjustment factors were accounted for in the Project's construction and operational mobile emissions calculations in order to account for the SAFE Vehicle Rule. However, as described above in Subsection 2.a.1, *Regulatory Framework – Federal*, in August 2021, the USEPA proposed the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards would achieve significant GHG emissions reductions along with reductions in other pollutants.<sup>117</sup> The proposal would revise current GHG standards under the SAFE Vehicle Rules, beginning in model year 2023 and increase in stringency year-over-year through model year 2026. These proposed standards would increase in stringency from model year 2022 to model year 2023 by 10 percent, followed by a nearly five percent stringency increase in each model year from 2024 through 2026. This proposal would strengthen current standards, which require only a 1.5 percent increase in stringency each year from model year 2021 through 2026.<sup>118</sup> Therefore, accounting for the SAFE Vehicle Rules in the Project's construction and operational mobile emissions calculations results in a conservative analysis that would overstate Project emissions in the event that the proposed Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards were to be adopted.

All vehicle types would visit the Project Site. Therefore, this assessment uses Los Angeles County's motor vehicle fleet mix and the fleet average calendar year emissions factors from EMFAC to estimate mobile source GHG emissions.

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Emissions of GHGs associated with energy usage under the Project's proposed land uses are calculated using the CalEEMod tool. Future fuel consumption rates are estimated based on specific square footage of the residential, retail, and restaurant land uses, as well as predicted water supply needs of the Project. Emission factors for GHGs due to electrical generation to serve the demands of the existing Project Site were obtained from the LADWP 2017 Final Power Strategic Long-Term Resource Plan, which accounts for the generation mix

<sup>115</sup> CARB, *EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One*, November 20, 2019.

<sup>116</sup> CARB, *EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO<sub>2</sub>) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule*, June 26, 2020.

<sup>117</sup> Federal Register, *Proposed Rule, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 FR 43726, August 10, 2021.

<sup>118</sup> Federal Register, *Proposed Rule, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 FR 43726, August 10, 2021.

using renewable and non-renewable sources.<sup>119</sup> According to LADWP’s 2017 Final Power Strategic Long-Term Resource Plan, LADWP provides 30 percent of electricity via renewable sources but would provide an increasing percentage from renewable sources in compliance with the RPS with 50 percent by 2025, 55 percent by 2030, and 65 percent by 2036.<sup>120</sup> Based on data from LADWP, the CO<sub>2</sub> intensity for electricity sales as of year 2016 was 834 lbs CO<sub>2</sub>/MWh. With the passage of SB 100, LADWP would be required to update plans to provide an increasing percentage of renewable electricity pursuant to the regulation (i.e., 60 percent by December 31, 2030 and 100 percent by December 31, 2045).

Based on LADWP future projections for the Project opening, an estimated emission factor of 626.48 lbs CO<sub>2</sub>/MWh for electricity was calculated using LADWP projections from existing plans for compliance with the RPS (i.e., pre-SB 100) and future projected energy supply resources.<sup>121,122,123</sup>

Emissions of GHGs associated with solid waste disposal under the Project’s proposed land uses are calculated using the CalEEMod tool. The emissions are based on the size of the residential, commercial, restaurant, open space, and parking structure land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted.<sup>124</sup> Refer to Section IV.N.3, *Solid Waste*, of this Draft EIR for estimated solid waste disposal and diversion rates from the Project. The City has developed and is in the process of implementing, the Solid Waste Integrated Resources Plan, also referred to as the City’s Zero Waste Plan, whose goal is to lead the City towards being a “zero waste” City by 2030. These waste reduction plans, policies, and regulations, along with Mayoral and City Council directives, have increased the level of waste diversion (e.g., recycling) for the City to 76 percent as of 2013.<sup>125</sup>

The emissions of GHGs associated with water demand and wastewater generation from the Project are calculated using CalEEMod. The emissions are based on the size of the existing land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted.<sup>126</sup>

<sup>119</sup> Los Angeles Department of Water and Power (LADWP), *2016 Power Integrated Resource Plan*, 2017, p. C-12.

<sup>120</sup> CEC, *2017 LADWP Power Content Label*, 2017, p. ES-1.

<sup>121</sup> Pre-SB 100 refers to the emission factor based on electricity/energy sources from the LADWP forecast plans that do not yet incorporate SB 100. Currently, LADWP does not have a plan that describes how it will achieve SB 100’s Renewables Portfolio Standard numbers, but it is expected to do so. Therefore, using the pre-SB 100 numbers would be more conservative.

<sup>122</sup> LADWP, *2017 Power Strategic Long-Term Resource Plan*, December 2017.

<sup>123</sup> California Energy Commission, *Utility Energy Supply Plans from 2015, 2016*, [http://www.energy.ca.gov/almanac/electricity\\_data/s-2\\_supply\\_forms\\_2015/](http://www.energy.ca.gov/almanac/electricity_data/s-2_supply_forms_2015/). Accessed February 27, 2020.

<sup>124</sup> CAPCOA, *California Emissions Estimator Model, User’s Guide for CalEEMod Version 2016.3.2*.

<sup>125</sup> City of Los Angeles, Bureau of Sanitation, *Zero Waste Progress Report*, 2013.

<sup>126</sup> CAPCOA, *California Emissions Estimator Model, User’s Guide for CalEEMod Version 2016.3.2*.



Refer to Section IV.N.2, *Water Supply*, of this Draft EIR for the estimated water usage rate for the Project.

The emissions of GHGs associated with operational area sources under the Project are calculated using the CalEEMod tool. The emissions for landscaping equipment are based on the size of the open space provided by the Project, the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted.

Stationary sources would include three on-site emergency generators. The emergency generators would result in emissions during maintenance and testing operations and emissions were estimated separately outside of the CalEEMod software. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470. Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470. Emissions of GHGs would be generated during maintenance and testing operations and emissions were estimated separately outside of the CalEEMod software. Emergency generator emissions include compliance with CARB and SCAQMD regulations including SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines) mandated emission limits and operating hour constraints. As discussed previously, Rule 1470 applies to stationary compression ignition engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

Stationary sources would also include on-site cooling towers to assist in dissipating heat from commercial processes, such as commercial heating, ventilation and air conditioning (HVAC) systems, of the project. The cooling towers would utilize a flow rate of 121,176 gallons per day (refer to Section IV.N.2, *Water Supply*, of this Draft EIR). The cooling towers would result in emissions due to the required energy to supply, distribute, and treat the water used and emissions were estimated based on the energy demand factors for water used in the CalEEMod software.

The GHG emissions calculations for the Project include credits or reductions for implementation of relevant Project Design Features as described in Subsection 3.c, *Project Design Features*.

As stated in Chapter II, *Project Description*, of this Draft EIR, a rooftop heliport is proposed for emergency and occasional use. Heliport GHG emissions were conservatively estimated based on helicopter emission values obtained from a City study for a similar heliport for a mixed-used development. Estimate of GHG emissions from helicopters included in the Project GHG analysis below are conservative as the frequency of trips for

the proposed Project would be expected to be fewer in number as compared to those used in the referenced helicopter emissions calculations.<sup>127</sup>

Operational GHG emissions are assessed based on the Project-related incremental increase in GHG emissions compared to baseline conditions. Under CEQA, the baseline environmental setting is established as the time the Notice of Preparation for this EIR circulated on April 25, 2017.

There are challenges in determining consumption-based GHG emissions for embodied GHG emissions<sup>128</sup> such as the production of construction materials and consumer goods and services include that many require elongated supply chains. Therefore, the data necessary to accurately quantify embodied emissions may not be readily available due to the fact that other jurisdictions (particularly outside California or outside the United States) may not track GHG emissions in sufficient detail and, in part due to business practices concerning proprietary data. Furthermore, as discussed in the Draft AEP White Paper: Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans, “CEQA admonishes lead agencies to avoid speculation in completing their analyses and making conclusions. Furthermore, CEQA does not require a lead agency to complete every study possible, but rather to fully disclose impacts based on reasonably available data. Developing project-specific estimates of embedded GHG emissions for all construction materials, or future consumed goods and services that are related to complex supply chains, would require extensive research and may not be able to accurately identify GHG emissions for many consumed items without substantial uncertainty.”<sup>129</sup>

In addition, the State addressed embodied (lifecycle) GHG emissions in the Final Statement of Reasons for Regulatory Action, prepared for the amendment to Appendix F of the CEQA Guidelines pursuant to SB 97:

*The amendments to Appendix F remove the term —lifecycle. No existing regulatory definition of —lifecycle exists. In fact, comments received during OPR’s public workshop process indicate a wide variety of interpretations of that term. (Letter from Terry Rivasplata et al. to OPR, February 2, 2009, at pp. 5, 12 and Attachment; Letter from Center for Biological Diversity et al. to OPR, February 2, 2009, at pp. 17.) Thus, retention of the term —lifecycle in Appendix F could create confusion among lead agencies regarding what Appendix F requires. Moreover, even if a standard definition of the term —lifecycle existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered —indirect effects of a project as that term is*

<sup>127</sup> Estimate of Heliport GHG emissions adapted from Appendix C of Appendix IV.O of the Climate Change Technical Report Wilshire Grand Development Project.

<sup>128</sup> Embodied GHG emissions are the total emissions of GHG from all energy sources used to mine, log, harvest, extract, process, manufacture, and transport to the construction site and assemble the thousands of materials that go into a typical building.

<sup>129</sup> Association of Environmental Professionals, *Draft AEP White Paper – Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans*, 2017, p. 5-3.

*defined in section 15358 of the State CEQA Guidelines. Depending on the circumstances of a particular project, an example of such emissions could be those resulting from the manufacture of building materials. (CAPCOA White Paper, pp. 50-51.) CEQA only requires analysis of impacts that are directly or indirectly attributable to the project under consideration. (State CEQA Guidelines, § 15064(d).) In some instances, materials may be manufactured for many different projects as a result of general market demand, regardless of whether one particular project proceeds. Thus, such emissions may not be caused by the project under consideration. Similarly, in this scenario, a lead agency may not be able to require mitigation for emissions that result from the manufacturing process. Mitigation can only be required for emissions that are actually caused by the project. (CEQA Guidelines Section 15126.4(a)(4).)<sup>130</sup>*

Therefore, embodied GHG emissions were not considered in this analysis as they are not consistent with generally recommended GHG emissions analysis methodology under CEQA.

### (3) Comparison to Project without Reduction Features Scenario

As discussed previously, State, regional, and local GHG reduction plans and policies, such as CARB's Climate Change Scoping Plan, SCAG's 2020–2045 RTP/SCS, L.A.'s Green New Deal (Sustainable City' pLAn 2019), and the Los Angeles Green Building Code would be applicable to the Project. These plans and policies are intended to reduce GHG emissions in accordance with the goals of AB 32 and SB 32. In order to evaluate the efficacy of the GHG reduction characteristics, features, and measures that would be implemented as part of the Project as required by these GHG reduction plans and policies, this analysis compares the Project's GHG emissions to the emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures. This approach mirrors the concepts used in CARB's Climate Change Scoping Plan, which demonstrates GHG reductions compared to a Project without Reduction Features scenario. This comparison is provided only to evaluate the Project's efficiency with respect to GHG reduction plans and policies, but is not relied on as a threshold of significance.

The GHG emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures is quantified based on specific and defined circumstances in the context of relevant State activities and mandates, as described above. Since this comparison is intended to mirror the concepts used in CARB's Climate Change Scoping Plan, the GHG emissions for the Project without implementation of GHG reduction characteristics, features, and measures is evaluated based on the specific and defined circumstances that CARB relied on when it projected

<sup>130</sup> CNRA, *Final Statement of Reasons for Regulatory Action – Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 397*, p. 71.

the State's GHG emissions in the absence of GHG reduction measures in the First Update to the Climate Change Scoping Plan.

Project Design Feature WS-PDF-1 (Water Conservation Features), Mitigation Measure TRAF-MM-1, (Transportation Demand Management [TDM] Program), and land use characteristics such as increased destination accessibility and increased transit ability are not included in the Project without Reduction Features Scenario as they encompass GHG reduction strategies and features that would be consistent with State, regional, and local GHG reduction plans and policies or would go above and beyond regulatory requirements. The emissions are estimated using the CalEEMod software, and the model inputs are adjusted to account for the Project without implementation of GHG reduction characteristics, features, and measures. In addition, mobile emissions would not incorporate land use characteristics that would result in reduced mobile emissions, such as increased destination accessibility and increased transit ability through VMT reductions and TDM trip reductions.

### c) Project Design Features

Refer to Project Design Feature AQ-PDF-1 (Fireplace Exclusion) in Section IV.A, *Air Quality*, of this Draft EIR, which excludes fireplaces from the Project's residential units that reduce operational GHG emissions and Project Design Feature WS-PDF-1 (Water Conservation Features) in Section IV.N.2, *Water Supply*, of this Draft EIR, which includes water conservation features that reduce operational GHG emissions.

The following Project Design Features would also be implemented as part of the Project:

**GHG-PDF-1: Green Building Features.** The Project will be designed to achieve the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Silver Certification level for new buildings. The Project will demonstrate compliance with the LEED Silver Certification or equivalent green building standards by providing architectural and engineering documentation, building energy modeling simulations, and other supporting evidence consistent with USGBC accepted documentation standards. Pre-construction documentation that indicates the Project is designed to achieve the number of points required for LEED Silver Certification will be provided to the City prior to building permit issuance. Post-construction documentation that indicates the Project operates within the expected parameters to achieve the number of points required for LEED Silver Certification will be provided to the City after completion of the required LEED commissioning activities. As part of the Project's LEED Silver Certification or equivalent green building standards, the Project will optimize building energy performance and achieve a minimum of four points in the Energy and Atmosphere Credit 2 category (LEED version 4), which means a 12 percent reduction from the LEED baseline, which is based on the

ASHRAE 90.1-2010 standard in LEED version 4.<sup>131</sup> The Project will reduce water usage and achieve a minimum of one point in the Water Efficiency Credit 1 category (LEED version 4), which means a 50 percent reduction in outdoor water use for irrigation from the LEED baseline, and a minimum of five points in the Water Efficiency Credit 2 category (LEED version 4), which means a 45 percent reduction in indoor water use from the LEED baseline.

## d) Analysis of Project Impacts

***Threshold (a): Would the Project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?***

***Threshold (b): Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?***

### (1) Impact Analysis

#### *(a) Project Consistency with Applicable Plans and Policies*

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

As described above, compliance with a GHG emissions reduction plan renders a less-than-significant impact. The analyses below demonstrate that the Project is consistent with the applicable GHG emission reduction plans and policies included within the 2017 Climate Change Scoping Plan, the SCAG 2020–2045 RTP/SCS, the City of L.A.'s Green New Deal (Sustainable City pLAn 2019), and Los Angeles Green Building Code. As shown herein, the Project would be consistent with the applicable GHG reduction plans and policies.

#### *(i) CARB's Climate Change Scoping Plan*

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 (i.e., AB 32) and codified into law in HSC Division 25.5. Executive Order B-30-15's goal to reduce GHG emissions to 40 percent below 1990

<sup>131</sup> The Project's building energy is modeled based on compliance with the 2019 Title 24 Building Energy Standards. It is not known exactly the extent to which the Project's energy improvements achieved through LEED Silver Certification or equivalent green building standards process would exceed the 2019 Title 24 Building Energy Standards at the time of buildout. Therefore, the Project's building energy-related emissions may be lower than analyzed in this Draft EIR and the analysis provided herein is a conservative estimate.

levels by 2030 was adopted by the Legislature in SB 32 and also codified into law in HSC Division 25.5.

In support of AB 32 and SB 32, the State has promulgated specific laws and strategies aimed at GHG reductions that are 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."<sup>132</sup> It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone.

The Climate Change Scoping Plan outlines a framework that relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program. The Climate Change Scoping Plan builds off of a wide array of regulatory requirements that have been promulgated to reduce statewide GHG emissions, particularly from energy demand and mobile sources.

Certain elements of these regulations must be complied with by all projects that develop urban land uses (e.g., commercial, residential, industrial, etc.). This category of regulations can be grouped in terms of the GHG sector that benefit from their implementation. With regard to the energy sector, implementation of the California RPS program (SB 100), SB 350, and the Energy Independence and Security Act of 2007 (EISA) would reduce GHG emissions generated by energy consumption. With regard to the mobile sector, implementation of the Advanced Clean Cars Program, Advance Clean Truck Regulation, Low Carbon Fuel Standard (Executive Order S-01-07) and SB 375 would reduce GHG emissions generated by motor vehicle travel. In addition, ongoing implementation of the SB 1368/AB 398, CCR Title 20, and the Cap-and-Trade Program would reduce GHG emissions from both energy consumption and the fuels used for motor vehicle travel. With regard to the solid waste sector, implementation of the California Integrated Waste Management Act of 1989 and AB 341 would reduce GHG emissions generated by solid waste disposal in terms of reduced vehicle trips associated with the transport of solid waste materials as well as landfill emissions.<sup>133</sup> Lastly, with regard to

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<sup>132</sup> CAPCOA, *CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, 2008.

<sup>133</sup> 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.

the water sector, implementation of SB X7-7 would reduce GHG emissions associated with the energy used by the infrastructure required for the conveyance of water. Further, the Project development would occur in accordance with these regulations and, therefore, would comply with their requirements and would not conflict with the implementation of these regulations.

**Table IV.E-4, *Consistency with Applicable Climate Change Scoping Plan Greenhouse Gas Reduction Strategies***, contains a list of GHG-reducing strategies applicable to the Project. The analysis describes the Project's compliance and consistency with these strategies outlined in the State's Climate Change Scoping Plan to reduce GHG emissions. As discussed below, the Project would implement Project Design Features and incorporate characteristics to reduce energy use, conserve water, reduce waste generation, and reduce vehicle travel consistent with Statewide strategies and regulations. As a result, the Project would not conflict with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

**TABLE IV.E-4  
CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN  
GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
<b>Energy</b>		
<b>CCR, Title 24.</b> Energy Efficiency Standards for Residential and Nonresidential Buildings	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet or exceed the applicable requirements of the 2019 Title 24 Building Energy Efficiency Standards and CALGreen Code or applicable version at the time of building permit issuance. The Project would also incorporate energy efficient measures as part of meeting the LEED Silver Certification level or equivalent green building standards. As part of Project Design Feature WS-PDF-1, the Project would provide water efficiency features (see Section IV.N.2, <i>Water Supply</i> , for additional details).
<b>California Green Building Standards Code Requirements.</b> Heating, ventilation, and air conditioning (HVAC) Systems will be designed to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would install HVAC systems that would meet or exceed the energy standards in the applicable ASHRAE standards and 2019 Title 24 Building Energy Efficiency Standards.
Energy commissioning shall be performed for buildings larger than 10,000 square feet.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements and LEED Silver Certification level or equivalent green building standards.

**TABLE IV.E-4**  
**CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN**  
**GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements and the CALGreen Code for the use of HFCs in HVAC systems.
Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces will be designed for such vehicles.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements and the CALGreen Code. The Project would designate a minimum of eight percent of on-site parking for carpool and/or alternative-fueled vehicles (approximately 160 to 280 spaces). In addition, the Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into a minimum of 30 percent of the parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations.
Long-term and short-term bike parking shall be provided for up to 5 percent of vehicle trips.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement by meeting City bicycle parking requirements. The Project would provide on-site bicycle parking to support the proposed on-site uses in accordance with the proposed Mesquit Specific Plan. The Project would provide a minimum of 288 short-term and 519 long-term bicycle parking spaces.
Stormwater Pollution Prevention Plan (SWPPP) required.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements and the CALGreen Code (See Section IV.G, <i>Hydrology and Water Quality</i> , of this Draft EIR).
Indoor water usage must be reduced by 20 percent compared to current California Building Code Standards for maximum flow.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement, pursuant to Project Design Feature GHG-PDF-1, as part of its compliance with the City's requirements, the CALGreen Code, and meeting the LEED Silver Certification level or equivalent green building standards. Also, as part of Project Design Feature WS-PDF-1, the Project would provide water efficiency features (see Section IV.N.2, <i>Water Supply</i> , for additional details).



**TABLE IV.E-4**  
**CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN**  
**GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
All irrigation controllers must be installed with weather sensing or soil moisture sensors.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements, the CALGreen Code, and meeting the LEED Silver Certification level or equivalent green building standards.
Wastewater generation shall be reduced by 20 percent compared to current California Building Standards.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement, pursuant to Project Design Feature GHG-PDF-1, as part of its compliance with the City's requirements, the CALGreen Code, Los Angeles Green Building Code, and meeting the LEED Silver Certification level or equivalent green building standards. Also, as part of Project Design Feature WS-PDF-1, the Project would provide water efficiency features (see Section IV.N.2, <i>Water Supply</i> , for additional details) that would reduce water usage and have a corresponding reduction in wastewater generation.
Requires a minimum of 50 percent recycle or reuse of nonhazardous construction and demolition debris.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet or exceed this requirement as part of its compliance with the City's requirements, the CALGreen Code, and meeting the LEED Silver Certification level or equivalent green building standards.
Requires documentation of types of waste recycled, diverted or reused.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement as part of its compliance with the City's requirements, the CALGreen Code, and meeting the LEED Silver Certification level or equivalent green building standards.
<b>Water</b>		
<b>CCR, Title 24.</b> Title 24 includes water efficiency requirements for new residential and non-residential uses.	State, Local Jurisdictions	<b>No Conflict.</b> See discussion under Title 24 Building Standards Code, CALGreen Code, and Los Angeles Green Building Standards requirements above.

**TABLE IV.E-4**  
**CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN**  
**GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
<b>Other Sources</b>		
Climate Action Team. Reduce diesel-fueled commercial motor vehicle idling.	State, CARB.	<b>No Conflict.</b> The Project would comply with the CARB Air Toxics Control Measure to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time. This would also be applicable to the Project without Reduction Features scenario since the underlying Airborne Toxic Control Measure that limits heavy-duty diesel motor vehicle idling (Title 13 CCR, Section 2485) was adopted by CARB in 2004.
Plant five million trees in urban areas by 2020 to effect climate change emission reductions.	Local Jurisdictions	<b>No Conflict.</b> While this action does not apply to individual projects, the Project would include the addition of 180 trees (24-inch boxes), including street trees. At present, there are no trees located on the Project Site. The Project's design includes 141,876 square feet of open space accessible by all Project residents including approximately 40,006 square feet of landscaped open space. As a result, the Project design would be consistent with and would not conflict with this goal.
Implement efficient water management practices and incentives, as saving water saves energy and GHG emissions.	State, Local Jurisdictions	<b>No Conflict.</b> The Project would meet this requirement, pursuant to Project Design Feature GHG-PDF-1, as part of its compliance with the City's requirements, the CALGreen Code, and meeting the LEED Silver Certification level or equivalent green building standards. Also, as part of Project Design Feature WS-PDF-1, the Project would provide water efficiency features (see Section IV.N.2, <i>Water Supply</i> , for additional details).
Reduce GHG emissions from electricity by reducing energy demand. The California Energy Commission updates appliance energy efficiency standards that apply to electrical devices or equipment sold in California. Recent policies have established specific goals for updating the standards; new standards are currently in development.	State, Local Jurisdictions	<b>No Conflict.</b> While this action does not apply to individual projects, the Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards, the CALGreen Code, and the Los Angeles Green Building Code, and meeting the LEED Silver Certification level or equivalent green building standards.

**TABLE IV.E-4**  
**CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN**  
**GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Apply strategies that integrate transportation and land-use decisions, including but not limited to promoting jobs/housing proximity, high-density residential/commercial development along transit corridors and implementing intelligent transportation systems.	State, CARB, SCAG	<b>No Conflict.</b> The Project would incorporate physical and operational Project characteristics that would reduce vehicle trips and VMT and encourage alternative modes of transportation for guests and employees. The Project would reduce VMT as a result of its urban infill location, with nearby access to public transportation within 1.0 miles of the Project Site, including the existing Metro bus routes (e.g., 18, 60, 62, 720) and a Greyhound station located at the southwest corner of 7th Street and Decatur Street, all located within 0.3 miles of the Project Site. The closest LADOT stop for the LADOT Downtown Area Short Hop (DASH) Loop A is located at the intersection of Molino Street and Palmetto Street, approximately 0.28 miles northwest of the Project Site. The closest Metro light rail stations are the Metro L (Gold) Line Pico/Aliso Station, located approximately 0.7 miles from the Project Site and the Little Tokyo/Arts District Station, located approximately 2.0 miles from the Project Site. In addition, the Project Site is in close proximity to other destinations including off-site residential, retail, and entertainment (refer to discussion of VMT-reducing Project land use characteristics in Subsection 3.d.1.a.ii, <i>SCAG 2020–2045 RTP/SCS</i> ).
Reduce energy use in private buildings.	State, Local Jurisdictions	<b>No Conflict.</b> The Project consistent with this strategy as part of its compliance with the City's requirements, the CALGreen Code, the Los Angeles Green Building Code, and meeting the LEED Silver Certification level or equivalent green building standards.

SOURCE(S): ESA, 2020.

As described in Table IV.E-4, the Project is compliant with the applicable laws and regulations that serve to reduce GHG emissions. In addition to the Project'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 using renewable

resources for half of the State's electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting other alternative transportation options, and use of high-efficiency appliances, water heaters, and HVAC systems.<sup>134</sup> The Project would benefit from Statewide and utility-provider efforts towards increasing the portion of electricity provided from renewable resources. The utility provider for the Project, LADWP, currently provides 30 percent of electricity via renewable sources, but has committed to providing 50 percent by 2025, 55 percent by 2030, and 65 percent by 2036.<sup>135,136</sup> As these targets were determined prior to the passage of SB 100, LADWP would also be required to comply with the RPS goals as discussed above in Subsection 2.a.2.d, *Energy*.<sup>137</sup> The Project would achieve the LEED Silver Certification level or equivalent green building standards as committed to in Project Design Feature GHG-PDF-1. The Project would also benefit from Statewide efforts towards increasing the fuel economy standards of vehicles. The Project would support reducing VMT given its location at an infill site close to existing transit options, including the existing Metro bus routes (e.g., 18, 60, 62, 720) and a Greyhound station located at the southwest corner of 7th Street and Decatur Street, all located within 0.3 miles of the Project Site. The closest LADOT stop for the LADOT DASH Loop A is located at the intersection of Molino Street and Palmetto Street, approximately 0.28 miles northwest of the Project Site. The closest Metro light rail stations are the Metro L (Gold) Line Pico/Aliso Station, located approximately 0.7 miles from the Project Site and the Little Tokyo/Arts District Station, located approximately 2.0 miles from the Project Site.

The 2017 Scoping Plan (adopted in December 2017) 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.<sup>138</sup> 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

<sup>134</sup> Energy + Environmental Economics (E3), *Summary of the California State Agencies' PATHWAYS Project: Long-Term Greenhouse Gas Reduction Scenarios*, April 6, 2015.

<sup>135</sup> CEC, *Utility Annual Power Content Labels for 2017*, July 2018.

<sup>136</sup> LADWP, *2017 Power Strategic Integrated Long-Term Resource Plan*, December 2017, p. ES-18.

<sup>137</sup> Note that LADWP will incorporate the targets of SB 100 into the upcoming 2018 Power Strategic Long-Term Resource Plan (see: [https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-renewableenergy/a-p-renewableenergypolicy?\\_afWindowId=qgysh2515\\_1&\\_afLoop=61924918578548&isNoLocale=true&\\_afWindowMode=0&\\_adf.ctrl-state=qgysh2515\\_4](https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-renewableenergy/a-p-renewableenergypolicy?_afWindowId=qgysh2515_1&_afLoop=61924918578548&isNoLocale=true&_afWindowMode=0&_adf.ctrl-state=qgysh2515_4)). Accessed May 27, 2020.

<sup>138</sup> CEC, *2016 Existing Buildings Energy Efficiency Plan Update*, December 2016.

Scoping Plan, the Project would support or not impede implementation of these potential GHG reduction strategies identified by CARB for all the reasons summarized in Table IV.E-4.

Even though the 2017 Scoping Plan and supporting documentation do not provide an exact regulatory and technological roadmap to achieve 2050 goals, they demonstrate that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study or not currently feasible at the time the 2017 Scoping Plan was adopted could enable the State to meet the 2050 targets.<sup>139</sup> For example, the 2017 Scoping Plan states some policies are not feasible at this time, such as Net Zero Carbon Buildings, but that this type of policy would be necessary to meet the 2050 target.

In June 2018, an updated report was published on the California PATHWAYS model, which was used in the preparation of the 2017 Scoping Plan. This updated report determined that “meeting the state’s 2030 climate goals requires scaling up and using technologies already in the market such as energy efficiency and renewables, while pursuing aggressive market transformation of new technologies that have not yet been utilized at scale in California (for example, zero-emission vehicles and electric heat pumps).”<sup>140</sup> Priority GHG reduction strategies include energy efficiency in buildings, renewable energy, and smart growth through increased use of public transit, walking, biking, telepresence, and denser, mixed-use community design. The Project would not conflict with these strategies given it would incorporate energy efficient measures as part of meeting the LEED Silver Certification level or equivalent green building standards including water efficiency measures in Project Design Feature WS-PDF-1, minimizing energy use to support efforts by its utility provider, LADWP, to obtain renewable energy pursuant to State mandates, and be located in an HQTA that would lead to reduced vehicle trips and VMT through increased use of public transit and alternative modes of transportation for guests and employees. Specifically regarding VMT, the 2017 Scoping Plan PATHWAYS model High Electrification Scenario, which is defined in the modeling report as a scenario that “meets the state’s climate goals using a plausible low-cost, low-risk combination of GHG mitigation technologies,” assumes a 12 percent reduction in per capita light-duty vehicle miles traveled relative to 2015 by 2030 and a 24 percent reduction

<sup>139</sup> E3, Summary of the California State Agencies’ PATHWAYS Project: Long-Term Greenhouse Gas Reduction Scenarios, April 6, 2015; Greenblatt, Jeffrey, “Modeling California Impacts on Greenhouse Gas Emissions,” *Energy Policy*, Vol. 78, 2015, pp. 158–172. The CARB, CEC, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the State’s goal of reducing GHG emissions to 80% below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation, and electricity sectors.

<sup>140</sup> CEC, Energy Research and Development Division, *Final Project Report, Deep Decarbonization in a High Renewables Future Updated Results from the California PATHWAYS Model*, June 2018.

in per capita light-duty vehicle miles traveled relative to 2015 by 2050.<sup>141</sup> However, it should be noted that the state has not identified project-specific goals or targets for individual development projects or new construction to reach this statewide goal. Furthermore, The Project would support the priority market transformation strategy of zero-emission light-duty vehicles by providing for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into a minimum of 30 percent of the parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations. As such, the Project would not conflict with the findings relevant to the Project from the updated California PATHWAYS model report.

With Statewide efforts underway to facilitate the State’s achievement of those goals, it is reasonable to expect the Project’s GHG emissions to decline from their opening year levels as reported in Table IV.E-7, below, as the regulatory initiatives identified by CARB in the 2017 Scoping Plan are implemented, and other technological innovations occur. Stated differently, the Project’s emissions at buildout likely represents the maximum emissions for the Project as anticipated regulatory developments and technology advances are expected to reduce emissions associated with the Project, such as emissions related to electricity use and vehicle use.

Based on the analysis above, the Project would be consistent with CARB’s Scoping Plans (i.e., 2008 Scoping Plan, 2014 Scoping Plan, and 2017 Scoping Plan) and given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would be consistent with the State’s GHG reduction targets for 2030 and 2050. Therefore, impacts would be less than significant.

(ii) *SCAG’s 2020–2045 RTP/SCS*

Transportation-related GHG emissions would be the largest source of emissions from the Project. This finding is consistent with the findings in regional plans, including the 2020–2045 RTP/SCS, which recognizes that the transportation sector is the largest contributor to the State’s GHG emissions. At the regional level, the 2020–2045 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs.

The purpose of the SCAG 2020–2045 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 2020–2045 RTP/SCS, certified on May 7, 2020, states that “[e]ach [Metropolitan Planning Organization] is required to prepare an SCS as part of their RTP in order to meet these GHG emissions reduction targets by aligning transportation, land use, and housing strategies with respect to [Senate Bill] 375.”<sup>142</sup> The 2020–2045 RTP/SCS seeks improved mobility and

<sup>141</sup> CEC, Energy Research and Development Division, *Final Project Report, Deep Decarbonization in a High Renewables Future Updated Results from the California PATHWAYS Model*, pp. 12, 16, and 19, June 2018.

<sup>142</sup> SCAG, *Program Environmental Impact Report – 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy*, May 2020, p. 3.8-73.

accessibility, which is defined as “the ability to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices.”<sup>143</sup> The 2020–2045 RTP/SCS seeks to implement strategies that “alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation.”<sup>144</sup> As part of the 2020–2045 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.”<sup>145</sup> Moreover, the 2020–2045 RTP/SCS states that while “[t]ransportation emissions are most prevalent relative to all other sectors in California and specifically in the SCAG region,” the 2020–2045 RTP/SCS would focus “growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions.”<sup>146</sup>

In order to assess the Project’s potential to conflict with the 2020–2045 RTP/SCS, this section analyzes the Project’s land use characteristics for consistency with the strategies and policies set forth in SCAG’s 2020–2045 RTP/SCS to meet GHG emission-reduction targets set by CARB.<sup>147</sup> Generally, projects are considered consistent with applicable City and regional land use plans and regulations, such as SCAG’s 2020–2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. As discussed below, the Project would be consistent with the 2020–2045 RTP/SCS goals and benefits intended to improve mobility and accessibility for people, increase travel choices within the transportation system, encourage development of diverse housing types in areas that are supported by multiple transportation options, and reduce GHG emissions and improve air quality.<sup>148</sup> Therefore, the Project would be consistent with the GHG reduction-related actions and strategies contained in the 2020–2045 RTP/SCS. Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use.

<sup>143</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, p. 129.

<sup>144</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, p. 51.

<sup>145</sup> SCAG, *Program Environmental Impact Report – 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy*, May 2020, p. 3.8-62.

<sup>146</sup> SCAG, *Program Environmental Impact Report – 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy*, May 2020, pp. 3.8-14 and -65.

<sup>147</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, pp. 21 and 46. The actions and strategies included in the 2020–2045 RTP/SCS are similar to, and consistent with in the 2012–2035 and 2016–2040 RTP/SCS. For instance, as discussed in the 2020–2045 RTP/SCS, planning for more housing and jobs near transit was a strategy incorporated in SCAG’s first RTP/SCS in 2012 and carried forward in the 2016 RTP/SCS with a focus on areas that are well served by transit. Furthermore, as stated on p. 46 of the 2020–2045 RTP/SCS, “Rooted in the 2008 and 2012 RTP/SCS plans, Connect SoCal’s “Core Vision” centers on maintaining and better managing the transportation network we have for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.”

<sup>148</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, p. 9.

## (a) Consistency with Integrated Growth Forecast

The 2020–2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG’s Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. According to SCAG’s 2020–2045 RTP/SCS, the population in the City was estimated to be 3,962,680 in 2017<sup>149</sup> and the Project’s earliest projected buildout year, 2026, the projected occupancy year of the Project, the City of Los Angeles Subregion is projected to have a population of approximately 4,222,593 in 2026.<sup>150</sup> As discussed in Section IV.J, *Population and Housing*, of this Draft EIR, the Project would provide housing for approximately 743 people. The estimated 743 new residents generated by the Project would represent approximately 0.3 percent of the population growth forecasted by SCAG in the City between 2017 and 2026.

As discussed in Section IV.J, *Population and Housing*, of this Draft EIR, the Project would generate approximately 4,523 net new employees (see Section IV.J, *Population and Housing*, of this Draft EIR for additional details). As shown in Table IV.J-4, in Section IV.J, *Population and Housing*, of this Draft EIR, the Project’s net total of 4,630 employees would comprise 5.2 percent of SCAG’s estimated employment growth between year 2017–2026 estimated growth of 89,254 employees within the City. Accordingly, the Project’s generation of residents and employees would be consistent with the population and employment projections contained in the 2020–2045 RTP/SCS. Refer to Section IV.H, *Land Use and Planning*, of this Draft EIR, for additional information regarding consistency with the 2020–2045 RTP/SCS.

## (b) Consistency with VMT Reduction Strategies and Policies

Consistent with SCAG’s 2020–2045 RTP/SCS alignment of transportation, land use, and housing strategies, the Project would accommodate increases in population, households, employment, and travel demand. As discussed below, the Project Site is an infill location close to jobs, housing, shopping and entertainment uses and in close proximity to existing 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 Project would concentrate new multi-family and hotel uses and neighborhood-serving office, commercial retail and restaurant uses within an HQTAs in an urban infill location in proximity to multiple public transit stops. The Project would also provide bicycle storage areas for Project residents and four major pedestrian

<sup>149</sup> SCAG, *2020–2045 RTP/SCS*, Demographics and Growth Forecast Technical Report, May 2020, TABLE 14 Jurisdiction-Level Growth Forecast, p. 35. Based on a linear interpolation of 2016–2045 data.

<sup>150</sup> SCAG, *2020–2045 RTP/SCS*, Demographics and Growth Forecast Technical Report, May 2020, Table 13 County Forecast of Population, Households, and Employment, p. 29. Based on a linear interpolation of 2020–2030 data. As stated in Subsection 3.b.2, Quantification of Greenhouse Gas Emissions, for emissions modeling purposes, the Project’s emissions were calculated assuming buildout in 2025. However, the Project would be completed as early as 2026.



passageways (Entry Plazas) are proposed between Mesquit Street and the eastern edge of the Project Site. The Entry Plazas would be located between each of Buildings 1 through 5. Three of the Entry Plazas would provide midblock access through the Project to its eastern edge, including landscaped balconies at the northerly end of Building 1 (North River Balcony) and the southerly end of Building 4, which would support active transportation options and transit access, including access to public transportation within 1.0 miles of the Project Site, including the existing Metro bus routes (e.g., 18, 60, 62, 720) and a Greyhound station located at the southwest corner of 7th Street and Decatur Street, all located within 0.3 miles of the Project Site. The closest LADOT stop for the LADOT DASH Loop A is located at the intersection of Molino Street and Palmetto Street, approximately 0.28 miles northwest of the Project Site. The closest Metro light rail stations are the Metro L (Gold) Line Pico/Aliso Station, located approximately 0.7 miles from the Project Site and the Little Tokyo/Arts District Station, located approximately 2.0 miles from the Project Site. The high employment density of the Central City North Community Plan area supports the expectation that projects located in the area would provide walkability and high potential for transit usage by Project employees and visitors.<sup>151</sup>

Further, as discussed in the Project's TA, the Project's specific location and intense mixed-use design in close proximity to high-quality transit, including the Metro L (Gold) Line and multiple bus routes, its close proximity to other off-site retail, restaurant, entertainment, commercial, and job destinations, and its highly walkable environment support the conclusion from this analysis that the Project has been located so that its development would minimize VMT.<sup>152</sup>

Further, the Project would support the development of new transit connections for the Arts District, the growth of multi-modal transit infrastructure, and help foster engagement with the Los Angeles River through the provision of landscaped open space. The Project would create multi-modal access directly from the 7th Street Bridge via the southerly River Balcony to an elevated pedestrian walkway, as well as via the new pedestrian connections between the 7th Street Bridge and Building 5 near the southwestern corner of the Project site. Additionally, the Project proposes a new pedestrian crosswalk on the 7th Street Bridge to provide pedestrian access to the Project site near Building 4.

The Project design includes characteristics that would reduce trips and VMT when compared to a standard project within the Air Basin as measured by CalEEMod. These relative reductions in vehicle trips and VMT from a standard project within the Air Basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in an infill, HQTAs area that promotes alternative modes of transportation. Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which

<sup>151</sup> City of Los Angeles, Health Atlas for the City of Los Angeles, Figure 33: Employment Density by Community Plan Area in 2010. The Central City North Community Plan has a higher employment density than half of the 37 Community Plan Areas.

<sup>152</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order to provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.<sup>153</sup> The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown in Appendix C, Air Quality and Greenhouse Gas Emissions Appendix, and the Project's TA, included as Appendix M-1 of this Draft EIR,<sup>154</sup> incorporation of USEPA MXD VMT reduction features applicable to the Project results in a 22.5 percent reduction in overall VMT for the Project and resultant pollutant emissions and in a 22.4 percent reduction in overall VMT for the Project with the Deck Concept and resultant pollutant emissions.

The Project would be consistent with the following key GHG reduction strategies in SCAG's 2020–2045 RTP/SCS, which are based on changing the region's land use and travel patterns in the following key areas:<sup>155</sup>

- Compact growth in areas accessible to transit;
- More multi-family housing;
- Locate jobs and housing in proximity to transit;
- Locate housing and job growth focused in HQTAs; and
- Biking and walking infrastructure to improve active transportation options and transit access.

The Project represents an infill development within an HQTAs, which is defined by the 2020–2045 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 miles of a well-served transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.<sup>156</sup> As previously discussed, the Project Site is located within 1.0-miles of public transportation, including the Metro L (Gold) Line Pico/Aliso Station and Metro bus routes. In addition, the Project would also provide on-site bicycle parking to support the proposed on-site uses in accordance with the proposed Mesquit Specific Plan. The Project would provide a minimum of 288 short-term and 519 long-term bicycle parking spaces, and would include bicycle lockers and showers for Project residents and employees. The Project would provide residents and visitors with access to public transit and opportunities for walking and biking, which would facilitate a

<sup>153</sup> USEPA, Mixed-Use Trip Generation Model, <https://www.epa.gov/smartgrowth/mixed-use-trip-generation-model>. Accessed March 10, 2021.

<sup>154</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>155</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, pp. 3, 9, 10, 21, 26, 46, 49, 50, 52, and 69.

<sup>156</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, pp. 23 and 51.

reduction in VMT and related vehicular GHG emissions. These and other measures, including internal capture of vehicle trips from the Project's mix of uses<sup>157</sup> and pass-by trips, would further promote a reduction in VMT and subsequent reduction in GHG emissions, which would be consistent with the goals of SCAG's 2020–2045 RTP/SCS.<sup>158</sup> The Project's consistency with the applicable goals set forth in the 2020–2045 RTP/SCS is discussed in Section IV.J, *Land Use and Planning*, and Table LU-1, *Project Consistency with Applicable Goals of the 2020–2045 RTP/SCS*, provided in Appendix I-1 of this Draft EIR. As concluded therein, the Project would not conflict with applicable goals of the 2020–2045 RTP/SCS.

By locating the Project's proposed restaurant, retail, office, hotel and residential land uses within an area that has existing public transit (with access to existing bus and rail service), employment opportunities, restaurants and entertainment, all within walking distance, and by including features that support and encourage pedestrian activity and other non-vehicular transportation and increased transit use in the Downtown area of Los Angeles, the Project would reduce vehicle trips and VMT, and resulting air pollution and GHG emissions. Therefore, by developing a land use pattern that promotes sustainability, the Project's characteristics developed at its location would achieve many of the objectives of SCAG's 2020–2045 RTP/SCS. As such, the Project would be consistent with regional plans to reduce VMT and associated GHG emissions.

(c) Increased Use of Alternative Fueled Vehicles Policy Initiative

The 2020–2045 RTP/SCS policy initiative focuses on providing charge port infrastructure and accelerating fleet conversion to electric or other near zero-emission technologies.<sup>159</sup> The Project would support this policy by providing for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into a minimum of 30 percent of the parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations.

(d) Energy Efficiency Strategies and Policies

The 2020–2045 RTP/SCS includes strategies for individual developments, such as the Project, to improve energy efficiency (e.g., reducing energy consumption) to reduce GHG emissions.<sup>160</sup> As discussed above under Subsection 3.c, *Project Design Features*, Project design would include Project Design Feature GHG-PDF-1: Green Building Features, where the Project will be designed to achieve the equivalent of the USGBC LEED Silver Certification level for new buildings. The Project will demonstrate compliance

<sup>157</sup> Internal capture of vehicle trips refers to trips generated by a mixed-use development that would begin and end within the development.

<sup>158</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>159</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, p. 70.

<sup>160</sup> SCAG, *2020–2045 RTP/SCS*, May 2020, p. 49: strategies fall under 4 categories: Focus Growth Near Destinations & Mobility Options; Promote Diverse Housing Choices; Leverage Technology Innovations; Support Implementation of Sustainability Policies; Promote a Green Region, see p. 49 of the SCAG, 2020–2045 RTP/SCS for additional details.

with the LEED Silver Certification or equivalent green building standards by providing architectural and engineering documentation, building energy modeling simulations, and other supporting evidence consistent with USGBC accepted documentation standards. In addition, the Project would reduce indoor and outdoor water use and the Project design would incorporate Project Design Feature WS-PDF-1, which includes water conservation features including, but not limited to: high efficiency toilets, with a flush volume of 1.06 gallons of water per flush, or less; domestic water heating system located in close proximity to point(s) of use, where feasible; leak detection system for swimming pools and Jacuzzis; drip/subsurface irrigation (Micro-Irrigation); proper hydro-zoning/zoned irrigation (group plants with similar water requirements together); drought-tolerant plants – 62 percent of total landscaping; water conserving turf – 3 percent of total landscaping with a 0.6 Plant Factor being committed; automated pool chemical delivery system; and installation of thermal pool covers on all outdoor pools/spas (see Section IV.N.2, *Water Supply*, of this Draft EIR for additional details).

(e) Land Use Characteristics

In order to assess the Project's consistency with the 2020–2045 RTP/SCS, this Draft EIR also analyzes the Project's land use characteristics such as density and proximity to job centers for consistency with those utilized by SCAG in its SCS. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as the 2020–2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The Project's consistency with the applicable land use goals set forth in the 2020–2045 RTP/SCS is discussed in Section IV.J, *Land Use and Planning*, and Table LU-1, *Project Consistency with Applicable Goals of the 2020–2045 RTP/SCS*, provided in Appendix I-1 of this Draft EIR. As concluded therein, the Project would not conflict with applicable land use goals of the 2020–2045 RTP/SCS.

(iii) L.A.'s Green New Deal (Sustainability 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 L.A.'s Green New Deal (Sustainable City' pLAn 2019). While not intended 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.E-5, Comparison of Project Characteristics to Applicable City of Los Angeles Green New Deal Goals and Actions**, contains a list of GHG emission-reducing strategies applicable to the Project. The analysis describes the consistency of the Project with these GHG emissions-reduction goals and actions. As discussed in Table IV.E-5, the Project would be consistent with and would not conflict with the applicable goals and actions of these plans. In addition, as discussed below, the Project would also result in GHG reductions beyond those specified by the City and would minimize its GHG emissions by incorporating energy efficient design features and VMT

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

**TABLE IV.E-5  
COMPARISON OF PROJECT CHARACTERISTICS TO APPLICABLE CITY OF LOS ANGELES  
GREEN NEW DEAL GHG EMISSIONS GOALS AND ACTIONS**

Target	Project Consistency
<b>Chapter 3: Local Water</b>	
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.	The Project would support or not impede implementation of this action/strategy. The Project would reduce water use via the CALGreen Code, which requires water efficient fixtures and would also include water conservation features described in Project Design Feature WS-PDF-1, Water Conservation Features (refer to Section IV.N.2, <i>Water Supply</i> , of this Draft EIR for additional details)
<b>Chapter 4: Clean and Healthy Buildings</b>	
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/sf in 2015).	The Project would support or not impede implementation of this action/strategy. The Project is designed and would operate to meet or exceed the applicable requirements of the CALGreen Code and the Green Building Code and meet the standards of the USGBC LEED Silver Certification level or equivalent green building standards. The Project would optimize building energy performance with a 12 percent reduction from the LEED v4 baseline consistent with LEED requirements as described in Project Design Feature GHG-PDF-1. As a result, the Project would be consistent with and would not conflict with the City's action to reduce energy use from buildings.
All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.	The Project would support or not impede implementation of this action/strategy. The Project would comply with the State's and City's requirements that are designed to reduce GHG emissions over time, including the LA Green Building Code, Title 24, and other increasingly stringent energy conservation programs. The Project will demonstrate compliance with the LEED Silver Certification or equivalent green building standards by providing architectural and engineering documentation, building energy modeling simulations, and other supporting evidence consistent with USGBC accepted documentation standards as described in Project Design Feature GHG-PDF-1. As a result, the Project would also help the City move toward a net zero carbon future.

**TABLE IV.E-5  
COMPARISON OF PROJECT CHARACTERISTICS TO APPLICABLE CITY OF LOS ANGELES  
GREEN NEW DEAL GHG EMISSIONS GOALS AND ACTIONS**

Target	Project Consistency
<b>Chapter 5: Housing &amp; Development</b>	
Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035.	The Project would support or not impede implementation of this action/strategy. The Project would provide 308 net new market-rate and affordable units thus supporting the City's new housing goals in future years.
Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025; and 75 percent by 2035.	The Project would support or not impede implementation of this action/strategy. The Project would reduce VMT as a result of its urban infill location, with nearby access to public transportation within 0.3 miles, including the existing Metro bus routes (e.g., 18, 60, 62, 720) and a Greyhound station located at the southwest corner of 7th Street and Decatur Street. In addition, the closest Metro light rail stations are the Metro L (Gold) Line Pico/Aliso Station, located approximately 0.7 miles from the Project Site; the Little Tokyo/Arts District Station, located approximately 2.0 miles from the Project Site; and Union Station, located approximately 1.5 miles from the Project Site. As a result, the Project's location and design are consistent with and would not conflict with this City action.
<b>Chapter 6: Mobility &amp; Public Transit</b>	
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.	The Project would support or not impede implementation of this action/strategy. The Project would facilitate pedestrian and bicycle movements by providing access to and from on-site uses from the four mid-block Entry Plazas between Buildings 1 through 5. The Entry Plazas would provide access from Mesquit Street through the Project Site to the Elevated Pedestrian Walkway and the River Balconies along the eastern edge of the Project Site, overlooking the Los Angeles River, Ribbon of Light Bridge, the proposed PARC Improvements, and Boyle Heights. The Entry Plaza between Buildings 4 and 5 would provide a public connection from the Mesquit Paseo through the Project Site to the 7th Street Bridge. The North River Balcony would connect to the Project Site's Northern Landscaped Area and proposed PARC Improvements to the north, and the potential future 6th Street/Arts District Metro light rail station. The Project would provide a new pedestrian corridor along the eastern edge of the Project Site overlooking the Los Angeles River that would serve as a link between the 7th Street Bridge and the Ribbon of Light Bridge. Pedestrian access from the south would be provided directly from the 7th Street Bridge via the South River Balcony to the Elevated Pedestrian Walkway, as well as via the Entry Plaza between Buildings 4 and 5 that would connect to the Mesquit Paseo. Alternately, pedestrian access from the north would be provided from the Northern Landscaped Area, which would connect to the North River Balcony and the Elevated Pedestrian Walkway (see Chapter II, <i>Project Description</i> , of this Draft EIR for additional details). The Project

**TABLE IV.E-5  
COMPARISON OF PROJECT CHARACTERISTICS TO APPLICABLE CITY OF LOS ANGELES  
GREEN NEW DEAL GHG EMISSIONS GOALS AND ACTIONS**

Target	Project Consistency
<p>Reduce VMT per capita by at least 13 percent by 2025; 39 percent by 2035; and 45 percent by 2050.</p>	<p>would locate residential, hotel, office, retail and restaurant uses on an infill Project Site located within a walkable area of Downtown Los Angeles with access to public transit and employment opportunities, restaurants and entertainment. The Project would provide a minimum of 288 short-term and 519 long-term bicycle parking spaces to encourage the utilization of alternative modes of transportation.</p> <p>Additionally, the Project would co-locate its complementary residential, hotel, office, retail, and restaurant land uses, which are in close proximity to existing off-site commercial and residential uses. In addition, the Line Pico/Aliso Station is located 0.7 miles from the Project Site; the Little Tokyo/Arts District Station is located approximately 2.0 miles from the Project Site; and Union Station is located approximately 1.5 miles from the Project Site. The Metro L (Gold) Line stations provide service between Downtown Los Angeles and Pasadena, as well as the larger San Gabriel Valley. Union Station and 7th Street/Metro Center provide connections between Downtown and the Metro A (Blue), L (Gold), E (Expo), D (Purple), and B (Red) Lines and various bus lines, as well as the regional rail system (Metrolink).</p> <p>The Project would support or not impede implementation of this action/strategy. As indicated in the VMT analysis in Section IV.L, <i>Transportation</i>, of this Draft EIR, the results of the analysis show that the daily residential VMT per capita and the daily work VMT per employee is below the threshold for the Central APC. Therefore, the Project's residential VMT per capita and employee VMT per capita would not result in a significant transportation impact. In addition, the Project is an infill Project within an urbanized area of Los Angeles adjacent to existing and future public transportation, the proximity to which would serve to reduce VMT per capita.</p>
<b>Chapter 7: Zero Emission Vehicles</b>	
<p>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.</p>	<p>The Project would support or not impede implementation of this action/strategy. The Project would designate a minimum of eight percent of on-site parking for carpool and/or alternative-fueled vehicles. In addition, the Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into a minimum of 30 percent of the parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations.</p>

**TABLE IV.E-5  
COMPARISON OF PROJECT CHARACTERISTICS TO APPLICABLE CITY OF LOS ANGELES  
GREEN NEW DEAL GHG EMISSIONS GOALS AND ACTIONS**

Target	Project Consistency
<b>Chapter 9: Waste &amp; Resource Recovery</b>	
Increase landfill diversion rate to 90 percent by 2025; 95 percent by 2035 and 100 percent by 2050.	The Project would support or not impede implementation of this action/strategy. The Project would be served by a solid waste collection and recycling service that may include mixed waste processing. Mixed waste processing yields waste diversion results comparable to source separation and, as such, would be consistent with and would not conflict with Citywide recycling targets.
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).	The Project would support or not impede implementation of this action/strategy. The Project would be served by a solid waste collection and recycling service which would participate in City trash services, including separating trash from recycling through the use of blue and green recycling bins provided by LASAN.
Eliminate organic waste going to landfill by 2028.	The Project would support or not impede implementation of this action/strategy. The Project consists of a mixed-use development, which would participate in City trash services, including the participation in the organic waste recycling program pursuant to AB 1826 (see Section IV.N.3, <i>Solid Waste</i> , of this Draft EIR).
<b>Chapter 11: Urban Ecosystems &amp; Resilience</b>	
Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035.	The Project would support or not impede implementation of this action/strategy. The Project would include the addition of 180 trees (24-inch boxes), including street trees at the Project Site that would provide shade and reduce the urban heat island effect. At present, there are no trees located on the Project Site. The Project's design includes 141,876 square feet of common open space accessible by all Project residents including approximately 40,006 square feet of landscaped open space. The Project would be consistent with and would not conflict with the City's goal to reduce the heat island effect, with measures such landscaped open space and the addition of canopy trees.
Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65 percent by 2025; 75 percent by 2035; and 100 percent by 2050.	The Project would support or not impede implementation of this action/strategy. The Project's design includes 141,876 square feet of common open space accessible by all Project residents including approximately 40,006 square feet of landscaped open space. In addition, the Project Site has access to six neighborhood parks located within a two-mile radius; 62 community parks located within a five-mile radius; and 23 regional parks located within a 10-mile radius (see Section IV.K.4, <i>Public Services – Parks and Recreation</i> , of this Draft EIR for more information). As a result, the Project is consistent with and would not conflict with this action.

SOURCE(S): City of Los Angeles, L.A.'s Green New Deal (Sustainable City pLAn 2019), 2019; ESA, 2021.



As this analysis demonstrates, the Project would be consistent with and would support goals and targets of the L.A.'s Green New Deal (Sustainable City pLAn 2019).

(iv) *Los Angeles Green Building Code*

As memorialized in Project Design Feature GHG-PDF-1 and Project Design Feature WS-PDF-1, the Project would comply with the Los Angeles Green Building Code to reduce GHG emissions by increasing energy-efficiency beyond requirements, reducing indoor and outdoor water demand, and complying with the 2019 California Title 24 Building Energy Efficiency Standards, as amended by the City. As per Project Design Feature GHG-PDF-1, the Project would be designed to optimize energy performance and reduce building energy cost, consistent with the building energy performance standards of the Los Angeles Green Building Code.<sup>161</sup> The Project would also meet the mandatory measures of the CALGreen Code as amended by the City by incorporating strategies such as low-flow toilets, low-flow faucets, low-flow showers, and other energy and resource conservation measures. The heating, ventilation, and air conditioning (HVAC) system would be sized and designed in compliance with the CALGreen Code to maximize energy efficiency caused by heat loss and heat gain. Therefore, the Project would be consistent with the Los Angeles Green Building Code.

(v) *Conclusion*

In conclusion, the Project's consistency with applicable GHG reduction plans and policies plan as discussed above and as presented in Table IV.E-4 and Table IV.E-5, demonstrate that the Project would be generally consistent with regulations and policies and comply with or exceed the regulations and reduction actions/strategies outlined in the Climate Change Scoping Plan, 2020–2045 RTP/SCS, the L.A.'s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code. **Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to GHG emissions would be less than significant.**

(a) *Project with the Deck Concept*

As stated in Chapter II, *Project Description*, the Project with the Deck Concept would construct a Deck that extends over the off-site Railway Properties east of the Project Site. All operational components related to the project location, land uses proposed, compliance with regulations, and implementation of Project Design Features would be similar to that of the Project. Regarding all other land uses aside from the Deck, since the Project with the Deck Concept would locate the same types of land uses as the Project

<sup>161</sup> As explained above, the Project's building energy is modeled based on compliance with the 2019 Title 24 Building Energy Standards that would be consistent with the LAGBC regarding building energy performance as the LAGBC adopts by reference the California Green Building Standards Code and there were no amendments regarding Building Energy Standards. It is not known exactly the extent to which the Project's energy improvements achieved through LEED Silver Certification or equivalent green building standards process would exceed the 2019 Title 24 Building Energy Standards at the time of buildout. Therefore, the Project's building energy-related emissions may be lower than analyzed in this Draft EIR and the analysis provided herein is a conservative estimate.

(i.e., office, hotel, residential, commercial (food hall, grocery, retail, restaurant), studio/event/gallery, and gym), in the same HQTA-designated location as the Project, and would implement the same energy and water efficiency measures as the Project, the Project with the Deck Concept would be similarly consistent with GHG reduction plans, policies and regulations as the Project. Thus, the conclusions regarding impact significance presented above are the same and apply to the Project and the Project with the Deck Concept. The addition of the Deck would increase the outdoor public open space by 132,000 square feet compared to the Project. As with the Project, the Deck would be located within an HQTA-designated location, which would also encourage utilization of alternative mode of transportation in support of the applicable GHG emission reduction plans and policies included within the 2017 Climate Change Scoping Plan, the SCAG 2020–2045 RTP/SCS, the City of L.A.’s Green New Deal (Sustainable City pLAn 2019), and Los Angeles Green Building Code. Therefore, the Project with the Deck Concept would be generally consistent with regulations and policies and comply with or exceed the regulations and reduction actions/strategies outlined in the Climate Change Scoping Plan, 2020–2045 RTP/SCS, the L.A.’s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code. **Therefore, the Project with the Deck Concept would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to GHG emissions would be less than significant.**

(b) *Quantification and Comparison of GHG Emissions  
Calculation of Greenhouse Gas Emissions*

As described above, compliance with a GHG emissions reduction plan renders a project less than significant. In support of the consistency analysis which describes the Project’s compliance with or exceedance of performance-based standards included in the regulations and policies outlined in the applicable portions of the Climate Change Scoping Plan, the 2020–2045 RTP/SCS, the Sustainable City pLAn, and the LA Green Building Code, quantitative calculations are provided below. The Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Project is provided below.

(i) *Construction Emissions*

The emissions of GHGs associated with construction of the Project were calculated for each year of construction activity using CalEEMod and EMFAC. Construction would be completed in approximately 5.3 years. Results of the GHG emissions calculations are presented in **Table IV.E-6, *Estimated Unmitigated Construction Greenhouse Gas Emissions***. As presented therein, construction of the Project is anticipated to generate approximately 25,931 MTCO<sub>2e</sub>.

**TABLE IV.E-6  
ESTIMATED UNMITIGATED CONSTRUCTION GHG EMISSIONS**

<b>Emission Source</b>	<b>CO<sub>2</sub>e (Metric Tons)<sup>a,b</sup></b>
Construction Year 1	5,318
Construction Year 2	5,185
Construction Year 3	4,733
Construction Year 4	4,879
Construction Year 5	4,372
Construction Year 6	1,445
<b>Total</b>	<b>25,931</b>
Amortized Over 30 Years	864

NOTE(S):

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C of this Draft EIR.

<sup>b</sup> CO<sub>2</sub>e emissions are calculated using the global warming potential values from the IPCC AR4.

SOURCE(S): ESA, 2020.

It is estimated that 531,319 cubic yards (cy) of soil would be hauled from the Project Site during the grading and excavation phase. Emissions from haul trucks and continuous pour concrete trucks were estimated outside of CalEEMod using EMFAC2017 emission factors for heavy-duty trucks. It should be noted that the GHG emissions shown in Table IV.E-6 are based on construction equipment operating continuously throughout the work day. In reality, construction equipment tends to operate periodically or cyclically throughout the work day. Therefore, the GHG emissions shown reflect a conservative estimate.

Although GHGs are generated during construction and are accordingly considered one-time emissions, it is important to include them when assessing all of the long-term GHG emissions associated with a project. As recommended by the SCAQMD, construction-related GHG emissions were amortized over a 30-year project lifetime in order to include these emissions as part of a project's annualized lifetime total emissions. In accordance with this methodology, the estimated Project's construction GHG emissions have been amortized over a 30-year period and are added to the annualized operational GHG emissions.

*(ii) Operational Emissions*

The Project's annual GHG emissions included emissions from operations and construction calculated by CalEEMod and EMFAC2017 for mobile source emissions. As previously described, construction GHG emissions for the entire construction period were amortized over 30 years. The Project must comply with the portions of the City's Green

Building Code and State’s CALGreen Code / California Title 24 Building Energy Efficiency requirements applicable to the Project, and meeting these requirements are assumed in the quantitative analysis below. The Project would implement energy and water efficiency measures in listed in Project Design Features GHG-PDF-1 and WS-PDF-1 and from energy saving measures from the LEED Silver Certification level or equivalent green building standards that would result in a 12 percent reduction from the LEED baseline consistent with LEED requirements.<sup>162</sup>

As explained above, the Project’s mobile source emission calculations associated with the Project are calculated using the VMT from the TA prepared by Fehr & Peers for the Project.<sup>163</sup> The trip lengths are based on the location and urbanization of the project area. The average trip length of each land use is the sum of the trip length of each trip type multiplied by the percentage of trip type. The Project’s mobile source emissions are calculated based on the Project’s VMT obtained from the Project’s TA,<sup>164</sup> which accounts for Project related reductions in trip generation and VMT due to the Project’s infill nature, location, and design (refer to Section IV.L, *Transportation*, of this Draft EIR, for a discussion of the transportation demand management features).

As discussed above, the Project Site’s land use characteristics and the Project’s TA<sup>165</sup> demonstrate that the Project’s VMT would be reduced compared to a standard non-infill project and based on its location efficiency. The total VMT reduction taken due to the land use characteristics was 22.4 due to Land Use/Location Transportation measures for compact/infill projects such as the proposed Project.<sup>166</sup>

Maximum annual net GHG emissions resulting from on road mobile sources, emergency generators, cooling towers, area sources (landscape maintenance equipment and natural gas commercial fireplaces), energy (i.e., electricity, natural gas), water conveyance and wastewater treatment, and solid waste were calculated for the Project buildout year. The Project’s total and net GHG emissions from operation of the Project are shown in **Table IV.E-7, *Estimated Unmitigated Operational Greenhouse Gas Emissions – Project***.

<sup>162</sup> For the LEED V4 checklist, baseline is determined by ASHRAE Standard 90.1–2010. However, the Project’s building energy is modeled based on compliance with the 2019 Title 24 Building Energy Standards that is aligned with the ASHRAE Standard 90.1–2017. It is not known exactly the extent to which the Project’s energy improvements achieved through LEED Silver Certification or equivalent green building standards process would exceed the 2019 Title 24 Building Energy Standards at the time of buildout. Therefore, the Project’s building energy-related emissions may be lower than analyzed in this Draft EIR and the analysis provided herein is a conservative estimate.

<sup>163</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>164</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>165</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

<sup>166</sup> Fehr & Peers, *Transportation Assessment for the 670 Mesquit Project*, April 2021.

**TABLE IV.E-7  
ESTIMATED UNMITIGATED OPERATIONAL GREENHOUSE GAS EMISSIONS – PROJECT**

Emissions Sources	CO <sub>2</sub> e at Buildout Year (Metric Tons per Year) <sup>a</sup>	
	Proposed Project without Reduction Features	Proposed Project with PDFs
<b>Proposed Project Operational</b>		
Mobile Sources	33,064	25,633 <sup>b</sup>
Emergency Generators	99	99
Cooling Tower	242	164
Area	2,183	40
Electricity	9,697	7,910
Natural Gas	2,533	2,519
Water and Wastewater Treatment	1,209	917
Solid Waste	1,308	1,308
Heliport <sup>c</sup>	162	162
Construction (Amortized)	864	864
<i>Proposed Project Subtotal</i>	<i>51,363</i>	<i>39,617</i>
Existing Site (refer to Table IV.E-3)	2,067	2,067
<b>Net Total (Project minus Existing)</b>	<b>49,296</b>	<b>37,550</b>

## NOTE(S):

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations.

<sup>b</sup> Mobile source GHG emissions for the Project do not account for reduced VMT from implementation of Mitigation Measure TRAF-MM-1 (Transportation Demand Management [TDM] Program). Refer to Section IV.L, *Transportation*, for a discussion of Mitigation Measure TRAF-MM-1 TDM requirements. With implementation of Mitigation Measure TRAF-MM-1, mobile emissions for the Project would be 23,167 metric tons CO<sub>2</sub>e, and the Project total net GHG emissions would be 32,797 metric tons CO<sub>2</sub>e.

<sup>c</sup> Estimate of Heliport GHG emissions adapted from Appendix C of Appendix IV.O of the Climate Change Technical Report Wilshire Grand Development Project.

SOURCE(S): ESA, 2021.

As discussed previously, State, regional, and local GHG reduction plans and policies, such as CARB's Climate Change Scoping Plan, 2020–2045 RTP/SCS, and L.A.'s Green New Deal (Sustainable City pLAN 2019) would be applicable to the Project. These plans and policies are intended to reduce GHG emissions in accordance with the goals of AB 32. In order to evaluate the efficacy of the GHG reduction characteristics, features, and measures that would be implemented as part of the Project as required by these GHG reduction plans and policies, this analysis compares the Project's GHG emissions to the emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures. This comparison is provided to

evaluate the Project's efficiency with respect to GHG emissions but is not the threshold of significance used for impact analysis. The analysis assumes the Project without implementation of GHG reduction characteristics, features, and measures would incorporate the same land uses and building square footage as the Project, and does not include certain VMT reductions from the Project's TA and land use characteristics, such as increased destination accessibility and increased transit ability and the implementation of Project Design Feature GHG-PDF-1, as provide above, and Project Design Feature WS-PDF-1, as provided in Section IV.N.2, *Water Supply*, of this Draft EIR.

While other methodologies for calculating Project GHG reduction efficiencies exist, a comparison of Project GHG reduction efforts compared to a Project without Reduction Features scenario provides valuable information regarding the efficiency of the Project's GHG reduction features and is presented here for informational purposes only. This analysis compares the Project's GHG emissions to the emissions that would be generated by the Project in the absence of any GHG reduction features. It is not a threshold of significance, and is not used as the basis for any significance finding. Furthermore, this analysis is consistent with the most current regulatory policies and GHG quantification methods, however the scientific, regulatory environment regarding GHG reduction, and CEQA approaches for GHG analysis are constantly evolving and will continue to do so into the future.

The quantification of GHG emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures is based on specific and defined circumstances in the context of relevant State activities and mandates. The GHG emissions for the Project without Reduction Features scenario is evaluated based on the specific and defined circumstances that CARB relied on when it projected the State's GHG emissions in the absence of GHG reduction measures in the 2014 Scoping Plan and 2017 Scoping Plan. The defined circumstances used by CARB include conditions that existed during 2009 to 2011, which include the vehicle fleet that existed during that same period and the 2008 Title 24 Building Energy Efficiency Standards. Furthermore, the specific Project Site characteristics and Project Design Features such as Project Design Feature GHG-PDF-1 (Green Building Features) and Project Design Feature WS-PDF-1 (Water Conservation Features) were not included as part of the calculations using the CalEEMod tool as they encompass GHG reduction strategies and features that would be consistent with State, regional, and local GHG reduction plans and policies or would go above and beyond regulatory requirements (for complete list of assumptions refer to Appendix C of this Draft EIR).

When considering only the Project's emissions, Table IV.E-7 show that the Project's operational emissions of 37,550 MTCO<sub>2e</sub> in 2025 would be approximately 25 percent below the emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures. Thus, this analysis quantitatively demonstrates the efficiency of the Project GHG reduction measures as set forth in the applicable GHG reduction plans and policies. The 25 percent reduction in emissions

between the two analyzed scenarios (i.e., Project scenario and Project without Reduction Features scenario) is due to the following primary factors:

- **Reduction in vehicle trips and VMT associated with the Project's land use characteristics.** As discussed above, based on the Project's TA, Project related reductions in trip generation and VMT are expected due to the Project's infill nature, location, and design. For the Project, these characteristics account for approximately a 22 percent reduction in VMT and an approximately 16 percent reduction in total Project GHG emissions in the first operational year.
- **Water conservation features.** As discussed in Section IV.N.2, *Water Supply*, the Project would reduce water consumption by 13 percent for indoor water and 52 percent for outdoor water from the base water demand that is based on LASAN sewage generation rates. The reductions would be achieved through strategies such as the installation of water efficient fixtures that exceed applicable standards and water efficient landscaping (refer to Section IV.N.2, *Water Supply*, of this Draft EIR). Based on the water demand values were from LADWP's Water Supply Assessment, for the Project, the water conservation features would account for an approximately 24 percent reduction in water conveyance and wastewater treatment source emissions, and an approximately 0.6 percent reduction in total Project GHG emissions in the first operational year.
- **Optimize Building Energy Performance and Lower carbon intensity of electricity.** As discussed under Subsection 3.c, *Project Design Features*, above, the Project will optimize building energy performance with a 12 percent reduction from the LEED baseline consistent with LEED requirements.<sup>167</sup> In addition, under the RPS, LADWP is required to reduce the carbon intensity of their electricity. The carbon intensity of LADWP electricity is 730.6 lbs/MWh for the Project without implementation of GHG reduction characteristics, features, and measures scenario. As discussed above, the future year CO<sub>2</sub> emission factor of 626.48 lbs/MWh, used for 2025, was scaled proportionately based on the future year renewable energy targets of 47 percent by 2025, refer to Appendix C for additional details).<sup>168,169</sup> For the Project, these features account for approximately a 18 percent reduction in electricity emissions and an approximately four percent reduction in total Project GHG emissions in the first operational year.

It is important to note that the total net Project emissions in Table IV.E-7 do not reflect the fact that Project operational-related GHG emissions would likely decline in future years as

<sup>167</sup> For the LEED V4 checklist, baseline is determined by ASHRAE Standard 90.1–2010. However, the Project's building energy is modeled based on compliance with the 2019 Title 24 Building Energy Standards that is aligned with the ASHRAE Standard 90.1–2017. It is not known exactly the extent to which the Project's energy improvements achieved through LEED Silver Certification or equivalent green building standards process would exceed the 2019 Title 24 Building Energy Standards at the time of buildout. Therefore, the Project's building energy-related emissions may be lower than analyzed in this Draft EIR and the analysis provided herein is a conservative estimate.

<sup>168</sup> LADWP, *2016 Briefing Book*, 2016.

<sup>169</sup> CEC, *Utility Energy Supply Plans from 2015*, LADWP modified December 6, 2016, [http://www.energy.ca.gov/almanac/electricity\\_data/s-2\\_supply\\_forms\\_2015/](http://www.energy.ca.gov/almanac/electricity_data/s-2_supply_forms_2015/). Accessed February 27, 2020.

emissions reduction plans, policies and regulations at the state, local and regional level (including the RTP/SCS and Scoping Plan, discussed above) are achieved and as the State’s Cap-and-Trade program is continued. Emissions related to electricity would decline as utility providers, including LADWP, meet their RPS obligations to provide electricity from 33 percent renewable electricity sources by 2020, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. Emissions from mobile sources would also decline in future years as older vehicles are replaced with newer vehicles, resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017–2025 Pavley Phase II standards.

(iii) *Post Buildout Emissions*

Executive Orders S-3-05 and B-30-25 establish a goal 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 2008 Scoping Plan, CARB acknowledged that the “measures needed to meet the 2050 goal are too far in the future to define in detail.”<sup>170</sup> In the 2014 Scoping Plan, 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.”<sup>171</sup> 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.”<sup>172</sup> For example, the 2017 Scoping Plan acknowledges that “though Zero 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.”<sup>173</sup>

- **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.<sup>174</sup> Additionally, further technological

<sup>170</sup> CARB, *Climate Change Scoping Plan*, December 2008, p. 117.

<sup>171</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, p. 32.

<sup>172</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017.

<sup>173</sup> CARB, *California’s 2017 Climate Change Scoping Plan*, November 2017.

<sup>174</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, pp. 37–39 and 85.



improvements and additions to California’s renewable resource portfolio would favorably influence the Project’s emissions level.<sup>175</sup>

- **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.<sup>176</sup>
- **Water Sector:** The Project’s emissions level will be reduced as a result of further enhancements to water conservation technologies.<sup>177</sup>
- **Waste Management Sector:** Plans to further improve recycling, reuse, and reduction of solid waste will beneficially reduce the Project’s emissions level.<sup>178</sup>

The Air Quality and Greenhouse Gas Technical Appendix, provided in Appendix C of this Draft EIR, 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 relative to the 2050 goal is speculative for purposes of CEQA. Despite the thorough investigation performed, due to the uncertainty regarding specific State and local actions that will be implemented to achieve the 2050 GHG emission reduction targets, calculating Project emissions levels for 2050 would be highly speculative. 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. Stated differently, the Project’s emissions total at buildout represents the maximum emissions inventory for the Project as California’s emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State’s environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would be consistent with the Executive Orders’ goals.

*(iv) Project with the Deck Concept*

Construction of the Project with the Deck Concept would require similar construction activities as the Project. In addition, the amount of maximum daily construction equipment would be the same for the Project with the Deck Concept. Overall, the Project would require a similar or slightly reduced duration of construction compared to the Project with the Deck Concept given that the Deck would not be constructed under the Project. However, total construction GHG emissions when amortized over a 30-year lifetime would not substantially differ between the Project and the Project with the Deck Concept. For the purposes of the analysis, construction emissions calculations are conservatively based on the Project with the Deck Concept. As such, the GHG emissions calculated in the analysis above also reflects GHG emissions associated with the construction of the Project with the

<sup>175</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, pp. 40–41.

<sup>176</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, pp. 55–56.

<sup>177</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, p. 65.

<sup>178</sup> CARB, *First Update to the AB 32 Scoping Plan*, May 2014, p. 69.

Deck Concept. Thus, the conclusions regarding impact significance presented above are the same and apply to the Project and the Project with the Deck Concept.

Maximum annual operational net GHG emissions resulting from on road mobile sources, emergency generators, cooling towers, area sources (landscape maintenance equipment and natural gas commercial fireplaces), energy (i.e., electricity, natural gas), water conveyance and wastewater treatment, and solid waste were calculated for the Project with the Deck Concept.<sup>179</sup> The Project's total and net GHG emissions from operation of the Project are shown in **Table IV.E-8, *Estimated Unmitigated Operational Greenhouse Gas Emissions – Project with the Deck Concept***, below. The Project with the Deck Concept's operational emissions of 35,700 MTCO<sub>2</sub>e (i.e., at buildout) would be approximately 25 percent below the emissions that would be generated by the Project with the Deck Concept without implementation of GHG reduction characteristics, features, and measures. The analysis quantitatively demonstrates the efficiency of the Project with the Deck Concept's GHG reduction measures as set forth in the applicable GHG reduction plans and policies. The 25 percent reduction in emissions is due to the primary factors as discussed above for the Project, which include the reduction in vehicle trips and VMT associated with the Project with the Deck Concept's land use characteristics, water conservation features, and building energy performance and lower carbon intensity of electricity. The total net GHG emissions for the Project with the Deck Concept in Table IV.E-8 do not reflect the fact that the operational-related GHG emissions would decline in future years as emissions reduction plans, policies and regulations at the state, local and regional level (including the RTP/SCS and Scoping Plan, discussed above) are achieved and as the State's Cap-and-Trade program is continued. Emissions related to electricity would decline as utility providers, including LADWP, meet their RPS obligations to provide electricity from 33 percent renewable electricity sources by 2020, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. Emissions from mobile sources would also decline in future years as older vehicles are replaced with newer vehicles, resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017–2025 Pavley Phase II standards. Regarding the addition of the Deck, which would increase the outdoor public open space by 132,000 square feet, the Project with the Deck Concept's location in an HQTAs would also encourage utilization of alternative modes of transportation in support of the applicable GHG emission reduction plans and policies included within the 2017 Climate Change Scoping Plan, the SCAG 2020–2045 RTP/SCS, the City of L.A.'s Green New Deal (Sustainable City pLAN 2019), and Los Angeles Green Building Code.

<sup>179</sup> Maximum annual operational net GHG emissions resulting from the Project with the Deck Concept would have increased on road mobile sources due to increased trips, electricity due to increased lighting for the deck, as compared to the Project. All other emission sources, emergency generators, cooling towers, area sources (landscape maintenance equipment and natural gas commercial fireplaces), natural gas, water conveyance and wastewater treatment, and solid waste were the same between the Project with the Deck Concept and the Project.

**TABLE IV.E-8  
ESTIMATED UNMITIGATED OPERATIONAL GREENHOUSE GAS EMISSIONS – PROJECT WITH THE  
DECK CONCEPT**

<b>CO<sub>2</sub>e at Buildout Year (Metric Tons per Year)<sup>a</sup></b>		
<b>Emissions Sources</b>	<b>Proposed Project without Reduction Features</b>	<b>Proposed Project With PDFs</b>
<b>Proposed Project Operational</b>		
Mobile Sources	33,600	26,058
Emergency Generators	99	99
Cooling Tower	242	164
Area	2,183	40
Electricity	9,713	7,923
Natural Gas	2,533	2,519
Water and Wastewater Treatment	1,209	917
Solid Waste	1,308	1,308
Heliport <sup>b</sup>	162	162
Construction (Amortized)	864	864
<i>Proposed Project Subtotal</i>	<i>51,914</i>	<i>40,055</i>
Existing Site (refer to Table IV.E-3)	2,067	2,067
<b>Net Total (Project minus Existing)</b>	<b>49,847</b>	<b>37,988</b>

## NOTE(S):

- <sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations.
- <sup>b</sup> Estimate of Heliport GHG emissions adapted from Appendix C of Appendix IV.O of the Climate Change Technical Report Wilshire Grand Development Project.
- <sup>c</sup> Mobile source GHG emissions for the Project do not account for reduced VMT from implementation of Mitigation Measure TRAF-MM-1 (Transportation Demand Management [TDM] Program). Refer to Section IV.L, *Transportation*, for a discussion of TRAF-MM-1 TDM requirements. With implementation of TRAF-MM-1 TDM requirements, mobile emissions for the Proposed Project would be 23,556 metric tons CO<sub>2</sub>e, and the Proposed Project total net GHG emissions would be 33,199 metric tons CO<sub>2</sub>e.

SOURCE(S): ESA, 2021.

(v) *Conclusion*

As set forth above, the Project would generate incrementally increased GHG emissions over existing conditions. However, even a very large individual project would not generate enough GHG emissions on its own to significantly influence global climate change. Moreover, as also discussed above, the Project would be consistent with the Climate Change Scoping Plan, 2020–2045 RTP/SCS, L.A.’s Green New Deal (Sustainable City pLAN 2019), and the LA Green Building Code. The Project’s consistency with these applicable regulatory plans and policies to reduce GHG emissions, along with implementation of Project Design Features as discussed in this Draft EIR, particularly

Project Design Feature GHG-PDF-1 (Green Building Features) in Subsection 3.c, *Project Design Features*, and Project Design Feature WS-PDF-1 (Water Conservation Features) in Section IV.N.2, *Water Supply*, of this Draft EIR, would reduce the Project's GHG emissions by approximately 25 percent for both scenarios (i.e., Project scenario and Project without Reduction Features scenario). In summary, the plan consistency analysis provided above demonstrates that the Project's design features are consistent with regulations and policies and comply with or exceed the regulations and reduction actions/strategies outlined in the Climate Change Scoping Plan, 2020–2045 RTP/SCS, L.A.'s Green New Deal (Sustainable City pLAN 2019), and the LA Green Building Code. **Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to GHG emissions and climate change would be less than significant.**

(a) Project with the Deck Concept

As with the Project, the Project with the Deck Concept would generate incrementally increased GHG emissions over existing conditions. All operational components related to the project location, land uses proposed, compliance with regulations, and implementation of Project Design Features would be similar to that of the Project. Thus, the conclusions regarding impact significance presented above are the same and apply to the Project and the Project with the Deck Concept. In addition, as the Deck would increase the outdoor public open space by 132,000 square feet, this would further encourage utilization of alternative modes of transportation. As explained in Section IV.H, *Land Use and Planning*, the Deck would provide expanded pedestrian access to the residents, visitors, and employees on the Project Site as compared to the Project. Pedestrians would be able to move from the Mesquit Street Level to the 7th Street Level and Deck via the Entry Plazas. With the inclusion of the Deck, the Project with the Deck Concept and the proposed 7th Street Bridge connection would increase accessibility of Mesquit Street from the surrounding streets and neighborhoods. The Deck would allow for expanded pedestrian connections and connectivity to the surrounding amenities as compared to the Project in support of the applicable GHG emission reduction plans and policies included within the 2017 Climate Change Scoping Plan, the SCAG 2020–2045 RTP/SCS, the City of L.A.'s Green New Deal (Sustainable City pLAN 2019), and Los Angeles Green Building Code. **Therefore, the Project with the Deck Concept would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and Project-specific impacts with regard to GHG emissions and climate change would be less than significant.**

(2) Mitigation Measures

Impacts regarding GHG emissions and conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs were determined to be less than significant without mitigation. Therefore, no mitigation measures are required.

### (3) Level of Significance after Mitigation

Impacts regarding GHG emissions and conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

## e) Cumulative Impacts

As analyzed above, the Project and the Project with the Deck Concept would have slight differences in quantified GHG emissions. However, despite the variance in the quantified GHG emissions, the consistency of the Project or the Project with the Deck Concept to applicable GHG plans, policies and regulations would be essentially the same. Thus, the conclusions regarding the cumulative impact analysis, impact significance and mitigation measures presented below are the same and apply to the Project or the Project with the Deck Concept.

### (1) Impact Analysis

Although the Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. The State has mandated a goal of reducing Statewide emissions to 1990 levels by 2020 and reducing Statewide emissions to 40 percent below 1990 levels by 2030, even though Statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce Statewide GHG emissions. Currently, there are no applicable CARB, SCAQMD, or City of Los Angeles quantitative significance thresholds or specific quantitative reduction targets for determining significance at the project or cumulative levels. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3),<sup>180</sup> the City, as lead agency, has determined that the Project's contribution to

<sup>180</sup> As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project 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 plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

cumulative GHG emissions and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions: AB 32 Climate Change Scoping Plan, SCAG's 2020–2045 RTP/SCS, L.A.'s Green New Deal (Sustainable City pLAn 2019), and the Los Angeles Green Building Code.

Table IV.E-4 illustrates that implementation of the Project's regulatory requirements and Project Design Features, including State mandates, would contribute to GHG reductions. These reductions represent a reduction from the Project without Reduction Features scenario and support State goals for GHG emissions reduction. The methods used to establish this relative reduction are consistent with the approach used in CARB's Climate Change Scoping Plan for the implementation of AB 32.

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

As part of SCAG's 2020–2045 RTP/SCS, a reduction in VMT within the region is a key component to achieving the 2020 and 2035 GHG emission reduction targets established by CARB. As discussed previously, the Project Site's land use characteristics and the Project's TA demonstrate that the Project's VMT would be reduced compared to a standard non-infill project and based on its location efficiency, mix of uses, and implementation of Mitigation Measure TRAF-MM-1, which requires implementation of a TDM Program.

Additionally, the Project has incorporated sustainability design features in accordance with regulatory requirements as provided throughout this Draft EIR and project design features to reduce VMT and to reduce the Project's potential impact with respect to GHG emissions. With implementation of these features, compared to the Project without Reduction Features scenario, for the Project, these features account for approximately a 25 percent reduction in total GHG emissions in the first operational year.

As discussed in Section IV.A, *Air Quality*, and in Section IV.H, *Land Use and Planning*, of this Draft EIR, the Project would be consistent with applicable land use policies of the City of Los Angeles and SCAG pertaining to air quality, including reducing GHG emissions.

The Project also would support the goals of L.A.'s Green New Deal (Sustainable City pLAn 2019), as shown in Table IV.E-5, which emphasizes improving energy conservation and energy efficiency, increasing renewable energy generation, and changing transportation and land use patterns to reduce auto dependence. The Project would also comply with the Los Angeles Green Building Code, which emphasizes improving energy conservation and energy efficiency, and increasing renewable energy generation. The

Project's regulatory requirements and project design features provided above and throughout this Draft EIR would advance these objectives. Furthermore, the related projects would also be anticipated to comply with many of these same emissions reduction goals and objectives (e.g., Los Angeles Green Building Code).

As discussed above, the Project is consistent with the applicable GHG reduction plans and policies. The comparison of the Project's emissions to a scenario without GHG reduction features demonstrates the efficacy of the measures contained in these policies. Moreover, while the Project is not directly subject to the Cap-and-Trade Program, that Program would indirectly reduce the Project's GHG emissions by regulating "covered entities" that affect the Project's GHG emissions, including energy, mobile, and construction emissions. More importantly, the Cap-and-Trade Program will backstop the GHG reduction plans and policies applicable to the Project in that the Cap-and-Trade Program will be responsible for relatively more emissions reductions if California's direct regulatory measures reduce GHG emissions less than expected. The Cap-and-Trade Program will ensure that the GHG reduction targets of AB 32 and SB 32 are met.

The 2017 Scoping Plan demonstrates that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030. Even though the 2017 Scoping Plan and supporting documentation do not provide an exact regulatory and technological roadmap to achieve the 2050 goal, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target. Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, which would require CARB to ensure that Statewide GHG are reduced to 40 percent below the 1990 emissions level by 2030. As discussed above, the new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

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

*(a) Project with the Deck Concept*

As analyzed above, the Project and the Project with the Deck Concept would have slight differences in quantified GHG emissions. However, despite the variance in the quantified GHG emissions, the consistency of either option to applicable GHG plans, policies and regulations would be essentially the same. Thus, the conclusions regarding the cumulative impact analysis, impact significance and consistency with GHG reduction plans, policies, and regulations provided above are the same and apply to the Project or

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

## (2) Mitigation Measures

Cumulative impacts regarding GHG emissions were determined to be less than significant without Mitigation Measures. Therefore, no mitigation measures are required.

## (3) Level of Significance after Mitigation

Cumulative impacts regarding GHG emissions were determined to be less than significant without mitigation measures. Therefore, no mitigation measures are required, and the impact level would be less than significant.