

IV. Environmental Impact Analysis

D. Energy

1. Introduction

This section analyzes impacts on energy resources due to construction and operation of the Project. Section 15126.2 (b) of the California Environmental Quality Act (CEQA) Guidelines states that a project's energy use shall be analyzed to determine the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, as well as being compliant with building codes and renewable energy features. Appendix G of the State CEQA Guidelines checklist, Section VI, *Energy*, includes questions to assist lead agencies when assessing a project's potential energy impacts. Additionally, State CEQA Guidelines **Appendix F** provides guidance on information to use when evaluating a project's energy use.

In accordance with the applicable Appendix G sections and utilizing guidance from Appendix F of the State CEQA Guidelines, this EIR includes relevant information and analyses that address the energy implications of the Project, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). Detailed energy calculations can be found in Appendix F of this Draft EIR. Information found herein, as well as other aspects of the Project's energy implications, are discussed in greater detail elsewhere in this Draft EIR, including in Chapter II, *Project Description*, and Sections IV.A, *Air Quality*, IV.F, *Greenhouse Gas Emissions*, and IV.M.2, *Water Supply*.

2. Environmental Setting

a) Regulatory Framework

There are several plans, regulations, and programs that include policies, requirements, and guidelines regarding energy at the federal, state, regional, and City of Los Angeles levels that apply to the Project. As described below, these plans, guidelines, and laws include the following:

- Energy Independence and Security Act of 2007
- Corporate Average Fuel Economy Standards
- Federal Energy Policy and Conservation Act
- Phase 1 and 2 Heavy-Duty Vehicle GHG Standards

- Public Utility Regulatory Policies Act of 1978
- National Energy Policy Act of 1992
- Energy Policy Act of 2005
- Clean Air Act
- Energy Independence and Security Act of 2007
- Clean Cities Program
- California Senate Bill 1389
- Renewables Portfolio Standards
- California Building Standards
 - California Building Energy Efficiency Standards
 - California Green Building Standards
- California Assembly Bill 1493
- California Air Resources Board
 - Scoping Plan
 - Advanced Clean Car Program
 - Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
 - In-Use Off-Road Diesel Fueled Fleets Regulation
- California Senate Bill 375
- Regional Transportation Plan/Sustainable Communities Strategy
- Green New Deal
- Green Building Code
- City of Los Angeles Mobility Plan 2035
- City of Los Angeles All-Electric Buildings

(1) Federal

(a) *Energy Independence and Security Act of 2007*

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

- Increasing the supply of alternative fuel sources by setting mandatory Renewable Fuel Standards (RFS) that require 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
- Superseded by U.S. Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) actions described below by (i) establishing miles per gallon (mpg) 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.”¹

(b) Corporate Average Fuel Economy Standards

Established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards (49 CFR Parts 531 and 533) reduce energy consumption by increasing the fuel economy of cars and light trucks. The NHTSA and the United States Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for (1) technological feasibility, (2) economic practicality, (3) effect of other standards on fuel economy, and (4) need for the nation to conserve energy. When these standards are raised, automakers respond by creating a more fuel-efficient fleet. In 2012, the NHTSA established final passenger car and light truck CAFE standards for model years 2017 through 2021, which the agency projects will require in model year 2021, on average, a combined fleet-wide fuel economy of 40.3 to 41.0 mpg. Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.² USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027

¹ 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.

² United States Environmental Protection Agency, Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, 2011.

and require the phase-in of a 5- to 25-percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.³

In March 2020, the USEPA and NHTSA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE standards for model year 2020 are 43.7 mpg for passenger cars and 31.3 mpg for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. However, consistent with President Biden's executive order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.⁴

(c) Federal Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 (EPCA) is a United States Act of Congress that responded to the 1973 oil crisis by creating a comprehensive approach to federal energy policy. The primary goals of EPCA are to increase energy production and supply, reduce energy demand, provide energy efficiency, and give the executive branch additional powers to respond to disruptions in energy supply. Most notably, EPCA established the Strategic Petroleum Reserve, the Energy Conservation Program for Consumer Products, and CAFE regulations.

(d) Phase 1 and 2 Heavy-Duty Vehicle GHG Standards

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by U.S. EPA and the National Highway Traffic Safety Administration (NHTSA). The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.³ The U.S. EPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.

³ United States Environmental Protection Agency, Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, 2018.

⁴ United States District Court for the District Court of Columbia, Union of Concerned Scientists, et al., v. National Highway Traffic Safety Administration, USCA Case No. 19-1230 and consolidated cases (D.C. Cir. 2020) (February 21, 2021 order holding cases in abeyance held in abeyance pending further order of the court and directing the government to file status reports on the agencies' review of the One National Program at 90-day intervals beginning 90 days from the date of the order). Available online at: <https://www.4cleanair.org/wp-content/uploads/Documents/UCS-v-NHTSA-Industry%20Petitioners-Brief-6-26-20.pdf>, accessed February 2022.

(e) *Public Utility Regulatory Policies Act of 1978 (PURPA),
Public Law 95-617*

PURPA sought to promote conservation of electric energy. Additionally, PURPA created a new class of nonutility generators (small power producers) from which, along with qualified co-generators, utilities are required to buy power.

PURPA was in part intended to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers. Utility companies are required to buy all electricity from qualifying facilities (Qfs) at avoided cost (i.e., the incremental savings associated with not having to produce additional units of electricity). PURPA expanded participation of nonutility generators in the electricity market and demonstrated that electricity from nonutility generators could successfully be integrated with a utility's own supply. In addition, PURPA requires utilities to buy whatever power is produced by Qfs (usually cogeneration or renewable energy). The Fuel Use Act (FUA) of 1978 (repealed in 1987) also helped Qfs become established. Under FUA, utilities were not allowed to use natural gas to fuel new generating technologies, but Qfs, by definition not utilities, were able to take advantage of abundant natural gas and abundant new technologies (such as combined-cycle). The technologies lowered the financial threshold for entrance into the electricity generation business as well as shortened the lead time for constructing new plants.

(f) *National Energy Policy Act of 1992 (EPACT92)*

EPACT92 calls for programs that promote efficiency and the use of alternative fuels. EPACT92 requires certain federal, state, and local government and private fleets to purchase a percentage of light duty alternative fuel vehicles (AFV) capable of running on alternative fuels each year. In addition, EPACT92 has financial incentives. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Act also requires states to consider a variety of incentive programs to help promote AFVs.

(g) *Energy Policy Act of 2005*

The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

(h) *Clean Air Act*

Clean Air Act (CAA). CAA Section 211(o), as amended by the Energy Policy Act of 2005, requires the Administrator of the U.S. EPA to annually determine a renewable fuel standard (RFS) which is applicable to refineries, importers, and certain blenders of gasoline, and to publish the standard in the Federal Register by November 30 each year. On the basis of this standard, each obligated party determines the volume of renewable fuel that it must ensure is consumed as motor vehicle fuel. This standard is calculated as a percentage, by dividing the amount of renewable fuel that the Act requires to be blended

into gasoline for a given year by the amount of gasoline expected to be used during that year, including certain adjustments specified by the CAA.

(i) *Energy Independence and Security Act of 2007*

EISA is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it:

- Increases 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, which represents a nearly five-fold increase over current levels; and
- Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020. (an increase in fuel economy standards of 40 percent)

(j) *Clean Cities Program*

The U.S. Department of Energy's (DOE) Clean Cities Program promotes voluntary, locally based government/industry partnerships for the purpose of expanding the use of alternatives to gasoline and diesel fuel by accelerating the deployment of AFVs and building local AFV refueling infrastructure. The mission of the Clean Cities Program is to advance the nation's economic, environmental and energy security by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption. The Clean Cities Program carries out this mission through a network of more than 80 volunteer coalitions, which develop public/private partnerships to promote alternative fuels and vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction.

(2) State

(a) *Senate Bill 1389*

Senate Bill (SB) 1389 (Public Resources Code (PRC) Sections 25300–25323; SB 1389) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (PRC Section 25301[a]). The 2020 Integrated Energy Policy Report, the latest published report from CEC, provides the results of the CEC's assessments related to energy sector trends, building decarbonization and energy efficiency, zero-emission vehicles (ZEV), energy equity, climate change adaptation, electricity reliability in Southern California, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts.

(b) *Renewables Portfolio Standards*

First established in 2002 under SB 1078, California's Renewables Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible

renewable energy resources to 33 percent by 2020 and 50 percent by 2030. SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent and (2) to double the energy savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. On September 10, 2018, former Governor Jerry Brown signed SB 100, which further increased California's RPS and requires 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, and that the California Air Resources Board (CARB) should plan for 100-percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include (1) determining annual procurement targets and enforcing compliance, (2) reviewing and approving each investor-owned utility's renewable energy procurement plan, (3) reviewing contracts for RPS-eligible energy, and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

In March 2021, the CEC, CPUC, and CARB issued an SB 100 Joint Agency Report that assesses barriers and opportunities to implementing the 100-percent clean electricity policy. The report's initial findings suggest that the goals of SB 100 are achievable, though opportunities remain to reduce overall system costs; however, the report also notes that the findings are intended to inform state planning and are not intended as a comprehensive or prescriptive roadmap to 2045, and future work is needed on critical topics, such as system reliability and land use, and further addresses energy equity and workforce needs. Refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR for additional details regarding this regulation.

(c) *California Building Standards*

(i) *California Building Energy Efficiency Standards (Title 24, Part 6)*

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2022 Title 24 standards, effective on January 1, 2023. The 2022 Title 24 standards continue to improve upon the previous versions of Title 24 standards for new construction of, and additions and alterations to, residential and nonresidential buildings, which include efficiency improvements to the residential standards for attics, walls, water heating, and lighting, and efficiency improvements to the non-residential standards include alignment with the

American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2017 national standards.⁵

(ii) *California Green Building Standards (Title 24, Part 11)*

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) are commonly referred to as the CALGreen Code. The 2019 CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.⁶ The 2019 CALGreen Code improves upon the 2016 CALGreen Code by updating standards for bicycle parking, electric vehicle charging, and water efficiency and conservation. The 2019 CALGreen Code went into effect on January 1, 2020. On August 11, 2021, the CEC adopted the 2022 Title 24 Standards, which were approved by the California Building Standards Commission for inclusion into the California Building Standards Code in December 2021. The 2022 standards encourage efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 standards.⁷ Refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR for additional details regarding these standards.

(d) *California Assembly Bill 1493 (AB 1493, Pavley)*

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO₂) emissions, Assembly Bill (AB) 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set greenhouse gas (GHG) emission standards for new passenger vehicles, light duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017-2025.^{8,9} In March 2020, the National Highway Traffic Safety Administration (NHTSA) and the USEPA issued the SAFE Vehicles Rule, which amends existing CAFE standards and tailpipe CO₂ emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026. Refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR for additional details regarding this regulation.

⁵ California Energy Commission, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, 2018.

⁶ California Building Standards Commission, Guide to the 2016 California Green Building Standards Code Nonresidential, 2018.

⁷ California Energy Commission, 2022 Building Energy Efficiency Standards.

⁸ California Air Resources Board, Clean Car Standards—Pavley, Assembly Bill 1493.

⁹ 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, 2012.

(e) *California Air Resources Board*(i) *Scoping Plan*

The Scoping Plan is a greenhouse gas emission (GHG) reduction roadmap developed and updated by the California Air Resources Board (CARB) at least once every five years, as required by Assembly Bill (AB) 32. It lays out the transformations needed across various sectors to reduce GHG emissions and reach the State's climate targets. CARB published the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update) in November 2022, as the third update to the initial plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 target of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual activities.¹⁰ The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG targets. The 2013 Scoping Plan Update (adopted in 2014) assessed progress toward achieving the 2020 target and made the case for addressing short-lived climate pollutants (SLCPs).¹¹ The 2017 Scoping Plan Update,¹² shifted focus to the newer Senate Bill (SB) 32 goal of a 40 percent reduction below 1990 levels by 2030 by laying out a detailed cost-effective and technologically feasible path to this target, and also assessed progress towards achieving the AB 32 goal of returning to 1990 GHG levels by 2020. The 2020 goal was ultimately reached in 2016, four years ahead of the schedule called for under AB 32.

The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. It identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan.¹³ The 2030 target is an interim but important stepping stone along the critical path to the broader goal of deep decarbonization by 2045. The relatively longer path assessed in the 2022 Scoping Plan Update incorporates, coordinates, and leverages many existing and ongoing efforts to reduce GHGs and air pollution, while identifying new clean technologies and energy. Given the focus on carbon neutrality, the 2022 Scoping Plan Update also includes discussion for the first time of the natural and working lands

¹⁰ CARB. 2008. Climate Change Scoping Plan. ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.

¹¹ CARB. 2014. First Update to the Climate Change Scoping Plan. ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

¹² CARB. 2017. California's 2017 Climate Change Scoping Plan. ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

¹³ CARB, California's 2017 Climate Change Scoping Plan, 2017, ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

sectors as sources for both sequestration and carbon storage, and as sources of emissions as a result of wildfires. **Table IV.D-1**, *Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan*, shows the estimated Statewide GHG emissions reductions estimated in the 2022 Scoping Plan.

TABLE IV.D-1
ESTIMATED STATEWIDE GREENHOUSE GAS EMISSIONS REDUCTIONS IN THE
2022 SCOPING PLAN

Emissions Scenario	GHG Emissions (MMTCO _{2e})
2019	
2019 State GHG Emissions	404
2030	
2030 BAU Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by AB 32 (i.e., 1990 level by 2030)	260
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2030	52 (16.7%) ^a
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	(3)

MMTCO_{2e} = million metric tons of carbon dioxide equivalents; parenthetical numbers represent negative values.

^a $312 - 260 = 52$. $52 / 312 = 16.7\%$

SOURCE: CARB, Final 2022 Climate Change Scoping Plan, November 2022.

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

Table IV.D-2, *Major Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan*, provides a summary of major climate legislation and executive orders issued since the adoption of the 2017 Scoping Plan.

TABLE IV.D-2
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE
2017 SCOPING PLAN

Bill/Executive Order	Summary
<p>Assembly Bill 1279 (AB 1279) (Muratsuchi, Chapter 337, Statutes of 2022) <i>The California Climate Crisis Act</i></p>	<p>AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that the Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage (CCUS) technologies.</p> <p>This bill is reflected directly in the 2022 Scoping Plan Update.</p>
<p>Senate Bill 905 (SB 905) (Caballero, Chapter 359, Statutes of 2022) <i>Carbon Capture, Removal, Utilization, and Storage Program</i></p>	<p>SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology.</p> <p>The bill requires CARB, on or before January 1, 2025, to adopt regulations creating a unified state permitting application for approval of CCUS and CDR projects. The bill also requires the Secretary of the Natural Resources Agency to publish a framework for governing agreements for two or more tracts of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project.</p> <p>The 2022 Scoping Plan Update modeling reflects both CCUS and CDR contributions to achieve carbon neutrality.</p>
<p>Senate Bill 846 (SB 846) (Dodd, Chapter 239, Statutes of 2022) <i>Diablo Canyon Powerplant: Extension of Operations</i></p>	<p>SB 846 extends the Diablo Canyon Power Plant's sunset date by up to five additional years for each of its two units and seeks to make the nuclear power plant eligible for federal loans. The bill requires that the California Public Utilities Commission (CPUC) not include and disallow a load-serving entity from including in their adopted resource plan, the energy, capacity, or any attribute from the Diablo Canyon power plant.</p> <p>The 2022 Scoping Plan Update explains the emissions impact of this legislation.</p>
<p>Senate Bill 1020 (SB 1020) (Laird, Chapter 361, Statutes of 2022) <i>Clean Energy, Jobs, and Affordability Act of 2022</i></p>	<p>SB 1020 adds interim renewable energy and zero carbon energy retail sales of electricity targets to California end-use customers set at 90 percent in 2035 and 95 percent in 2040. It accelerates the timeline required to have 100 percent renewable energy and zero carbon energy procured to serve state agencies from the original target year of 2045 to 2035. This bill requires each state agency to individually achieve the 100 percent goal by 2035 with specified requirements. This bill requires the CPUC, California Energy Commission (CEC), and CARB, on or before December 1, 2023, and annually thereafter, to issue a joint reliability progress report that reviews system and local reliability.</p> <p>The bill also modifies the requirement for CARB to hold a portion of its Scoping Plan workshops in regions of the state with the most significant exposure to air pollutants by further specifying that this includes communities with minority populations or low-income communities in areas designated as being in extreme federal non-attainment.</p> <p>The 2022 Scoping Plan Update describes the implications of this legislation on emissions.</p>

Bill/Executive Order	Summary
<p>Senate Bill 1137 (SB 1137) (Gonzales, Chapter 365, Statutes of 2022) <i>Oil & Gas Operations: Location Restrictions: Notice of Intention: Health protection zone: Sensitive receptors</i></p>	<p>SB 1137 prohibits the development of new oil and gas wells or infrastructure in health protection zones, as defined, except for purposes of public health and safety or other limited exceptions. The bill requires operators of existing oil and gas wells or infrastructure within health protection zones to undertake specified monitoring, public notice, and nuisance requirements. The bill requires CARB to consult and concur with the California Geologic Energy Management Division (CalGEM) on leak detection and repair plans for these facilities, adopt regulations as necessary to implement emission detection system standards, and collaborate with CalGEM on public access to emissions detection data.</p>
<p>Senate Bill 1075 (SB 1075) (Skinner, Chapter 363, Statutes of 2022) <i>Hydrogen: Green Hydrogen: Emissions of Greenhouse Gases</i></p>	<p>SB 1075 requires CARB, by June 1, 2024, to prepare an evaluation that includes: policy recommendations regarding the use of hydrogen, and specifically the use of green hydrogen, in California; a description of strategies supporting hydrogen infrastructure, including identifying policies that promote the reduction of GHGs and short-lived climate pollutants; a description of other forms of hydrogen to achieve emission reductions; an analysis of curtailed electricity; an estimate of GHG and emission reductions that could be achieved through deployment of green hydrogen through a variety of scenarios; an analysis of the potential for opportunities to integrate hydrogen production and applications with drinking water supply treatment needs; policy recommendations for regulatory and permitting processes associated with transmitting and distributing hydrogen from production sites to end uses; an analysis of the life-cycle GHG emissions from various forms of hydrogen production; and an analysis of air pollution and other environmental impacts from hydrogen distribution and end uses.</p> <p>This bill would inform the production of hydrogen at the scale called for in the 2022 Scoping Plan Update.</p>
<p>Assembly Bill 1757 (AB 1757) (Garcia, Chapter 341, Statutes of 2022) <i>California Global Warming Solutions Act of 2006: Climate Goal: Natural and Working Lands</i></p>	<p>AB 1757 requires the California Natural Resources Agency (CNRA), in collaboration with CARB, other state agencies, and an expert advisory committee, to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions in 2030, 2038, and 2045 by January 1, 2024. These targets must support state goals to achieve carbon neutrality and foster climate adaptation and resilience.</p> <p>This bill also requires CARB to develop standard methods for state agencies to consistently track GHG emissions and reductions, carbon sequestration, and additional benefits from natural and working lands over time. These methods will account for GHG emissions reductions of CO₂, methane, and nitrous oxide related to natural and working lands and the potential impacts of climate change on the ability to reduce GHG emissions and sequester carbon from natural and working lands, where feasible.</p> <p>This 2022 Scoping Plan Update describes the next steps and implications of this legislation for the natural and working lands sector.</p>
<p>Senate Bill 1206 (SB 1206) (Skinner, Chapter 884, Statutes of 2022) <i>Hydrofluorocarbon gases: sale or distribution</i></p>	<p>SB 1206 mandates a stepped sales prohibition on newly produced high-global warming potential (GWP) HFCs to transition California's economy toward recycled and reclaimed HFCs for servicing existing HFC-based equipment. Additionally, SB 1206 also requires CARB to develop regulations to increase the adoption of very low-, i.e., GWP < 10, and no-GWP technologies in sectors that currently rely on higher-GWP HFCs.</p>

Bill/Executive Order	Summary
<p>Senate Bill 27 (SB 27) (Skinner, Chapter 237, Statutes of 2021) <i>Carbon Sequestration: State Goals: Natural and Working Lands: Registry of Projects</i></p>	<p>SB 27 requires CNRA, in coordination with other state agencies, to establish the Natural and Working Lands Climate Smart Strategy by July 1, 2023. This bill also requires CARB to establish specified CO2 removal targets for 2030 and beyond as part of its Scoping Plan. Under SB 27, CNRA is to establish and maintain a registry to identify projects in the state that drive climate action on natural and working lands and are seeking funding.</p> <p>CNRA also must track carbon removal and GHG emission reduction benefits derived from projects funded through the registry.</p> <p>This bill is reflected directly in the 2022 Scoping Plan Update as CO2 removal targets for 2030 and 2045 in support of carbon neutrality.</p>
<p>Senate Bill 596 (SB 596) (Becker, Chapter 246, Statutes of 2021) <i>Greenhouse Gases: Cement Sector: Net- zero Emissions Strategy</i></p>	<p>SB 596 requires CARB, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero-emissions of GHGs associated with cement used within the state as soon as possible, but no later than December 31, 2045. The bill establishes an interim target of 40 percent below the 2019 average GHG intensity of cement by December 31, 2035. Under SB 596, CARB must:</p> <ul style="list-style-type: none"> ● Define a metric for GHG intensity and establish a baseline from which to measure GHG intensity reductions. ● Evaluate the feasibility of the 2035 interim target (40 percent reduction in GHG intensity) by July 1, 2028. ● Coordinate and consult with other state agencies. ● Prioritize actions that leverage state and federal incentives. ● Evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low GHG intensity. <p>The 2022 Scoping Plan Update modeling is designed to achieve these outcomes.</p>
<p>Executive Order N-82-20</p>	<p>Governor Newsom signed Executive Order N-82-20 in October 2020 to combat the climate and biodiversity crises by setting a statewide goal to conserve at least 30 percent of California's land and coastal waters by 2030. The Executive Order also instructed the CNRA, in consultation with other state agencies, to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the state's carbon neutrality goal and build climate resilience. In addition to setting a statewide conservation goal, the Executive Order directed CARB to update the target for natural and working lands in support of carbon neutrality as part of this Scoping Plan, and to take into consideration the NWL Climate Smart Strategy.</p> <p>CO2 Executive Order N-82-20 also calls on the CNRA, in consultation with other state agencies, to establish the California Biodiversity Collaborative (Collaborative). The Collaborative shall be made up of governmental partners, California Native American tribes, experts, business and community leaders, and other stakeholders from across the state. State agencies will consult the Collaborative on efforts to:</p> <ul style="list-style-type: none"> ● Establish a baseline assessment of California's biodiversity that builds upon existing data and can be updated over time. ● Analyze and project the impact of climate change and other stressors in California's biodiversity.

Bill/Executive Order	Summary
	<ul style="list-style-type: none"> ● Inventory current biodiversity efforts across all sectors and highlight opportunities for additional action to preserve and enhance biodiversity. <p>CNRA also is tasked with advancing efforts to conserve biodiversity through various actions, such as streamlining the state’s process to approve and facilitate projects related to environmental restoration and land management. The California Department of Food and Agriculture (CDFA) is directed to advance efforts to conserve biodiversity through measures such as reinvigorating populations of pollinator insects, which restore biodiversity and improve agricultural production.</p> <p>The Natural and Working Lands Climate Smart Strategy informs the 2022 Scoping Plan Update.</p>
Executive Order N-79-20	<p>Governor Newsom signed Executive Order N-79-20 in September 2020 to establish targets for the transportation sector to support the state in its goal to achieve carbon neutrality by 2045. The targets established in this Executive Order are:</p> <ul style="list-style-type: none"> ● 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. ● 100 percent of medium- and heavy-duty vehicles will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks. ● 100 percent of off-road vehicles and equipment will be zero-emission by 2035 where feasible. <p>The Executive Order also tasked CARB to develop and propose regulations that require increasing volumes of zero- electric passenger vehicles, medium- and heavy-duty vehicles, drayage trucks, and off-road vehicles toward their corresponding targets of 100 percent zero-emission by 2035 or 2045, as listed above.</p> <p>The 2022 Scoping Plan Update modeling reflects achieving these targets.</p>
Executive Order N-19-19	<p>Governor Newsom signed Executive Order N-19-19 in September 2019 to direct state government to redouble its efforts to reduce GHG emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy. This Executive Order instructs the Department of Finance to create a Climate Investment Framework that:</p> <ul style="list-style-type: none"> ● Includes a proactive strategy for the state’s pension funds that reflects the increased risks to the economy and physical environment due to climate change. ● Provides a timeline and criteria to shift investments to companies and industry sectors with greater growth potential based on their focus of reducing carbon emissions and adapting to the impacts of climate change. ● Aligns with the fiduciary responsibilities of the California Public Employees’ Retirement System, California State Teachers’ Retirement System, and the University of California Retirement Program. <p>Executive Order N-19-19 directs the State Transportation Agency to leverage more than \$5 billion in annual state transportation spending to help reverse the trend of increased fuel consumption and reduce GHG emissions associated with the transportation sector. It also calls on the Department of General Services to leverage its management and</p>

Bill/Executive Order	Summary
	<p>ownership of the state's 19 million square feet in managed buildings, 51,000 vehicles, and other physical assets and goods to minimize state government's carbon footprint. Finally, it tasks CARB with accelerating progress toward California's goal of five million ZEV sales by 2030 by:</p> <ul style="list-style-type: none"> ● Developing new criteria for clean vehicle incentive programs to encourage manufacturers to produce clean, affordable cars. ● Proposing new strategies to increase demand in the primary and secondary markets for ZEVs. ● Considering strengthening existing regulations or adopting new ones to achieve the necessary GHG reductions from within the transportation sector. <p>The 2022 Scoping Plan Update modeling reflects efforts to accelerate ZEV deployment.</p>
<p>Senate Bill 576 (SB 576) (Umberg, Chapter 374, Statutes of 2019)</p> <p><i>Coastal Resources: Climate Ready Program and Coastal Climate Change Adaptation, Infrastructure and Readiness Program</i></p>	<p>Sea level rise, combined with storm-driven waves, poses a direct risk to the state's coastal resources, including public and private real property and infrastructure. Rising marine waters threaten sensitive coastal areas, habitats, the survival of threatened and endangered species, beaches, other recreation areas, and urban waterfronts. SB 576 mandates that the Ocean Protection Council develop and implement a coastal climate adaptation, infrastructure, and readiness program to improve the climate change resiliency of California's coastal communities, infrastructure, and habitat. This bill also instructs the State Coastal Conservancy to administer the Climate Ready Program, which addresses the impacts and potential impacts of climate change on resources within the conservancy's jurisdiction.</p>
<p>Assembly Bill 65 (AB 65) (Petrie- Norris, Chapter 347, Statutes of 2019)</p> <p><i>Coastal Protection: Climate Adaption: Project Prioritization: Natural Infrastructure: Local General Plans</i></p>	<p>This bill requires the State Coastal Conservancy, when it allocates any funding appropriated pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, to prioritize projects that use natural infrastructure in coastal communities to help adapt to climate change. The bill requires the conservancy to provide information to the Office of Planning and Research on any projects funded pursuant to the above provision to be considered for inclusion into the clearinghouse for climate adaptation information. The bill authorizes the conservancy to provide technical assistance to coastal communities to better assist them with their projects that use natural infrastructure.</p>
<p>Executive Order B-55-18</p>	<p>Governor Brown signed Executive Order B-55-18 in September 2018 to establish a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. Policies and programs undertaken to achieve this goal shall:</p> <ul style="list-style-type: none"> ● Seek to improve air quality and support the health and economic resiliency of urban and rural communities, particularly low-income and disadvantaged communities. ● Be implemented in a manner that supports climate adaptation and biodiversity, including protection of the state's water supply, water quality, and native plants and animals.

Bill/Executive Order	Summary
	<p>This Executive Order also calls for CARB to:</p> <ul style="list-style-type: none"> • Develop a framework for implementation and accounting that tracks progress toward this goal. • Ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. <p>The 2022 Scoping Plan Update is designed to achieve carbon neutrality no later than 2045 and the modeling includes technology and fuel transitions to achieve that outcome.</p>
<p>Senate Bill 100 (SB 100) (De León, Chapter 312, Statutes of 2018) <i>California Renewables Portfolio Standard Program: emissions of greenhouse gases</i></p>	<p>Under SB 100, the CPUC, CEC, and CARB shall use programs under existing laws to achieve 100 percent clean electricity. The statute requires these agencies to issue a joint policy report on SB 100 every four years. The first of these reports was issued in 2021.</p> <p>The 2022 Scoping Plan Update reflects the SB 100 Core Scenario resource mix with a few minor updates.</p>
<p>Assembly Bill 2127 (AB 2127) (Ting, Chapter 365, Statutes of 2018) <i>Electric Vehicle Charging Infrastructure: Assessment</i></p>	<p>This bill requires the CEC, working with CARB and the CPUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of GHGs to 40 percent below 1990 levels by 2030. The bill requires the CEC to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure.</p> <p>This bill supports the deployment of ZEVs as modeled in the 2022 Scoping Plan Update.</p>
<p>Senate Bill 30 (SB 30) (Lara, Chapter 614, Statutes of 2018) <i>Insurance: Climate Change</i></p>	<p>This bill requires the Insurance Commissioner to convene a working group to identify, assess, and recommend risk transfer market mechanisms that, among other things, promote investment in natural infrastructure to reduce the risks of climate change related to catastrophic events, create incentives for investment in natural infrastructure to reduce risks to communities, and provide mitigation incentives for private investment in natural lands to lessen exposure and reduce climate risks to public safety, property, utilities, and infrastructure. The bill requires the policies recommended to address specified questions.</p>
<p>Assembly Bill 2061 (AB 2061) (Frazier, Chapter 580, Statutes of 2018) <i>Near-zero-emission and Zero-emission Vehicles</i></p>	<p>Existing state and federal law sets specified limits on the total gross weight imposed on the highway by a vehicle with any group of two or more consecutive axles. Under existing federal law, the maximum gross vehicle weight of that vehicle may not exceed 82,000 pounds. AB 2061 authorizes a near-zero-emission vehicle or a zero-emission vehicle to exceed the weight limits on the power unit by up to 2,000 pounds.</p> <p>This bill supports the deployment of cleaner trucks as modeled in this 2022 Scoping Plan Update.</p>

The 2022 Scoping Plan Scenario identifies the need to accelerate AB32's 2030 target, from 40 percent to 48 percent below 1990 levels. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet

these GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology. The Scoping Plan Scenario is summarized in Table 2-1 starting on page 72 of the Scoping Plan. It includes references to relevant statutes and Executive Orders, although it is not comprehensive of all existing new authorities for directing or supporting the actions described. Table 2-1 identifies actions related to a variety of sectors such as: smart growth and reductions in Vehicle Miles Traveled (VMT); light-duty vehicles (LDV) and zero-emission vehicles (ZEV); truck ZEVs; reduce fossil energy, emissions, and GHGs for aviation ocean-going vessels, port operations, freight and passenger rail, oil and gas extraction; and petroleum refining; improvements in electricity generation; electrical appliances in new and existing residential and commercial buildings; electrification and emission reductions across industries such as the for food products, construction equipment, chemicals and allied products, pulp and paper, stone/clay/glass/cement, other industrial manufacturing, and agriculture; retiring of combined heat and power facilities; low carbon fuels for transportation, business, and industry; improvements in non-combustion methane emissions, and introduction of low GWP refrigerants.

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

Aligning local jurisdiction action with state-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan Update is identified as critical to achieving the statutory targets for 2030 and 2045. The 2022 Scoping Plan Update discusses the role of local governments in meeting the State's GHG reductions goals. Local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. They also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhoods that do not force people into cars. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements, and play a critical role in facilitating the rollout of ZEV infrastructure. As a

result, local government decisions play a critical role in supporting state-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority. The City has taken the initiative in combating climate change by developing programs and regulations such as the Green New Deal and Green Building Code. Each of these is discussed further below.

(ii) Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations.¹⁴ The program requires a greater number of zero-emissions vehicle (ZEV) models for years 2015 through 2025 to control smog, soot and GHG emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles and the ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. In particular, implementation of the ZEV and PHEV regulations reduce transportation fuel consumption by increasing the number of vehicles that are partially or fully electric-powered.

(iii) Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

(iv) In-Use Off-Road Diesel Fueled Fleets Regulation

Because off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of an older fleet that do not have emission controls. In 2007, CARB approved the “In-Use Off-Road Diesel Fueled Fleets Regulation” to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation sets an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. It also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these

¹⁴ California Air Resources Board, Clean Car Standards – Pavley, Assembly Bill 1493, <https://www.arb.ca.gov/cc/ccms/ccms.htm>, last reviewed January 11, 2017. Accessed June 2018.

targets. Revised in October 2016, the regulation enforced off-road restrictions on fleets adding vehicles with older tier engines beginning July 1, 2014. By each annual compliance deadline, a fleet must demonstrate that it has either met the fleet average target for that year or has completed the Best Available Control Technology requirements (BACT). Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028. While the goal of this regulation is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from the use of more fuel-efficient engines.

(f) *SB 375 (Sustainable Communities Strategy)*

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan (since updated to 2022 Climate Change Scoping Plan) for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associate with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled (VMT) and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

(3) Regional

(a) *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*

SB 375 requires each MPO to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plan. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), adopted on September 3, 2020, is the current RTP/SCS and is an update to the 2016-2040 RTP/SCS.

The 2020-2045 RTP/SCS focuses on the continued efforts of the previous RTP/SCS plans for an integrated approach in transportation and land use strategies in development of the SCAG region through horizon year 2045. The 2020-2045 RTP/SCS projects that the SCAG region will meet the GHG per capita reduction targets established for the SCAG region of 8 percent by 2020 and 19 percent by 2035. Additionally, its implementation is projected to reduce VMT per capita for the year 2045 by 4.1 percent compared to baseline conditions for the year. Rooted in the 2008 and 2012 RTP/SCS plans, the 2020-2045

RTP/SCS includes “Core Vision” that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by location housing, jobs, and transit closer together, and increasing investments in transit and complete streets. In addition, refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR for additional details regarding these requirements.

(4) Local

(a) *Green New Deal*

On April 8, 2015, Mayor Eric Garcetti released the Sustainable City pLAN, which includes both short-term and long-term aspirations through the year 2035 in various topic areas, including water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.¹⁵ Specific targets included the construction of new housing units within 1,500 feet of transit by 2017, reducing VMT per capita by five percent by 2025, and increasing trips made by walking, biking or transit by at least 35 percent by 2025. The Sustainable City pLAN was intended to be updated every four years.

In April 2019, Mayor Eric Garcetti released an update to the Sustainable City pLAN renamed as L.A.’s Green New Deal, which consists of a program of actions designed to create sustainability-based performance targets through 2050 to advance economic, environmental, and equity objectives.¹⁶ The Green New Deal augments, expands, and elaborates in more detail the City’s vision for a sustainable future and it tackles the climate emergency with accelerated targets and new aggressive goals.

Within the Green New Deal, 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 foot for all building types 22 percent by 2025, 34 percent by 2035, and 44 percent by 2050 (from a baseline of 68 thousand British thermal units (mBTU) per square foot in 2015).
- All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.
- Increase cumulative new housing unit construction to 150,000 by 2025 and 275,000 units by 2035.
- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025 and 75 percent by 2035.

¹⁵ City of Los Angeles, Sustainable City pLAN, 2015.

¹⁶ City of Los Angeles, LA’s Green New Deal, 2019.

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

(b) *Green Building Code*

Chapter IX of the Los Angeles Municipal Code (LAMC) is referred to as the “Los Angeles Green Building Code.” which incorporates by reference portions of the CALGreen Code. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. The Los Angeles Green Building Code includes mandatory measures for newly constructed nonresidential and high-rise residential buildings. The Los Angeles Green Building Code includes some requirements that are more stringent than state requirements such as increased requirements for electric vehicle charging spaces and water efficiency, which results in potentially greater energy demand reductions from improved transportation fuel efficiency and water efficiency. Refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR for additional details.

(c) *City of Los Angeles Mobility Plan 2035*

In August 2015, the City Council adopted Mobility Plan 2035 (Mobility Plan), which serves as the City’s General Plan circulation element. The City Council has adopted several amendments to the Mobility Plan since its initial adoption, including the most recent amendment on September 7, 2016.¹⁷ The Mobility Plan incorporates “complete streets” principles and lays the policy foundation for how the City’s residents interact with their

¹⁷ Los Angeles Department of City Planning, Mobility Plan 2035: An Element of the General Plan, approved by City Planning Commission on June 23, 2016 and adopted by City Council on September 7, 2016.

streets. The Mobility Plan includes five main goals that define the City’s high-level mobility priorities:

- (1) Safety First;
- (2) World Class Infrastructure;
- (3) Access for All Angelenos;
- (4) Collaboration, Communication, and Informed Choices; and
- (5) Clean Environments and Healthy Communities.

Each of the goals contains objectives and policies to support the achievement of those goals.

(d) City of Los Angeles All-Electric Buildings

Chapter IX of the LAMC also requires that all new buildings be all-electric buildings, with some exceptions. Equipment typically powered by natural gas such as space heating, water heating, cooking appliances and clothes drying would need to be powered by electricity for new construction. Exceptions are made for commercial restaurants, laboratory, and research and development uses. The LAMC is consistent with 2022 Title 24 goals of encouraging all-electric development which requires new residential uses to be electric-ready (wiring installed for all-electric appliances). Buildings in Los Angeles account for 43 percent of greenhouse gas emissions—more than any other sector in the City. These LAMC requirements ensure that new buildings being constructed are built to leverage the increasingly clean electric grid, which is anticipated to be carbon-free by 2035, rather than relying on fossil fuels.

b) Existing Conditions

(1) Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator’s capacity is typically rated in megawatts (MW), which is one million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours.

The Los Angeles Department of Water and Power (LADWP) provides electrical service throughout the City, including the Project Site, serving approximately 4 million people within a service area of approximately 465 square miles. Electrical service provided by LADWP is divided into two planning districts: Valley and Metropolitan. The Valley Planning District includes the LADWP service area north of Mulholland Drive, and the Metropolitan Planning District includes the LADWP service area south of Mulholland Drive. The Project Site is located within LADWP's Metropolitan Planning District.

LADWP generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to LADWP's 2017 Power Strategic Long-Term Resource Plan, LADWP has a net dependable generation capacity greater than 8,009 MW.¹⁸ On August 31, 2017, LADWP's power system experienced a record instantaneous peak demand of 6,502 MW.¹⁹ Approximately 35.2 percent of LADWP's 2021 electricity purchases were from renewable sources, which is greater than the 33.6 percent statewide percentage of electricity purchases from renewable sources.²⁰ The annual electricity sale to customers for the 2022-2023 fiscal year was forecasted at approximately 22,802 million kWh.²¹

(2) Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the State's total energy requirements. Natural gas is measured in terms of cubic feet (cf).

Natural gas is provided to the Project Site by SoCalGas, which is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the U.S./Mexican border.²²

¹⁸ Los Angeles Department of Water and Power (LADWP). Facts & Figures. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl-state=j81sbqss0_4&_afLoop=214061808185836, accessed September 2022.

¹⁹ LADWP, Facts & Figures, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl-state=xk0dbq6vu_4&_afLoop=9598324856637&_afWindowMode=0&_afWindowId=null#%40%3F_afWindowId%3Dnull%26_afLoop%3D9598324856637%26_afWindowMode%3D0%26_adf.ctrl-state%3Dfcfwty0v_25. Accessed September 2022.

²⁰ Los Angeles Department of Water and Power, 2021 Power Content Label, Power Content Label (ladwp.com), accessed December 5, 2022.

²¹ Los Angeles Department of Water and Power (LADWP), 2017 Power Strategic Long-Term Resource Plan, December 2017, page A-6.

²² Southern California Gas Company (SoCalGas), Company Profile. Company Profile | SoCalGas, accessed December 5, 2022.

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.²³ The traditional, southwestern United States sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.²⁴ Renewable natural gas comes from the decomposition of organic matter. While not actively used to generate gas supply for the region, renewable natural gas has the potential to become a substantial source of natural gas supply.²⁵ Gas supply available to SoCalGas is 2,443 million cf per day and available supply from California sources averaged 86 million cf per day in 2021 (the most recent year for which data are available).²⁶ The annual natural gas sale to customers in 2021 was approximately 891,695 million cf.²⁷

(3) Transportation Energy

According to the CEC, transportation accounted for about 39 percent of California's total energy consumption in 2019.²⁸ In 2021, California consumed 13.8 billion gallons of gasoline and 3.7 billion gallons of diesel fuel.²⁹ Petroleum-based fuels currently account for more than 90 percent of California's transportation fuel use.³⁰ However, the State is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT. Accordingly, gasoline consumption in California has declined. The CEC predicts that the demand for gasoline and transportation fossil fuels in general will continue to decline over the next 10 years primarily due to improvements in fuel efficiency and increased electrification.³¹

²³ California Gas and Electric Utilities, 2022 California Gas Report, 2022, page 135.

²⁴ California Gas and Electric Utilities, 2022 California Gas Report, 2022, page 136.

²⁵ California Gas and Electric Utilities, 2022 California Gas Report, 2022, page 136.

²⁶ California Gas and Electric Utilities, 2022 California Gas Report, 2022, page 184.

²⁷ Daily natural gas usage in 2021 was 2,443 million cf, annual value derived by multiplying daily values by 365 days.

²⁸ United States Energy Information Administration (USEIA), State Energy Data System, <https://www.eia.gov/state/seds/seds-data-complete.php?sid=CA#StatisticsIndicators>. Accessed October 2022.

²⁹ CEC, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed October 2022. Diesel is adjusted to account for retail (49.7 percent) and non-retail (50.3 percent) diesel sales.

³⁰ CEC, 2020-2023 Investment Plan Update for the Clean Transportation Program, March 2020. <https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/clean-transportation-program-investment-5>. Accessed October 2022.

³¹ California Energy Commission, 2019 Integrated Energy Policy Report, p.228.

According to fuel sales data from the CEC, fuel consumption in Los Angeles County was approximately 3.1 billion gallons of gasoline and 0.45 billion gallons of diesel fuel in 2021.³²

(4) Project Site

The Project Site is currently developed with the existing Universal Hilton Hotel facilities including the Existing Hotel Building, Existing Ancillary Building, below grade parking garage, and associated amenities. To accommodate the proposed development, the Existing Outdoor Pool Area on the southern portion of the Project Site would be demolished, and the existing North and South Plazas would be reconfigured. These features result in minor energy consumption and are deemed negligible in the evaluation of the energy use of the existing Hotel. Therefore, this energy analysis addresses only the energy profile of the new construction, and the current energy demands from the existing Hotel are not quantified or further addressed in the analysis.

3. Project Impacts

a) Thresholds of Significance

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

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or***
- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.***

For this analysis, the State CEQA Guidelines Appendix G Thresholds are relied upon. Appendix F of the State CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that an EIR shall include a detailed statement setting forth “[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” The analysis utilizes factors and considerations identified in Appendix F of the State CEQA Guidelines, as appropriate, to assist in answering the Appendix G questions. The factors to evaluate energy impacts under Threshold (a) include:

- a. The Project’s energy requirements and its energy use efficiencies by amount and fuel type for each stage of the Project including construction, operation,

³² CEC, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed October 2022. Diesel is adjusted to account for retail (49.7 percent) and non-retail (50.3 percent) diesel sales.

maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed. In addition, this analysis considers whether the Project would consume a substantially greater amount of energy, in either the construction or operational phase, than similar projects, in order to evaluate whether the Project would use energy that is “wasteful, inefficient, and unnecessary”;

- b. The effects of the Project on local and regional energy supplies and on requirements for additional capacity;
- c. The effects of the Project on peak and base period demands for electricity and other forms of energy;
- d. The effects of the Project on energy resources; and
- e. The Project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.

In addition, with regard to potential impacts to energy, the 2006 L.A. CEQA Thresholds Guide states that a determination of significance shall be made on a case-by case basis considering the following factor, which is also utilized to evaluate Threshold (a):

- f. The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

In accordance with Appendix F of the State CEQA Guidelines, the degree to which the Project complies with existing energy standards and whether the Project conflicts with adopted energy conservation plans are considered, as appropriate, to evaluate impacts under Threshold (b).

Appendix G of the CEQA Guidelines also includes a threshold question in the Utilities and Service Systems section regarding electric power and natural gas facilities. The Initial Study in **Appendix A** of this Draft EIR determined that environmental impacts relating to the relocation or construction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects would be less than significant and that no further analysis of this topic in an EIR or mitigation measures are required.

b) Methodology

This analysis addresses the Project’s potential energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation is assessed. Specific analysis methodologies are discussed below. Calculations are provided in Appendix F of this Draft EIR, and are based on the same assumptions as are used in Section IV.A, *Air Quality*, and Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR.

(1) Construction

Project construction is estimated to start in 2024, but may commence at a later date. If, for various site planning, financial, or other reasons, the onset of construction is delayed to a later date than assumed in the modeling analysis, construction impacts 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. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the Project Site. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the Project Site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources. This analysis is based on estimated maximum construction activities.

(a) *Electricity*

Construction electricity was estimated for a temporary construction office, for construction equipment that would use electricity as an alternative to diesel fuel, and for water usage from dust control. The amount of construction office space for the Project was assumed to be a temporary trailer up to 2,000 square feet and was modeled using CalEEMod (version 2022.1.1.9).³³ In addition, electricity from water conveyance for dust control was also calculated based on the estimated exposed area and water needs to cover the area during construction activity (e.g., demolition, site preparation, grading, and foundation activities). Default CalEEMod water electricity intensity factors were used to convert the volume of water needed to electricity demand from water conveyance.

(b) *Natural Gas*

Natural gas from construction activities would not be consumed during Project construction because natural gas equipment was not specified by the Project construction representative and is not typically used during construction. Therefore, natural gas associated with construction activities was not calculated.

(c) *Transportation Fuels*

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and GHG emissions provided in the CalEEMod construction output files included in **Appendix B** of this Draft EIR. The total GHG emissions are then multiplied by kilograms of CO₂ per gallon of fuel gasoline and diesel equipment. Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the default trip rates and distances provided in the CalEEMod (version 2022.1.1.9).

³³ California Air Pollution Control Officers Association, California Emissions Estimator Model, 2022, <http://caleemod.com/>, accessed April 2023.

Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific mpg factor using CARB's Emission FACtor (EMFAC) 2021 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include a mix of light duty gasoline automobiles and light duty gasoline trucks and construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix F of this Draft EIR for detailed energy calculations.

Energy use during construction was forecasted by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). The energy usage required for Project construction has been estimated based on the number and type of construction equipment that would be used during Project construction, the extent that various equipment are utilized in terms of equipment operating hours or miles driven, the estimated duration of construction activities based on information received from the Project applicant, and the operation of an onsite construction trailer. Energy for construction worker commuting trips has been estimated based on the predicted number of workers for the various phases of construction and the estimated VMT based on CalEEMod modelling. The assessment also includes a discussion of the Project's compliance with relevant energy-related regulatory requirements that would minimize the amount of energy usage during construction. These measures are also discussed in Section IV.A, *Air Quality*, and Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR.

The construction equipment and haul trucks would likely be diesel-fueled, while the construction worker commute vehicles would primarily be gasoline-fueled. For the purposes of this assessment, however, it is conservatively assumed that all heavy-duty construction equipment and haul trucks would be diesel-fueled. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB off-road vehicle (OFFROAD) emissions model, which is a state-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC2021 emissions model, which is a state-approved model for estimating emissions on-road vehicles and trucks. Therefore, this energy assessment is consistent with the modeling approach used for other environmental analyses in this Draft EIR and consistent with general CEQA standards.

(2) Operation

Operation of the Project would require energy in the form of electricity and natural gas for building space and water heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation fuels, primarily gasoline, for vehicles traveling to and from the Project Site.

(a) *Electricity*

Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from Project operation was calculated using demand factors

provided in CalEEMod, software version 2022.1.1, which is based on the 2019 Title 24 standards. CalEEMod has not been updated to include correction factors for the 2022 Title 24 standards, which includes additional building energy reductions and associated GHG emissions reductions as compared to the 2019 Title 24 standards. The Project would be required to comply with applicable Title 24 Building Energy Efficiency Standards. Thus, to provide a more conservative analysis, the analysis of building energy-related GHG emissions for the Project is based on the 2019 Title 24 standards and does not reflect additional building energy reductions and associated GHG emissions reductions from 2022 Title 24 compliance. Energy usage from water demand (e.g., electricity used to supply, convey, treat, and distribute) was estimated based on the size of the new building additions and facilities. The assessment also includes a discussion of the Project's compliance with relevant energy-related regulations and its land use transportation characteristics that would minimize the amount of energy usage during operations. These features and characteristics are also discussed in Chapter II, *Project Description*, Section IV.A, *Air Quality*, Section IV.F, *Greenhouse Gas Emissions*, Section IV.H, *Land Use and Planning*, and Section IV.M, *Utilities and Service Systems*, of this Draft EIR.

The Project's estimated energy demand was analyzed relative to LADWP's existing and planned energy supplies for the Project buildout year (2027) to determine if the utility company would be able to meet the Project's energy demands. Operational energy impacts were assessed based on the increase in energy demand from the operation of the new facilities.

(b) *Natural Gas*

Annual consumption of natural gas from Project operation was calculated using demand factors provided in CalEEMod based on the 2019 Title 24 standards. As stated above, the Project will be required to comply with the applicable Title 24 Building Energy Efficiency Standards, which may be updated in future iterations of CalEEMod to provide additional building energy reductions and associated GHG emissions reductions. However, to provide a more conservative analysis that is consistent with CalEEMod version 2022.1.1, the analysis of building energy-related GHG emissions for the Project is based on the 2019 Title 24 standards. Natural gas demand for the Project would be generated mainly by building heating and cooking. The Project's estimated energy demand was analyzed relative to SoCalGas' existing and planned energy supplies for the Project buildout year (2027) to determine if the utility company would be able to meet the Project's energy demands.

(c) *Stationary Sources*

Stationary sources would also include an emergency generator with one emergency rated at approximately 450 kilowatts (603 horsepower), which would provide emergency power primarily for lighting and other emergency building systems. The emergency generator would result in consumption of diesel fuel during maintenance and testing operations. 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.

(d) *Transportation Fuels*

Energy impacts associated with transportation during operation were also assessed. Energy demand due to the trips generated by employees and visitors to and from the Project Site was estimated based on the predicted number of trips to and from the Project Site and the estimated VMT obtained from the *2023 Transportation Analysis Addendum* prepared for the Project included in **Appendix K-4** of this Draft EIR.³⁴ Based on the Project's annual operational VMT, gasoline and diesel consumption rates were calculated using the county-specific mpg in EMFAC2021. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated consistent with the CalEEMod default for the Project Site area in the South Coast Air Basin, which includes Los Angeles County. Supporting calculations are provided in Appendix F of this Draft EIR. These calculations were also used to determine if the Project would cause the wasteful, inefficient and/or unnecessary consumption of energy as required by Appendix F of the State CEQA Guidelines.

c) Project Design Features

The Project would be designed to meet the CALGreen Code as adopted by the City through the incorporation of green building techniques and other sustainability features, including those within the City of Los Angeles Green Building Code, where applicable. In addition, the Project would incorporate GHG-PDF-1 (refer to Project Design Feature GHG-PDF-1 in Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR). With this Project Design Feature, the Project would be designed to achieve the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certification level or equivalent for new buildings and includes the incorporation of water conservation features, solid waste reduction features, and optimization of building energy performance, which will minimize building energy demand and associated air pollutant emissions. Refer to Project Design Feature WS-PDF-1 (Water Conservation Features) in Section IV.M, *Utilities and Service Systems*, of this Draft EIR. Project Design Feature WS-PDF-1 includes water conservation features that reduce operational GHG emissions. Refer to Project Design Feature TRAF-PDF-1 (Transportation Demand Management [TDM] Program) in Section IV.K, *Transportation*, of this Draft EIR. Project Design Feature TRAF-PDF-1 would require implementation of a TDM Program to reduce Project VMT and thereby reduce operational transportation fuel consumption.

³⁴ Linscott, Law & Greenspan, Engineers. *2023 Transportation Analysis Addendum for Hilton Universal City Project*. City of Los Angeles, California. April 2023.

d) Analysis of Project Impacts

Threshold a) *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, and unnecessary consumption of energy resources, during project construction or operation?*

The Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption, and transportation fuels (diesel and gasoline).

(1) Impact Analysis

(a) *The Project's Energy Requirements and its Energy Use Efficiencies by Amount and Fuel Type for Each Stage of the Project Including Construction, Operation, Maintenance, and/or Removal. If Appropriate, the Energy Intensiveness of Materials may be Discussed*

(i) Construction

During Project construction, which is anticipated to occur for approximately 30 months, energy would be consumed in the form of electricity on a limited basis for powering lights, electronic equipment, and for water conveyance for dust control. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction workers traveling to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown in **Table IV.D-3, Summary of Energy Use During Project Construction**, the summary of the annual average electricity, gasoline fuel, and diesel fuel estimated to be consumed during Project construction is provided. Each of these is discussed and analyzed in greater detail in the sections below.

**TABLE IV.D-3
SUMMARY OF ENERGY USE DURING PROJECT CONSTRUCTION ^a**

Energy Type	Total Quantity	Annual Average Quantity During Construction
Electricity^b		
Water Consumption	2,624 kWh	1,075 kWh
Construction Office ^b	99,929 kWh	40,936 kWh
Total Electricity	102,553 kWh	42,011 kWh
Gasoline		
On-Road Construction Equipment	100,797 gallons	41,292 gallons
Off-Road Construction Equipment	0 gallons	0 gallons
Total Gasoline	100,797 gallons	41,292 gallons
Diesel		
On-Road Construction Equipment	147,244gallons	60,319 gallons
Off-Road Construction Equipment	263,218gallons	107,828gallons
Total Diesel	410,462 gallons	168,147 gallons

kWh = kilowatt-hours

^a Detailed calculations are provided in Appendix F of this Draft EIR.

^b Construction office includes electricity consumption from lighting, plug load, and small electric equipment.

SOURCE: ESA, 2022.

(a) Electricity

During construction of the Project, electricity would be consumed, on a limited basis, to power lighting and electric equipment to supply and convey water for dust control, and to operate an on-site construction trailer. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electrical lines that connect to the Project Site.

As shown in Table IV.D-3, annual average construction electricity usage would be approximately 42,011 kWh. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption.

As shown in Table IV.D-3, annual construction electricity usage would be approximately 42,011 kWh and would be within the supply and infrastructure capabilities of LADWP

(forecasted to be 26,748 GWh net energy load in the 2025–2026 fiscal year).³⁵ The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the Project's net annual operational electricity. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related air pollutant and GHG emissions from more traditional construction-related energy in the form of diesel fuel. **Therefore, Project impacts from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.**

(b) Natural Gas

As stated above, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus, there would be no expected demand generated by construction of the Project. Therefore, Project impacts on natural gas supply and infrastructure associated with construction activities would be less than significant.

(c) Transportation Energy

Table IV.D-3 reports the estimated amount of petroleum-based transportation energy that is expected to be consumed during Project construction. Energy calculations are provided in Appendix F of this Draft EIR. During Project construction, on- and off-road vehicles would consume an estimated annual average of approximately 41,292 gallons of gasoline and approximately 168,147 gallons of diesel. As noted above, project construction activities would last for approximately 29 months. For comparison purposes only, and not for the purpose of determining significance, the fuel usage during Project construction would represent approximately 0.001 percent of the 2021 annual on-road gasoline-related energy consumption of approximately 3,061,000,000 gallons and approximately 0.04 percent of the 2021 annual diesel fuel-related energy consumption of approximately 445,328,032 gallons in Los Angeles County,³⁶ as shown in Appendix F of this Draft EIR.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current petroleum production and consumption and future trends, oil production and consumption will grow

³⁵ Los Angeles Department of Water and Power defines its future electricity supplies in terms of sales that will be realized at the meter. Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1, accessed December 5, 2022.

³⁶ California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2010-2021, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed January 28, 2022. Diesel is adjusted to account for retail (49.7 percent) and non-retail (50.3 percent) diesel sales.

through 2050. Crude oil supply and utilization in the United States is expected to return to pre-pandemic levels starting in 2023 and stabilize in the long term and therefore would be sufficient to sustain the projected oil consumption through 2050.³⁷

Construction of the Project would utilize fuel-efficient equipment consistent with state and federal regulations, such as fuel efficiency regulations in accordance with the CARB Pavley Phase II standards, the anti-idling regulation in accordance with Section 2485 in 13 CCR, and fuel requirements in accordance with 17 CCR Section 93115. The Project would benefit from fuel and automotive manufacturers' compliance with CAFE standards, which would result in more efficient use of transportation fuels (lower consumption). As such, the Project would indirectly comply with regulatory measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

In addition, the Project would divert mixed construction and demolition debris to City-certified construction and demolition waste processors using City-certified waste haulers, consistent with the Los Angeles City Council approved Ordinance No. 181519 (LAMC Chapter VI, Article 6, Section 66.32-66.32.5). Diversion of mixed construction and demolition debris would reduce truck trips to landfills, which are typically located some distance away from City centers, and would increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption.

Based on the analysis above, construction would utilize energy only for necessary on-site activities and to transport construction materials and demolition debris to and from the Project Site. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment and fuels would result in less fuel combustion and energy consumption, and thus minimize the Project's construction-related transportation energy use. **Therefore, construction of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts would be less than significant.**

(ii) Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, appliances, emergency generator, cooling tower, and electric vehicle charging stations. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. **Table IV.D-4, Summary of Annual New Energy Use During Project Operation**, provides a summary of the annual average

³⁷ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

electricity, natural gas, gasoline fuel, and diesel fuel estimated to be consumed during Project operations. Each of these is discussed and analyzed in greater detail in the sections below.

TABLE IV.D-4
SUMMARY OF ANNUAL NEW ENERGY USE DURING PROJECT OPERATION ^{a,b}

Energy Type	Annual Quantity ^{b, c}
Electricity	
Building Energy	4,781,064 kWh
EV Charging	75,482 kWh
Water Conveyance	226,599 kWh
Total Electricity	5,083,145kWh
Natural Gas	
Building Energy	8,244,524 cf
Mobile Sources	1,078,170cf
Total Natural Gas	9,322,694 cf
Transportation	
Gasoline	368,176 gallons
Diesel	69,115 gallons
Stationary Sources	
Emergency Generators	1,150 gallons

NOTES: kWh = kilowatt-hours; cf = cubic feet

^a Detailed calculations are provided in Appendix F of this Draft EIR.

^b Totals may not add up exactly due to rounding of decimals.

^c Project electricity and natural gas estimates for buildings assume compliance with applicable Title 24 and CALGreen requirements

(a) Electricity

LADWP is required to procure at least 33 percent of its energy portfolio from renewable sources by 2020. Additionally, the RPS requires that the percentage of renewable sources be increased to 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. LADWP's current sources include wind, solar, geothermal, hydroelectric, and biomass/biowaste sources. These sources accounted for 35.2 percent of LADWP's overall energy mix in 2021, the most recent year for which data are available, and represent the available off-site renewable sources of energy that would meet the Project's energy demand.³⁸

LADWP generates its load forecast based on multiple forms of data from various agencies, including historical sales from the General Accountings Consumption and

³⁸ California Energy Commission, Utility Annual Power Content Labels for 2021, Los Angeles Department of Water and Power. Power Content Label (ladwp.com), accessed December 5, 2022.

Earnings report, historical Los Angeles County employment data provided from the State's Economic Development Division, plug-in electric vehicle (PEV) projections from the CEC account building permits when determining electricity load forecasts, solar rooftop installations from the Solar Energy Development Group, electricity price projections from LADWP's Financial Services Organization, and LADWP program efficiency forecasts.³⁹ In addition, LADWP considers projected Los Angeles County building permit amounts calculated by the UCLA Anderson School of Management when determining its load forecast and would therefore account for the Project's electricity demand.⁴⁰

As a result, in 2017 Power Strategic Long-Term Resource Plan, LADWP forecasts that its total energy load in the 2027-2028 fiscal year (the Project's buildout year) would be 24,078 GWh of electricity.^{41,42} As such, the Project-related increase in annual electricity consumption of 5,083,145 kWh (5.1 GWh) per year would represent approximately 0.021 percent of LADWP's projected energy load for 2027-2028 and, therefore, would be within LADWP's projected electricity supplies.

As previously described in Subsection IV.D.3.c), *Energy – Project Design Features*, the Project incorporates a variety of energy and water conservation measures and features that are consistent with and go beyond state and local energy policies to reduce energy usage and minimize energy demand. With incorporation of GHG-PDF-1 (refer to Project Design Feature GHG-PDF-1 in Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR), the Project would be designed to achieve the equivalent of the LEED Gold Certification level or equivalent for new buildings and would include sustainability features such as the use of materials and finishes that emit low quantities of volatile organic compounds; the installation of HVAC systems that utilize ozone-friendly refrigerants; the installation of high-efficiency appliances; and the provision of bicycle parking and other amenities for bicyclists. The Project's parking garage expansion would provide infrastructure for vehicular charging stations per the requirements of the City.⁴³ The Hotel Expansion Building would also utilize the recycling program and facilities that are currently located in the Existing Hotel Building. In addition, the Project would incorporate a variety of water conservation features pertaining to water-efficient fixtures for the entire Project; landscaping and irrigation features, such as use of artificial turf, California Friendly® plants, and drip/subsurface irrigation (micro-Irrigation); and pool-related features, such as

³⁹ Los Angeles Department of Water and Power, 2017 Final Power Strategic Long-Term Resource Plan, p. 70, 2017.

⁴⁰ Los Angeles Department of Water and Power, 2017 Final Power Strategic Long-Term Resource Plan, p. 67, 2017.

⁴¹ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

⁴² Los Angeles Department of Water and Power, 2017 Final Power Strategic Long-Term Resource Plan, p. A-6, 2017.

⁴³ The Project would provide 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 (approximately 140 spaces), with 10 percent of the LAMC-required spaces further improved with electric vehicle charging stations (approximately 47 spaces).

a leak-detection system and water-saving pool filters which would have the benefit of reducing the electricity used for operation of water systems (refer to Chapter II, *Project Description*, of the Draft EIR, for additional details). The Project's water conservation features are included as Project Design Feature WS-PDF-1.

Therefore, with the incorporation of the Project's energy and water saving measures and features, operation of the Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity and impacts would be less than significant.

(b) Natural Gas

As reported in Table IV.D-4, with compliance with applicable Title 24 standards and applicable 2019CALGreen Code requirements, at buildout, the Project is projected to consume approximately 9,322,694 cf per year of natural gas. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and CALGreen Code), the Project incorporates project design features to further reduce natural gas use. The Project incorporates Green Building Features as described above and in Section IV.F, *Greenhouse Gas*, of this Draft EIR, which includes building features, such as installation of energy-efficient heating, and hot water systems.

As stated above, the Project's demand for natural gas is estimated to be 9,322,694 cf per year, or approximately 25,542 cf per day. Based on the 2022 California Gas Report, the California Energy and Electric Utilities, a collective of California utility companies, estimates natural gas consumption within SoCalGas's planning area will be approximately 2,221 million cf per day in 2027 (the Project's buildout year), with a capacity of approximately 3,435 million cf per day.⁴⁴ The Project would account for approximately 0.001 percent of the 2027 forecasted capacity in SoCalGas's planning area. As previously described in Subsection IV.D.3.c), *Energy – Project Design Features*, the Project would incorporate GHG-PDF-1 and WS-PDF-1 which are energy conservation measures and features to reduce energy usage and minimize energy demand. Therefore, with the incorporation of these measures and features, operation of the Project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas and impacts would be less than significant.

(c) Stationary Sources

The Project would also include an emergency generator that would require periodic testing, which would consume diesel fuel. As shown in Table IV.D-4, diesel fuel usage would be approximately 1,150 gallons per year related to testing and maintenance of the

⁴⁴ California Gas and Electric Utilities, 2022 California Gas Report, p. 186, 2022.

emergency generator⁴⁵. The emergency generator would only be used during emergency situations and during required testing.

(d) Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. A majority of the vehicle fleet that would be used by Project employees and guests would consist of light-duty automobiles and light-duty trucks, which are subject to federal fuel efficiency standards. Annual trips for the Project were estimated using trip rates provided in the *2023 Traffic Analysis Addendum* included in Appendix K-4 of this Draft EIR.⁴⁶

As reported in Table IV.D-4, the Project's estimated increase in petroleum-based fuel usage would be approximately 368,176 gallons of gasoline and 69,115 gallons of diesel per year.. Based on the California Energy Commission's *California Annual Retail Fuel Outlet Report*, Los Angeles County consumed 3,061,000,000 gallons of gasoline and 445,328,032 gallons of diesel fuel in 2021.⁴⁷ For comparison purposes only, the Project would account for 0.012 percent of County gasoline consumption and 0.016 percent of County diesel consumption.

Based on current petroleum production and consumption and future trends, oil production and consumption will grow through 2050.⁴⁸ Crude oil supply and utilization in the United States is expected to return to pre-pandemic levels starting in 2023 and stabilize in the long term and therefore would be sufficient to sustain the projected oil consumption through 2050.⁴⁹ The Project would benefit from fuel and automotive manufacturers' compliance with CARB's Low-Emission Vehicle (LEV-III) Program and CAFE standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also indirectly benefit from Pavley Standards, which are designed to reduce vehicle GHG emissions by mandating increasingly stringent emissions standards on new vehicles but would also result in fuel savings from more efficient engines in addition to compliance with CAFE standards.

The Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. As discussed in detail in Section IV.F, *Greenhouse Gas Emissions*, the Project's design and

⁴⁵ Analysis assumes up to 50 hours total per year of emergency generator testing and maintenance per SCAQMD Rule 1470.

⁴⁶ Linscott, Law & Greenspan, Engineers. *2023 Transportation Analysis Addendum Hilton Universal City Project*. City of Los Angeles, California. April 2023.

⁴⁷ California Energy Commission, *California Annual Retail Fuel Outlet Report, 2021*, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed September 2022.

⁴⁸ USEIA, 2023. *Annual Energy Outlook 2023*, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

⁴⁹ USEIA, 2023. *Annual Energy Outlook 2023*, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

characteristics would be consistent with and support the goals of the 2020-2045 RTP/SCS. The Project represents an infill development within an HQTAs, which, as discussed in Section IV.F, *Greenhouse Gas Emissions*, is defined as generally walkable transit villages or corridors that are within 0.5 mile of a well-served transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.⁵⁰ The Project Site is located within 0.25 mile of public transportation opportunities, including the Metro B (Red) Line (Universal City/Studio City Station, located at the intersection of Lankershim Boulevard and Universal Hollywood Drive and Metro bus routes Local 155 and 224. In addition, the Project would also provide up to 118 on-site bicycle parking spaces, which is above the requirements of the LAMC, and would also include access to end of trip facilities such as showers for Project employees available within the Existing Hotel Building. 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. The Project would provide residents and visitors with access to public transit and opportunities for walking and biking, which would facilitate a reduction in VMT and related vehicular GHG emissions. These and other measures would further promote a reduction in VMT and subsequent reduction in vehicular fuel consumption.⁵¹

For all the reasons stated above, the Project would minimize operational transportation fuel demand consistent with state, regional, and City goals. **Therefore, for all these reasons, operation of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy for transportation purposes and impacts would be less than significant.**

(b) *The Effects of the Project on Local and Regional Energy Supplies and on Requirements for Additional Capacity.*

(i) *Construction*

As discussed above, electricity would be consumed during Project construction activities. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electrical lines that connect to the Project Site. While temporary power poles would be installed to provide electricity during Project construction, the existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the Project Site during construction or demolition. Electricity demand during Project construction would be 0.8 percent of the Project's annual operational electricity consumption, which would be within the supply and infrastructure capabilities of LADWP. Thus, the Project would not result in an increase in demand for

⁵⁰ SCAG, 2020-2045 RTP/SCS, May 2020, pp. 23 and 51.

⁵¹ Linscott, Law & Greenspan, Engineers. *Transportation Analysis Addendum for Hilton Universal City Project*. City of Los Angeles, California. September 19, 2022.

electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new facilities or expansion of existing facilities.

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be required to support Project construction activities; thus, there would be no demand generated by construction. However, the Project would involve installation of new natural gas connections to serve the Project Site buildings. Since the Project Site is located in an area already served by existing natural gas infrastructure, the Project would not require extensive off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections are expected to be confined to grading/trenching activities in order to place the lines below surface.

As stated above, transportation fuel usage during Project construction activities would represent approximately 0.001 percent of the 2021 annual gasoline usage and 0.04 percent of the 2021 annual diesel usage within Los Angeles County, respectively. Construction transportation energy would be provided by existing retail service stations and from existing mobile fuel services that are typically needed to deliver fuel to a construction site to refuel the off-road construction equipment at the Project Site, and, therefore, no new facilities would be required.

As detailed above, energy consumption during construction would not be substantial (compared to existing and projected Countywide consumption) and energy supplies of the existing purveyors are sufficient to serve the Project. **Therefore, construction of the Project would not significantly affect the local and/or regional energy supplies and would not require additional capacity and impacts would be less than significant.**

(ii) Operation

(a) Electricity

As stated above, based on LADWP's 2017 Power Strategic Long-Term Resource Plan, LADWP forecasts that its total energy sales in the 2027–2028 fiscal year (the Project's buildout year) will be 24,078 GWh of electricity.⁵² The Project-related increase in annual electricity consumption of 5,083,145 kWh per year would represent approximately 0.021 percent of LADWP's projected sales. The LADWP 2017 Power Strategic Long-Term Resource Plan identifies adequate resources (natural gas, coal) to support future generation capacity.⁵³ Based on these factors, LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to serve the Project's operational electricity demand, and thus, the Project would not require additional infrastructure (i.e., a substation).

⁵² LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

⁵³ LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017.

(b) Natural Gas

As stated above, the Project's estimated demand for natural gas is 9,322,694 cf per year, or approximately 25,542 cf per day. Based on the 2022 California Gas Report, the California Energy and Electric Utilities estimates that natural gas consumption within SoCalGas' planning area will be approximately 2,221 million cf per day in 2027, and SoCalGas will have a capacity of approximately 3,435 million cf per day.⁵⁴ This report predicts gas demand for all sectors (residential, commercial, industrial, energy generation and wholesale exports) and presents best estimates, as well as scenarios for hot and cold years. The Project would account for approximately 0.001 percent of the 2027 forecasted capacity in SoCalGas' planning area. Furthermore, SoCalGas expects overall natural gas demand to decline through 2035, even accounting for population and economic growth, with efficiency improvements and the State's transition away from fossil fuel-generated electricity to increased renewable energy. The 2022 California Gas Report states, "SoCalGas projects total gas demand to decline at an annual rate of 1.5% from 2022 to 2035. By comparison, the total gas demand had been projected to decline at an annual rate of 1.1 percent in the 2020 California Gas Report. The forecasted, accelerated decline in throughput demand is being driven by modest economic growth and the forecasted energy efficiency and fuel substitution. Other factors that contribute to the downward trend are tighter standards created by revised Title 24 Codes and Standards, and renewable energy goals that impact gas-fired electricity."⁵⁵ As such, SoCalGas' existing and planned natural gas capacity, supplies and infrastructure would be sufficient to serve the Project's demand.

(c) Stationary Sources

As stated above, the Project would consume an increase of 1,150 gallons of diesel per year from required emergency generator testing and maintenance. For comparison purposes, the transportation-related fuel usage for the Project would represent less than 0.001 percent of the 2021 annual diesel-related energy consumption in Los Angeles County.⁵⁶ Based on current petroleum production and consumption and future trends, oil production and consumption will grow through 2050.⁵⁷ Crude oil supply and utilization in the United States is expected to return to pre-pandemic levels starting in 2023 and stabilize in the long term and therefore would be sufficient to sustain the projected oil consumption through 2050.⁵⁸ Further, emergency generators would be used for very limited applications including emergency situations and required testing and

⁵⁴ California Gas and Electric Utilities, 2022 California Gas Report, Table 33, p. 186, 2022.

⁵⁵ California Gas and Electric Utilities, 2022 California Gas Report, p. 115, 2022.

⁵⁶ CEC, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed October 27, 2020.

⁵⁷ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

⁵⁸ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

maintenance. As such, existing and planned transportation fuel supplies would be sufficient to serve the Project's demand.

(d) Transportation Energy

As stated above, at buildout, the Project would consume an increase of 368,176 gallons of gasoline and 70,265 gallons of diesel per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.012 percent of the 2021 annual on-road gasoline- and 0.016 percent of the 2021 annual on-road diesel-related energy consumption in Los Angeles County.⁵⁹ Detailed calculations are shown in Appendix F of this Draft EIR. Operational transportation energy would be provided by existing retail service stations, and, as such, no new retail service stations would be required. Based on current petroleum production and consumption and future trends, oil production and consumption will grow through 2050.⁶⁰ Crude oil supply and utilization in the United States is expected to return to pre-pandemic levels starting in 2023 and stabilize in the long term and therefore would be sufficient to sustain the projected oil consumption through 2050.⁶¹ As such, existing and planned transportation fuel supplies would be sufficient to serve the Project's demand.

The analysis above demonstrates that energy consumption during operation would be minimal compared to existing and forecasted supply. The Project would not affect the local and/or regional energy supplies and would not require additional capacity. As such, Project impacts would be less than significant.

(c) *The Effects of the Project on Peak and Base Period Demands for Electricity and Other Forms of Energy*

As discussed above, electricity demand during construction and operation of the Project would have a negligible effect on the overall capacity of LADWP's power grid and base load conditions. With regard to peak load conditions, the LADWP power system experienced an all-time high peak of 6,502 MW on August 31, 2017.⁶² The LADWP also estimates a peak load based on two years of data known as base case peak demand to account for typical peak conditions. LADWP's peak demand forecast accounts for a

⁵⁹ CEC, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed October 27, 2020.

⁶⁰ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

⁶¹ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

⁶² Los Angeles Department of Water and Power, Facts & Figures. https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl-state=7s7pxavcq_17&_afLoop=288073190197028&_afWindowMode=0&_afWindowId=2dx72pcjd_1#%40%3F_afWindowId%3D2dx72pcjd_1%26_afLoop%3D288073190197028%26_afWindowMode%3D0%26_adf.ctrl-state%3D2dx72pcjd_127. Accessed October 2022.

growth rate of 0.4 percent over the next ten years (approximately 30 MW per year).⁶³ Based on LADWP estimates for 2027-2028, the base case peak demand for the power grid is 6,182 MW.⁶⁴ Under peak conditions, the Project would consume 5,083,145 kWh on an annual basis, which is equivalent to a maximum instantaneous peak demand of approximately 1,289 kW (assuming a load factor of 45 percent). In comparison to the LADWP power grid forecasted base peak load of 6,182 MW for 2027-2028, the Project would represent approximately 0.021 percent of the LADWP base peak load conditions. In addition, as noted above, LADWP's peak demand forecast accounts for a growth rate of 0.4 percent annually. Therefore, LADWP's capacity considering their peak demand forecast would be sufficient to account for future electrical demand by the Project.⁶⁵

With regard to peak natural gas demand, the 2022 California Gas Report estimates for the peak 1-in-35 cold year for SoCalGas, the demand would be 2,647 million cf per day in 2027.⁶⁶ As described above, the Project is anticipated to use 25,542 cf per day and would represent approximately 0.001 percent of the SoCalGas peak demand conditions. Therefore, Project natural gas demand during operational activities would have a negligible impact on peak demands of natural gas supplies.

Therefore, the Project's electrical and natural gas consumption during operational activities would have a negligible effect on peak load conditions of the power grid and natural gas supplies. As such, impacts would be less than significant.

(d) Effects of the Project on Energy Resources

As discussed above, LADWP's electricity generation is derived from a mix of non-renewable and renewable sources such as coal, natural gas, solar, geothermal wind and hydropower. The LADWP 2017 Power Strategic Long-Term Resource Plan identifies adequate resources (natural gas, coal) to support future generation capacity, and, as discussed above, LADWP's existing and planned electricity capacity and supplies would be sufficient to serve the Project's electricity demand. As discussed above in the Regulatory Framework, one of the objectives of SB 350 was to increase the procurement of California's electricity from renewable sources from 33 percent to 50 percent by 2030. Accordingly, LADWP is required to procure at least 50 percent of its energy portfolio from renewable sources by 2030. The current sources of LADWP's renewable energy include wind, solar, geothermal, hydroelectric, and biomass/biowaste sources. These sources account for 35.2 percent of LADWP's overall energy mix in 2021, which is the most recent

⁶³ Los Angeles Department of Water and Power (LADWP), 2017 Power Strategic Long-Term Resource Plan, December 2017, page 74.

⁶⁴ Los Angeles Department of Water and Power (LADWP), 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1.

⁶⁵ Los Angeles Department of Water and Power (LADWP), 2017 Power Strategic Long-Term Resource Plan, December 2017, page 74.

⁶⁶ SoCalGas. 2022 California Gas Report. Page 179. [Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf](#) (socalgas.com) (socalgas.com). Accessed December 2022.

year for which data are available.⁶⁷ These represent the available off-site renewable sources of energy that would meet the Project's energy demand. LADWP has committed to providing an increasing percentage of its energy portfolio from renewable sources so as to exceed the RPS requirements, by increasing to 50 percent by 2025 (5 years before the 2030 requirement), 55 percent by 2030, and 65 percent by 2036.⁶⁸ The Project would not conflict with LADWP's ability to procure the required amount of renewable energy, as energy consumption is less than 1 percent of LADWP's forecasted supply.

With regard to on-site renewable energy sources, the Project would meet the applicable requirements of the Los Angeles Green Building Code and the CALGreen Code. Due to the Project Site's location, on-site renewable energy sources other than photovoltaic panels would not be feasible as there are no local sources of energy from the following sources: biodiesel, biomass hydroelectric and small hydroelectric, digester gas, fuel cells, landfill gas, methane, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, or multi-fuel facilities using renewable fuels. Additionally, wind-powered energy is not viable on the Project Site due to the lack of sufficient wind in the Los Angeles basin. Specifically, based on a map of California's wind resource potential, the Project Site is not identified as an area with wind resource potential.⁶⁹ However, with compliance with the applicable codes, including the installation of Solar Art windows on 100 percent of the building, the Project would support renewable energy.

As discussed above, natural gas supplied to the Southern California area is mainly sourced from out of state with a small portion originating in California. Sources of natural gas for the Southern California region are obtained from locations throughout the western United States, as well as Canada.⁷⁰ According to the U.S. Energy Information Administration (EIA), the United States currently has approximately 92 years of natural gas reserves based on 2018 consumption.⁷¹ Compliance with energy standards is expected to result in more efficient use of natural gas (lower consumption) in future years.⁷² For example, having a more energy efficient building envelope would reduce the amount of natural gas required for heating. Therefore, Project construction and operation activities would have a negligible effect on natural gas supply.

⁶⁷ California Energy Commission, Utility Annual Power Content Labels for 2021, Los Angeles Department of Water and Power.

⁶⁸ Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, p. ES-3, 2017.

⁶⁹ California Energy Commission, California Wind Resource Potential, https://planning.lacity.org/eir/8150Sunset/References/6.0.%20Other%20CEQA%20Considerations/OTHER.05_CEC,%20California%20Wind%20Resource%20Potential_August%202014.pdf. Accessed October 2020.

⁷⁰ California Gas and Electric Utilities, 2020 California Gas Report, 2020.

⁷¹ U.S. Energy Information Administration, How much natural gas does the United States have, and how long will it last?, last updated February 4, 2020, <https://www.eia.gov/tools/faqs/faq.php?id=58&t=8>. Accessed August 2020.

⁷² California Gas and Electric Utilities, 2020 California Gas Report, 2020

As stated earlier in the discussion under Threshold (a), transportation fuels (gasoline and diesel) are produced from crude oil, which can be provided domestically or imported from various regions around the world. Based on current petroleum production and consumption and future trends, oil production and consumption will grow through 2050.⁷³ Crude oil supply and utilization in the United States is expected to return to pre-pandemic levels starting in 2023 and stabilize in the long term and therefore would be sufficient to sustain the projected oil consumption through 2050.⁷⁴ The Project would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel efficiency to reduce fuel consumption. Therefore, Project construction and operation activities would have a negligible effect on the transportation fuel supply.

For all the reasons stated above, the Project would minimize construction and operational energy (electricity and natural gas) and transportation fuel demand to the extent feasible and would not substantially impact energy resources. **Therefore, Project construction and operation impacts on energy resources would be less than significant.**

- (e) *The Project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.*

As discussed in Section IV.F, *Greenhouse Gas Emissions*, and Section IV.H, *Land Use and Planning*, of this Draft EIR, the 2020-2045 RTP/SCS presents the transportation vision for the region through the year 2045 and provides a long-term investment framework for addressing the region's transportation and related challenges.⁷⁵ As discussed in detail in Section IV.F, *Greenhouse Gas Emissions*, the Project's design and its characteristics would be consistent with and support, and therefore, not conflict with, the goals of the 2020-2045 RTP/SCS. The Project represents an infill development within an HQTAs as it is located within 0.25 mile of public transportation opportunities, including the Metro B (Red) Line Universal City/Studio City Station, located at the intersection of Lankershim Boulevard and Universal Hollywood Drive and Metro bus routes Local 155 and 224. In addition, the Project would also provide up to 118 on-site bicycle parking spaces, which is above the requirements of the LAMC, and would also include access to facilities such as showers for Project employees, which would continue to be provided at the Existing Hotel Building. 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. The Project would implement a variety

⁷³ USEIA, 2022. Annual Energy Outlook 2022, March 3, 2022. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed April 2022.

⁷⁴ USEIA, 2023. Annual Energy Outlook 2023, March 16, 2023. Available online at: <https://www.eia.gov/outlooks/aeo/>. Accessed May 2023.

⁷⁵ SCAG, 2020-2045 RTP/SCS, September 2020.

of TDM strategies (see Section IV.K, *Transportation*, of this Draft EIR for more information) that would further reduce Project-related trips and VMT, which would, in turn, result in the reduction of fuel consumption. The Project Site location and TDM strategies would be consistent with regional plans to improve transportation efficiency. These measures would further promote a reduction in VMT.

As a result, operation of the Project would encourage and result in reduced transportation energy and provide residents, employees, and visitors with multiple convenient alternative transportation options. **Therefore, the Project encourages the use of efficient transportation energy use and efficient transportation alternatives and impacts would be less than significant.**

- (f) *The degree to which the Project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.*

The current Los Angeles Green Building Code requires compliance with applicable Title 24 standards and the CALGreen Code, and is more stringent than state requirements. As detailed in the Section IV.F, *Greenhouse Gas Emissions*, 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 applicable California Title 24 Building Energy Efficiency Standards, CALGreen Code, and the Los Angeles Green Building Code. 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. The Project would also meet the mandatory measures of the Los Angeles Green Building Code, which as mentioned above are more stringent than the CALGreen Code, by incorporating strategies such as low-flow toilets, low-flow faucets, low-flow showers, and other energy and resource conservation measures. The HVAC system would be sized and designed in compliance with the CALGreen Code to maximize energy efficiency by reducing heat loss and heat gain in the building envelope. The Project has also committed to meeting the LEED Gold standard which requires energy efficiencies beyond those required by Title 24 Building Energy Efficiency Standards, the Los Angeles Green Building Code, or the CALGreen Code. Some sustainability features included in the Project that will help to meet the LEED Gold standards include: the use of materials and finishes that emit low quantities of volatile organic compounds; the installation of HVAC systems that utilize ozone-friendly refrigerants; the installation of high-efficiency appliances; and the provision of bicycle parking and other amenities for bicyclists. In addition, the Project would incorporate a variety of water conservation features pertaining to water-efficient fixtures for the entire Project; landscaping and irrigation features, such as use of artificial turf, California Friendly® plants, and drip/subsurface irrigation (micro-Irrigation); and pool-related features, such as a leak-detection system and water-saving pool filters. Therefore, the Project would be consistent with the Los Angeles Green Building Code and exceed City requirements by meeting LEED Gold standards.

With implementation of these features along with complying with state and local energy efficiency standards, the Project would exceed applicable energy conservation policies and regulations beyond City requirements and impacts would be less than significant.

(g) Conclusion Regarding Threshold (a)

As demonstrated by the analyses of the eight criteria discussed above, the Project would not cause wasteful, inefficient, or unnecessary consumption of energy during construction or operation. The Project's energy usage during peak and base periods would also be consistent with electricity, natural gas, and transportation fuel future projections for the region. During operations, the Project would comply with and exceed existing minimum energy efficiency requirements such as the applicable Title 24 standards and CALGreen Code. In summary, the Project's energy demands would not significantly affect available energy supplies and would comply with existing energy efficiency standards. **Therefore, Project impacts related to energy use under Threshold (a) would be less than significant during construction and operation, and would not cause wasteful, inefficient, and unnecessary consumption of energy.**

(2) Mitigation Measures

Impacts with respect to the wasteful, inefficient, and unnecessary consumption of energy resources during Project construction or operation would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts with respect to the wasteful, inefficient, and unnecessary consumption of energy resources during Project construction or operation would be less than significant without mitigation. Therefore, no mitigation measures are required, and the impact level remains less than significant.

Threshold b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

(1) Impact Analysis

A detailed discussion of the Project's comparison with the applicable actions and strategies in the L.A.'s Green New Deal is provided in Section IV.F, *Greenhouse Gas Emissions*. As discussed therein, the Project is designed in a manner that is consistent with and not in conflict with relevant energy conservation plans that are intended to encourage development that results in the efficient use of energy resources. Electricity and natural gas usage during Project operations, as reported in Table IV.D-2, would be minimized through compliance with applicable regulatory requirements for the design of

new buildings, including the provisions set forth in the Title 24 standards⁷⁶, applicable CALGreen Code requirements, and the Los Angeles Green Building Code. Furthermore, the Project incorporates energy-conservation measures beyond regulatory requirements, such as the Project would be designed to meet the USGBC LEED Gold Certification, including installing energy efficient appliances that meet the USEPA ENERGY STAR rating standards or equivalent (as specified in Project Design Feature GHG-PDF-1). The Project would also incorporate water conservation features, such as installing water fixtures that exceed applicable standards, and implementing water-efficient landscaping techniques (as specific in Project Design Feature WS-PDF-1).

The Project would also be consistent with and would not conflict with regional planning strategies that address energy conservation. As discussed above and in Section IV.F, *Greenhouse Gas Emissions*, as well as Section IV.H, *Land Use and Planning*, of this Draft EIR, the 2020-2045 RTP/SCS focuses on creating livable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of the approach, the 2020-2045 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, encouraging the reduction of building energy use, and increasing use of renewable sources. The Project's design, its increase in density on an infill site within a HQTAs in proximity to transit, its proximity to existing off-site retail, restaurant, entertainment, commercial, and job destinations, and its walkable environment would achieve a reduction in VMT. These land use characteristics are included in the transportation fuel demand for the Project's mobile sources. Additional detailed information regarding these land use characteristics are provided in Section IV.A, *Air Quality* and Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR.

As a result, the Project would implement project design features and incorporate water conservation, energy conservation, landscaping, and other features consistent with applicable actions and strategies in the L.A.'s Green New Deal (Sustainable City pLAN 2019), including features that go beyond those specified by regulations such as the City's Green Building Code such as achieving LEED Gold Certification as detailed in Project Design Feature GHG-PDF-1 (refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR).

Construction equipment would comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, the USEPA and NHSTA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans,

⁷⁶ On August 11, 2021, the CEC adopted the 2022 Title 24 Standards, which were approved by the California Building Standards Commission for inclusion into the California Building Standards Code in December 2021. The 2022 standards encourage efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 standards. The Project would comply with 2019 Title 24 Standards as the Project building permit application was filed in 2022

and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.⁷⁷ The USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.⁷⁸ The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy.

With respect to operational transportation-related fuel usage, the Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles through incorporation of TRAF-PDF-1 (TDM Program) which include strategies such as providing transit subsidies for employees; promotions and marketing tools to educate and inform employees about alternative transportation options and the effects of their travel choices; bicycle parking per LAMC; and secure bicycle parking and shower facilities. Further, the Project supports transportation efficiency by locating hotel, recreational and restaurant uses at an urban infill location with an existing street grid and in proximity to existing public transit options and in proximity to off-site uses (i.e., commercial, retail, entertainment and businesses uses) and would allow people in the community to utilize the nearby Project Site land uses.

Thus, based on all of the above, construction and operation of the Project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency and would comply with existing energy standards. As such, impacts would be less than significant.

⁷⁷ United States Environmental Protection Agency, Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August 2011, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100BOT1.PDF?Dockey=P100BOT1.PDF>. Accessed October 2022.

⁷⁸ United States Environmental Protection Agency, Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25, 2016, <https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf>. Accessed October 2022.

(2) Mitigation Measures

Impacts with regard to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency during Project construction and operation would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts with regard to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency during Project construction and operation would be less than significant. Therefore, no mitigation measures are required, and the level of impact would remain less than significant.

e) Cumulative Impacts

(1) Impact Analysis

(a) *Threshold (a): Wasteful, Inefficient and Unnecessary use of Energy*

Cumulative impacts occur when the incremental effects of a project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. As presented in Chapter III, *Environmental Setting*, of this Draft EIR, the City has identified 15 related projects located within 1.1 miles of the Project Site. The geographic context for the analysis of cumulative impacts on electricity is LADWP's service area and the geographic context for the analysis of cumulative impacts on natural gas in SoCalGas' service area, because the Project and related projects are located within the service boundaries of LADWP and SoCalGas. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Project in the context of County-wide consumption. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

(i) *Electricity*

Buildout of the Project, related projects, and additional forecasted growth in LADWP's service area would cumulatively increase the demand for electricity supplies and on infrastructure capacity.

LADWP, in coordination with the CEC, account for future increases in service area demand based on various economic, population, and efficiency factors. LADWP relies on multiple forms of data from various agencies, including historical sales from the General Accountings Consumption and Earnings report, historical Los Angeles County employment data provided from the State's Economic Development Division, PEV projections from the CEC account building permits when determining electricity load forecasts, solar rooftop installations from the Solar Energy Development Group, electricity

price projections from the LADWP's Financial Services Organization, and LADWP program efficiency forecasts.⁷⁹ As described in LADWP's 2017 Power Strategic Long-Term Resource Plan, LADWP would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards.⁸⁰ The 2017 Power Strategic Long-Term Resource Plan takes into account future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements.⁸¹ Accordingly, LADWP considers projected Los Angeles County building permit amounts calculated by the UCLA Anderson School of Management when determining its load forecast and would, therefore, account for the Project's and the related projects' electricity demand within its forecasts.⁸² Thus, LADWP considers growth from related projects within its service area for the increase in demand for electricity, as well as the need for energy infrastructure, such as new or expanded energy facilities.

LADWP forecasts that its total energy sales in the 2027-2028 fiscal year will be 24,078 GWh of electricity.^{83,84} As stated above, based on the Project's estimated electrical consumption of 5,083,145 kWh/year, the Project would account for approximately 0.021 percent of LADWP's total projected sales. Thus, although Project development would result in the use of renewable and non-renewable electricity resources during construction and operation, which could affect future availability, the Project's use of such resources would be on a relatively small scale, would be reduced by measures rendering the Project more energy-efficient, and would be consistent with growth expectations for LADWP's service area. The Project would also incorporate additional energy efficiency measures outlined in Project Design Features GHG-PDF-1 and WS-PDF-1 (refer to Section IV.F, *Greenhouse Gas Emissions*, and Section IV.M, *Utilities and Services Systems*, of this Draft EIR). Further, LADWP has issued a will-serve letter confirming that the Project is part of the total load growth forecast, has been taken into account in the planned growth of the City's power system, and would not adversely affect the LADWP electrical grid.⁸⁵ As with the Project, during construction and operation, the related projects would be required to adhere to any applicable energy conservation features, comply with applicable

⁷⁹ Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017, page 70.

⁸⁰ Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017, page ES-2.

⁸¹ Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017, page ES-2.

⁸² Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017, page 67.

⁸³ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

⁸⁴ Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, Appendix A, Table A-1, 2017.

⁸⁵ LADWP, Will Serve - 555 Universal Hollywood Dr - Hotel Expansion Development, November 2022. Included in Appendix M-1 of this Draft EIR.

codes and regulations, including the applicable Title 24 standards at the time of each project's application, and CALGreen Code, and incorporate mitigation measures to reduce energy uses, as necessary. Each of the related projects would be reviewed by the local utility provider to identify necessary electricity service connections to meet the needs of their respective projects. In addition, the local utility provider would provide service letters (which take into account all current uses and projected future development projects) for each related project confirming availability of adequate electricity supplies and infrastructure as part of the total load growth of the regional power system and Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the Project Site area. **As such, the Project's impacts together with related projects impacts related to wasteful, inefficient or unnecessary use of electricity would not be cumulatively considerable and the Project would not have a significant cumulative impact on electricity.**

(ii) *Natural Gas*

Buildout of the Project, related projects, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and on infrastructure capacity. Natural gas infrastructure is typically expanded in response to increasing demand and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Development projects within its service area, including the Project and related projects also served by the existing SoCalGas infrastructure, would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. Additionally, "will-serve" letters are provided for individual projects, in which SoCalGas determines whether sufficient infrastructure is in place to provide natural gas service to a project. As part of the "will-serve" letter process, SoCal Gas takes into account all uses (including future development projects) in the service area to ensure that local and regional infrastructure is adequate.

As stated above, based on the 2022 California Gas Report, the CEC estimates natural gas consumption within SoCalGas' planning area will be approximately 2,221 million cf per day in the Project's buildout year.⁸⁶ The Project would account for approximately 0.001 percent of the forecasted consumption in SoCalGas' planning area. As stated above, SoCalGas forecasts take into account projected population growth and development based on local and regional plans, and the Project's growth and development would not conflict with those projections. Although Project development would result in the use of natural gas resources, which could affect future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Project more energy-efficient would fall within SoCalGas' consumption forecasts, and would be consistent with regional and local growth expectations for SoCalGas' service area. The Project would also incorporate additional energy efficiency measures outlined in Project Design Feature GHG-PDF-1 (refer to

⁸⁶ California Gas and Electric Utilities, 2022 California Gas Report, p. 186.

Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR). Furthermore, the related projects would be required to adhere to any applicable energy conservation features, comply with applicable codes and regulations, including the applicable Title 24 standards at the time of each project's application, and CALGreen Code, and incorporate mitigation measures to reduce natural gas use, as necessary. **As such, the Project's impacts together with related projects impacts related to wasteful, inefficient or unnecessary use of natural gas would not be cumulatively considerable and the Project would not have a significant cumulative impact on natural gas.**

(iii) *Stationary Sources*

Similar to the Project, related projects' fuel consumption from emergency generators would be limited to emergency situations and testing and maintenance as required under SCAQD Rule 1470. **As such, the Project's impact together with related projects impacts related to wasteful, inefficient, or unnecessary use of diesel fuel for emergency generators would not be cumulatively considerable and the Project would not have a significant cumulative impact.**

(iv) *Transportation Energy*

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the State and region. As described above, at buildout, the Project would consume 368,176 gallons of gasoline and 70,265 gallons of diesel per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.012 percent of the 2021 annual on-road gasoline- and 0.016 percent of the 2021 annual on-road diesel-related energy consumption in Los Angeles County, as shown in Appendix F, of this Draft EIR.

Petroleum currently accounts for 90 percent of California's transportation energy sources; however, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT which would reduce reliance on petroleum fuels.

The Project would be consistent with the energy efficiency policies in the 2020-2045 RTP/SCS, such as proximity to public transportation options to encourage multi-modal transportation, provision of bicycle parking, and additional energy efficiency measures outlined in Project Design Features GHG-PDF-1 and WS-PDF-1 (refer to Section IV.F, *Greenhouse Gas Emissions*, and Section IV.M, *Utilities and Services Systems*, of this Draft EIR). By its very nature, the 2020-2045 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects. Furthermore, as with the Project, the related projects would need to adhere to any applicable provisions of the 2020-2045 RTP/SCS that would promote VMT reductions, including encouraging the use of alternative modes of transportation and other design features that would be compatible with the land use types of those related project sites, which would reduce vehicle fuel

consumption. Related projects, as with the Project, would be required to implement TDM programs to reduce potentially significant VMT and transportation impacts. **For the reasons stated above, the Project's impacts together with related projects impacts related to wasteful, inefficient or unnecessary use of transportation fuel would not be cumulatively considerable and the Project would not have a significant cumulative impact on transportation energy.**

(v) *Conclusion Regarding Threshold (a)*

Based on the analysis provided above, the Project's impacts related to the wasteful, inefficient, or unnecessary consumption of energy (i.e., electricity, natural gas, and transportation energy) would not be cumulatively considerable during construction or operation. **As such, the Project's impacts, together with related projects impacts, would not be cumulatively considerable; therefore, the Project's cumulative energy impacts under Threshold (a) would be less than significant.**

(b) *Threshold (b): Consistency with State or Local Plans*

(i) *Electricity*

Buildout of the Project, related projects, and additional forecasted growth in LADWP's service area would cumulatively increase the demand for electricity supplies and on infrastructure capacity. However, as discussed above, LADWP and the CEC account for increases in demand and load forecast based on various economic, population, and efficiency factors and relies on multiple forms of data from various agencies.⁸⁷ In addition, LADWP considers some anticipated loads from beyond City limits but within Los Angeles County when determining its load forecast and would therefore account for the Project's and the related projects' electricity demand within its forecasts.⁸⁸

Moreover, the Project would also incorporate energy efficiency measures outlined in Project Design Feature GHG-PDF-1 (refer to Section IV.F, *Greenhouse Gas Emissions* of this Draft EIR) that exceed applicable local and state energy plans and standards. Related projects, as with the Project, would be required to implement electricity conservation features, comply with applicable electricity efficiency plans and standards including the Los Angeles Green Building Code, the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Related projects, as with the Project, would also be required to evaluate potential impacts related to consistency with the City's Green New Deal standards, and local and regional supplies or capacity based on regional growth plans, such as the LADWP energy supply projections for long-term planning.

As such, the Project's contribution to cumulative impacts due to conflicting with or obstruction of a state or local plan for renewable energy or energy efficiency

⁸⁷ LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, page 70.

⁸⁸ LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, page 67.

would not be cumulatively considerable and cumulative impacts would be less than significant.

(ii) *Natural Gas*

Buildout of the Project, related projects, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and on infrastructure capacity. However, as discussed above, SoCalGas forecasts take into account projected population growth and development based on local and regional plans, and the Project's growth and development would not conflict with those projections.

The Project would also incorporate additional energy efficiency measures outlined in Project Design Feature GHG-PDF-1 (refer to Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR) that exceed applicable local and state energy plans and standards. Related projects, as with the Project, would be required to implement natural gas conservation features, comply with applicable regulations including the Los Angeles Green Building Code, the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Related projects, as with the Project, would also be required to evaluate potential impacts related to consistency with the City's Green New Deal standards, and local and regional supplies or capacity based on regional growth plans, such as the SoCalGas energy supply projections for long-term planning.

As such, the Project's contribution to cumulative impacts due to conflicting with or obstruction of a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable and cumulative impacts would be less than significant.

(iii) *Stationary Sources*

Similar to the Project, related projects would be required to comply with SCAQMD Rule 1470 which limits emergency generator testing and maintenance to a maximum of 50 hours per year. **As such, the Project's contribution to cumulative impacts due to conflicting with or obstruction of a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable and cumulative impacts would be less than significant.**

(iv) *Transportation Energy*

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. However, as discussed above, the Project would not conflict with the energy efficiency policies in the 2020-2045 RTP/SCS. As discussed previously, the Project would support statewide efforts to improve transportation energy efficiency by locating at an infill location close to existing off-site retail, restaurant, entertainment, commercial, and employment destinations. Siting land use development projects at infill sites is consistent with the State's overall goals to reduce VMT as outline in the 2020-2045 RTP/SCS for the region, which seeks improved access and mobility by emphasizing "growth in areas rich with

destinations and mobility options.”⁸⁹ The 2020-2045 RTP/SCS is a regional planning tool that address cumulative growth and resulting environmental effects and is applicable to the Project and related projects with respect to transportation energy efficiency. Related projects would be required under CEQA to evaluate if their respective developments would conflict with the energy efficiency policies in the 2020-2045 RTP/SCS, including policies related to per capita VMT targets, promotion of alternative forms of transportation, proximity to public transportation options, and provisions for encouraging multi-modal and energy efficient transit by accommodating bicycle parking and EV chargers at or above regulatory requirements. Furthermore, as with the Project, the related projects within the Project vicinity and HQTAs would similarly be required to demonstrate consistency with the provisions of the SCAG 2020-2045 RTP/SCS and other applicable transportation and land use plans that encourage reductions in VMT by encouraging the use of alternative modes of transportation, TDM strategies, and other design features that promote VMT reductions.

Since the Project would not conflict with the 2020-2045 RTP/SCS, the Project’s contribution to cumulative impacts due to wasteful, inefficient or unnecessary use of transportation fuel would not be cumulatively considerable and cumulative impacts would be less than significant.

(v) Conclusion

Based on the above, the Project’s contribution to cumulative impacts with respect to conflicting or obstructing a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable and cumulative impacts would be less than significant.

(2) Mitigation Measures

Cumulative impacts with regard to energy use during Project construction and operation would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts during Project construction and operation would be less than significant. When considered together with related projects, energy impacts would not result in a cumulatively considerable impact. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

⁸⁹ Southern California Association of Governments, 2020-2045 RTP/SCS, September 2020, page 11.