

3.5 Energy Demand and Conservation

3.5.1 Introduction

This section provides information regarding the Proposed Project's energy demand and conservation. The information has been prepared in accordance with Public Resources Code section 21100, subdivision (b)(3), CEQA Guidelines section 15126.2, subdivision (b), and Appendix F. Section 15126.2 and Appendix F provide that an EIR should include an evaluation of a proposed project's potential energy implications and encourages measures to avoid or reduce the inefficient, wasteful, or unnecessary consumption of energy.

This section identifies and evaluates potential effects on energy resources in the form of electricity, natural gas, and transportation fuels that could result from implementation of the Proposed Project. The section contains: (1) a description of the existing energy infrastructure serving and energy consumption from the Project Site; (2) a description of changes under the Adjusted Baseline to establish baseline conditions; (3) a summary of the regulatory framework related to energy demand and conservation; and (4) an analysis of the potential impacts related energy demand associated with the implementation of the Proposed Project.

Comments received in response to the NOP for the EIR regarding energy demand and conservation can be found in Appendix B. Applicable issues and concerns regarding potential impacts related to energy demand and conservation as a result of implementation of the Proposed Project are analyzed within this section.

The analysis included in this section was developed based on Project-specific construction and operational features described in Chapter 2, Project Description and Section 3.15, Utilities and Service Systems. The analysis also takes into account, and is consistent with, Section 3.7, Greenhouse Gas Emissions.

3.5.2 Environmental Setting

Regional Setting

Electricity

Electricity, as 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.

Southern California Edison (SCE) provides electrical services to approximately 15 million people, 15 counties, 180 incorporated cities including the City of Inglewood and the Project Site, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area, across central, coastal and southern California, an area bounded by Mono County to the North, Ventura County to the West, San Bernardino County to the East, and Orange County to the South.¹ SCE produces and purchases energy from a mix of conventional and renewable generating sources.

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW), coal, gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. In 2017, SCE's power system experienced a peak demand of 23,508 MW.^{2,3} Approximately 32 percent of SCE's 2017 electricity purchases were from renewable sources, which is similar to the 29 percent statewide percentage of electricity purchases from renewable sources.⁴ The annual electricity sale to customers in 2018 was approximately 87,143,000 megawatt hours (MWh).⁵ See **Table 3.5-1, Existing Annual Energy Use**, for a summary of SCE's 2018 electricity use.

The closest SCE substation to the Project Site is located at 4128 West 103rd Street (Lennox Substation), and is the primary source of power to the existing uses on the Project Site. The substation provides two distribution service voltages: 16 kV and 4.8 kV. Overhead power lines service the existing uses and run from west to east along West Century Boulevard and West 102nd Street, and south to north along South Prairie Avenue.

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 both cubic feet (cf) or british thermal units (Btu).

¹ Southern California Edison, About Us >Who We Are, <https://www.sce.com/about-us/who-we-are>. Accessed April 25, 2019.

² Southern California Edison, 2018 Annual Report, p. 2, <https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/eix-sce-2018-annual-report.pdf>. Accessed March 2019.

³ California Energy Commission, Hydroelectric Power in California, <https://www.energy.ca.gov/hydroelectric/index.html>. Accessed March 2019.

⁴ California Energy Commission, Utility Annual Power Content Labels for 2017, Southern California Edison, https://www.energy.ca.gov/pcl/labels/2017_labels/SCE_2017_PCL.pdf. Accessed March 2019.

⁵ Southern California Edison, 2017 Annual Report, p. 2, <https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/2017-eix-sce-annual-report.pdf>. Accessed March 2019.

The Project Site is served by the Southern California Gas Company (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 US/Mexican border.⁶

SoCalGas, along with five other California utility providers, released the *2018 California Gas Report*, presenting a forecast of natural gas supplies and requirements for California through the year 2035. 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. Overall, SoCalGas predicts a decrease in natural gas demand in future years due to a decrease in per capita usage, energy efficiency policies, and the State's transition to renewable energy displacing fossil fuels including natural gas.⁷

SoCalGas receives gas supplies from several sedimentary basins in the western United States (US) 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.⁸ Sources of natural gas in the southwestern US 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 Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.⁹ Gas supply available to SoCalGas from California sources averaged 2,625 million cf per day or 2,717 million Btu (MMBtu) in 2017, the most recent year for which data are available.¹⁰ This equates to an annual average of 892,060 million cf per year or 992 million MMBtu per year. See Table 3.5-1 for a summary of SoCalGas' 2018 natural gas use.

Existing gas lines in the vicinity of the Project Site extend west to east along West Century Boulevard, West 101st Street, and West 102nd Street and from south to north along South Prairie Avenue and South Doty Avenue.

Transportation Energy

According to the California Energy Commission (CEC), transportation accounted for nearly 38.5 percent of total energy consumption in California during 2015.¹¹ In 2016, 15.5 billion gallons of gasoline and 3.8 billion gallons of diesel fuel were consumed in California.¹²

⁶ SoCalGas, Company Profile, <https://www.socalgas.com/about-us/company-profile>. Accessed March 2019.

⁷ California Gas and Electric Utilities, 2018 California Gas Report, 2018, p. 40, https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf. Accessed February 2019.

⁸ California Gas and Electric Utilities, 2018 California Gas Report, p. 40.

⁹ California Gas and Electric Utilities, 2018 California Gas Report, p. 40.

¹⁰ California Gas and Electric Utilities, 2018 California Gas Report, p. 102.

¹¹ California Energy Commission, Final 2017 Integrated Energy Policy Report, p. 3, <https://efiling.energy.ca.gov/getdocument.aspx?tn=223205>. Accessed March 2019. Based on the transportation sector accounting for 38.5 percent of the state's GHG emissions in 2015.

¹² California Energy Commission, 2017. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed March 2019. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

Petroleum-based fuels currently account for more than 90 percent of California’s transportation fuel use.¹³

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 greenhouse gas emissions (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, gasoline consumption in California has declined. The CEC predicts that the demand for gasoline will continue to decline over the next 10 years, and there will be an increase in the use of alternative fuels.¹⁴ According to fuel sales data from the CEC, fuel consumption in Los Angeles County was approximately 3.66 billion gallons of gasoline and 0.59 billion gallons of diesel fuel in 2017.¹⁵ See Table 3.5-1 for a summary of Statewide fossil fuel consumption in 2017.

**TABLE 3.5-1
EXISTING ANNUAL REGIONAL ENERGY USE**

Source	Amount
Electricity (SCE) ^a	87,143,000 MWh
Natural Gas (SoCalGas) ^b	991,659,375 MMBtu
Gasoline (Statewide) ^c	3,659,000,000 gallons
Diesel (Statewide) ^c	590,196,078 gallons

NOTES:
^a Southern California Edison, 2018 Annual Report, p. 2,
^b California Gas and Electric Utilities, 2018 California Gas Report, p. 102
^c California Energy Commission, 2017. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results

Project Site

The entire Project Site is comprised of approximately 28 acres of land. All but six of the parcels that make up the Project Site are currently vacant. The vacant parcels within the Project Site total approximately 23 acres, or more than 85 percent of the Project Site. The six developed parcels include a restaurant, a motel, a light manufacturing/warehouse facility, a warehouse, and a groundwater well and related facilities.

All of these uses, besides the currently unoccupied light manufacturing/warehouse facility, actively consume electricity for lighting, electronics, appliances, and water conveyance. Natural gas is also used for cooking, hot water heating, and building heating/cooling at the five active land uses, and transportation fuels are used for visitor, vendor, and worker trips to and from the

¹³ California Energy Commission, 2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2016, <http://www.energy.ca.gov/2015publications/CEC-600-2015-014/CEC-600-2015-014-CMF.pdf>. Accessed March 2019.

¹⁴ California Energy Commission, 2017 Integrated Energy Policy Report, p. 213, <https://efiling.energy.ca.gov/getdocument.aspx?tn=223205>. Accessed March 2019.

¹⁵ California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2017. Diesel is adjusted to account for retail (51%) and non-retail (49%) diesel sales.

existing active land uses. The remaining, and majority, of the Project Site is undeveloped and does not consume energy or natural gas.

The existing energy use for the active uses within the Project Site are summarized in **Table 3.5-2, *Estimated Existing Energy Consumption***. Detailed energy calculations are provided in Appendix G of this Draft EIR.

**TABLE 3.5-2
 ESTIMATED EXISTING ENERGY CONSUMPTION**

Emissions Sources	Electricity (MWh)	Natural Gas (MMBtu)	Gasoline (gallons)	Diesel (gallons)
Existing – Onsite				
Fast Food Restaurant	43.3	289.9		
Hotel	173.1	575.6		
Warehouse	247.3	602.1		
Manufacturing/Warehouse	26.3	24.8	76,361 ^c	7,567 ^c
Commercial (Catering)	16.0	10.4		
Natural Gas-Powered Vehicles	-	63.5		
Subtotal	506.0	1,566.3	76,361	7,567
Existing – Offsite				
LA Clippers Team Office	262.6	245.9		
LA Clippers Training Center	475.4	811.86	94,270	9,341
Natural Gas-Powered Vehicles	-	78.3	-	-
Subtotal	738.0	1,136.1	94,270	9,341
Total	1,244	2,624	170,631	16,908

NOTES:

- ^a Totals may not add up exactly due to rounding in the modeling calculations.
- ^b CO₂e emissions are calculated using the global warming potential values from the IPCC AR4.
- ^c Existing onsite fossil fuel consumption is calculated as a total for all onsite existing land uses

SOURCE: ESA, 2019 [ADD SOURCE: cite the source of the estimates for energy use. Based on site-specific data, or on industry estimates for such uses?]

Existing Uses Relocating to Project Site

In addition to the actual LA Clippers games being relocated to the Project Site, the existing LA Clippers Team Offices, which are currently located at 1212 South Flower Street, Los Angeles, California, and the existing LA Clippers training center, which is located at 6854 South Centinela Avenue in Los Angeles, California, would be relocated to the Project Site upon completion of construction. See “Existing – Offsite” in Table 3.5-1, above.

3.5.3 Adjusted Baseline Environmental Setting

As described in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, the analysis in this section assumes the Adjusted Baseline. Related to energy demand and conservation, the changes associated with the Hollywood Park Specific Plan (HPSP) Adjusted Baseline project

include provision of energy infrastructure to serve the HPSP Adjusted Baseline project (electric vehicle (EV) charging stations, electricity lines, and transformers, natural gas lines, etc.). These infrastructure improvements will be constructed and in operation at the time the Proposed Project commences operations. For purposes of this analysis, the infrastructure improvements included in the Adjusted Baseline would not affect the threshold of significance or the impact analysis related to energy demand and conservation for the Proposed Project. No other changes to the existing environmental setting related to energy demand and conservation would occur under the Adjusted Baseline.

3.5.4 Regulatory Setting

This section provides a summary of pertinent federal, State, and local energy laws, regulations, standards, and policies.

Federal

Energy Policy Act of 1992

The Energy Policy Act (EPAcT) of 1992 was passed to reduce US dependence on foreign petroleum and improve air quality. EPAcT includes several provisions intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAcT requires certain Federal, State, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. Financial incentives are also included in EPAcT. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the EPAcT to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for 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.

Corporate Average Fuel Economy (CAFE) Standards

Established by the US Congress in 1975, the CAFE standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (US EPA) jointly administer the CAFE standards. The US Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given to: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.¹⁶

¹⁶ For more information on the CAFE standards, refer to <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed March 2019.

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by US EPA 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.¹⁷ US 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.¹⁸

US Department of Transportation, US Department of Energy, and US Environmental Protection Agency on Transportation Energy

On the federal level, the US Department of Transportation, US Department of Energy, and US EPA are three agencies with substantial influence over energy policies related to transportation fuels consumption. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure projects.

State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is a State agency created by a constitutional amendment to regulate privately owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas.¹⁹

California Energy Commission

The California Energy Commission (CEC) is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: (1) forecasting future energy needs and keeping historical energy data; (2) licensing thermal power plants 50 MW or larger; (3) promoting energy efficiency through appliance and building standards; (4) developing energy technologies and supporting renewable energy; and (5) planning for and directing State response to energy emergencies.

¹⁷ 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/Exec/zyPDF.cgi/P100BOT1.PDF?Dockey=P100BOT1.PDF>. Accessed March 2019.

¹⁸ 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 March 2019.

¹⁹ California Public Utilities Commission, 2019. *California Public Utilities Commission*. Available: <http://www.cpuc.ca.gov/>. Accessed April 25, 2019.

Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code sections 25300–25323) requires the 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 (Public Resources Code section 25301(a)). The 2017 Integrated Energy Policy Report provides the results of the CEC’s assessments of a variety of energy issues facing California including energy efficiency, strategies related to data for improved decisions in the Existing Buildings Energy Efficiency Action Plan, building energy efficiency standards, the impact of drought on California’s energy system, achieving 50 percent renewables by 2030, the California Energy Demand Forecast, the Natural Gas Outlook, the Transportation Energy Demand Forecast, Alternative and Renewable Fuel and Vehicle Technology Program benefits updates, an update on electricity infrastructure in Southern California, an update on trends in California’s sources of crude oil, an update on California’s nuclear plants, and other energy issues.

California Global Warming Solutions Act of 2006

In 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (codified in the California Health and Safety Code (HSC), Division 25.5), which focused on reducing GHG emissions in California to 1990 levels by 2020. Under HSC Division 25.5, California Air Resources Board (CARB) has the primary responsibility for reducing the State’s greenhouse gas (GHG) emissions; however, AB 32 also tasked the CEC and CPUC with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, Governor Brown signed SB 32 and its companion bill AB 197. SB 32 and AB 197 amend HSC Division 25.5 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. Please see Section 3.7, Greenhouse Gas Emissions, of this Draft EIR, Greenhouse Gas Emissions, for additional details regarding these statutes.

Senate Bill (SB) 1078 (Sher) (Chapter 516, Statutes of 2002), SB 107 (Simitian) (Chapter 464, Statutes of 2006), SB 100 (De León) (Chapter 312, Statutes of 2018) and Executive Order S-14-08

The State of California adopted standards to increase the percentage of electricity that retail sellers, including investor-owned utilities and community choice aggregators, must provide from renewable resources.²⁰ The standards are referred to as the Renewables Portfolio Standards (RPS). The legislation requires utilities to increase the percentage of electricity obtained from renewable sources to 33 percent by 2020 and 50 percent by 2030.

²⁰ SB 1078 (Chapter 526, Statutes of 2002); SB 107 (Chapter 464, Statutes of 2006); Executive Order S-14-08.

On September 10, 2018, 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. SB 100 also provides that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

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.²¹ Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this program.

California Building Standards Code (Title 24, Parts 6 and 11)

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 2016 Title 24 standards, which became effective on January 1, 2017.²² The 2016 Title 24 standards 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) 90.1-2013 national standards.²³

The next update to the Title 24 energy efficiency standards (2019 standards) go into effect on January 1, 2020.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, became effective on January 1, 2017. The 2016 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.²⁴ Most mandatory measure changes, when compared to the previously applicable 2013 CALGreen Code, were related to the definitions and to the clarification or addition of referenced manuals, handbooks, and standards. For example,

²¹ California Public Utilities Commission, RPS Program Overview, http://www.cpuc.ca.gov/RPS_Overview/. Accessed April 25, 2019.

²² California Energy Commission, 2016 Building Energy Efficiency Standards, <http://www.energy.ca.gov/title24/2016standards/>. Accessed March 2019.

²³ California Energy Commission, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015, <http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>. Accessed December 26, 2018.

²⁴ California Building Standards Commission, 2017. Guide to the 2016 California Green Building Standards Code Nonresidential, January 2017, <https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf>. Accessed March 2019.

several definitions related to energy that were added or revised affect electric vehicle (EV) chargers and charging, and hot water recirculation systems. For new multi-family dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification. For non-residential mandatory measures, Table 5.106.5.3.3 of the CALGreen Code, identifying the number of required EV charging spaces has been revised in its entirety. Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding these standards.

California Assembly Bill (AB) 1493 (Pavley)

The transportation sector accounts for more than half of California's carbon dioxide (CO₂) emissions. AB 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set 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.^{25,26} Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this regulation.

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 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 prohibits diesel-fueled commercial vehicles from idling 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.

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10-percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

²⁵ California Air Resources Board, Clean Car Standards—Pavley, Assembly Bill 1493, <http://www.arb.ca.gov/cc/ccms/ccms.htm>, last reviewed January 11, 2017. Accessed March 2019.

²⁶ United States Environmental Protection Agency, 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks. <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF>. Accessed March 2019.

Regulation to Reduce Emissions of Diesel Particulate Matter, Nitrogen Oxides and other Criteria Air Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

In addition to limiting exhaust from idling trucks, in 2008 CARB approved the Truck and Bus regulation to reduce NO_x, PM₁₀, and PM_{2.5} emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. The phasing of this regulation has full implementation by 2023.

CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

While the goals of these measures are primarily to reduce public health impacts from diesel emissions, compliance with the regulation has shown an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines.²⁷

CARB's 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.²⁸ The program requires a greater number of zero-emission vehicle 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 air pollutants and GHG emissions from light- and medium-duty vehicles; and the Zero-Emissions Vehicle regulations (ZEV) to require manufactures to produce an increasing number of pure ZEV's (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

Adopted by the State on September 30, 2008, the Sustainable Communities and Climate Protection Act of 2008, or SB 375, establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, each region's reduction target must be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning in a Sustainable Communities Strategy (SCS). Certain

²⁷ Cummins, Inc., Cummins Tier-4-Final Field Test Showed 10% Lower Fuel Consumption, March 5, 2014, <https://cumminsengines.com/cummins-tier-4-final-field-test-program>. Accessed March 2019.

²⁸ 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 March 2019.

transportation planning and programming activities must then be consistent with the SCS. However, SB 375 expressly provides that the SCS does not regulate local land use decisions, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or the SCS. Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding these requirements.

California Environmental Quality Act

Under CEQA (PRC section 21100, subdivision (b)(3)), EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. If the analysis of a proposed project shows that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, then the EIR must identify mitigation measures to address that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidelines, § 15126.2(b).) Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in the EIR. In addition, Appendix F provides the following topics for consideration in the discussion of energy use in an EIR, to the extent the topics are applicable or relevant to the Proposed Project:

- The Proposed Project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the Proposed Project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the Proposed Project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the Proposed Project on peak and base period demands for electricity and other forms of energy;
- The degree to which the Proposed Project complies with existing energy standards;
- The effects of the Proposed Project on energy resources; and
- The Proposed Project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for the region in which the City of Inglewood is located. In April 2016, SCAG adopted the *2016 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for*

Mobility, Accessibility, Sustainability and a High Quality of Life (RTP/SCS), which is an update to the previous 2012 RTP/SCS.²⁹

The 2016 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2016 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving (compared to per capita emissions in 2005) an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040. Compliance with and implementation of 2016 RTP/SCS policies and strategies would have co-benefits of reducing per capita energy demand and fuel use associated with reduced per capita VMT.

SCAG's 2016 RTP/SCS builds on the land use policies that were incorporated into the 2012 RTP/SCS, and provides specific implementation strategies. These strategies include development of "complete communities," defined as mixed-use districts that concentrate housing, employment, and a mix of retail and services in close proximity to each other; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "complete streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles. The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's high quality transit areas (HQTAs), which SCAG defines as areas within one-half mile of a well-serviced fixed guideway transit stop, and it includes bus transit corridors where buses pick up passengers every 15 minutes or less during peak commute hours.

In addition, the 2016 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2016 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. Please see Section 3.7, Greenhouse Gas Emissions, of this EIR for additional details regarding the 2016 RTP/SCS.

The central goal of the 2016 RTP/SCS of reducing GHG emissions through land use planning and reducing VMT is directly related to reduced energy consumption. Many of the emission reduction goals of the 2016 RTP/SCS would require reducing vehicular usage through the promotion of co-locating diverse land uses that can be easily accessed by pedestrians, bicyclists, and/or public

²⁹ Southern California Association of Governments, 2016. *2016 Regional Transportation Plan/Sustainable Communities Strategy Executive Summary*. Available: http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_ExecSummary.pdf. Accessed March 11, 2019. Adopted April 2016.

transit. Meeting these goals would result in less passenger vehicle travel and ultimately less fossil fuel use.

Local

City of Inglewood General Plan

The City of Inglewood General Plan sets forth goals, objectives, and policies for the future development of the City and designates the location of desired future land uses within the City.

There are no goals and policies in the General Plan that directly address energy demand and conservation. However, the following goals from the Land Use Element of the City of Inglewood General Plan are relevant to transportation-related energy demand and conservation.³⁰

Circulation Goal: Promote and support adequate public transportation within the City and the region.

Circulation Goal: Develop a safe and adequate pedestrian circulation system which is barrier free for the handicapped.

Please see further discussion of transit and pedestrian circulation in Section 3.14, Transportation and Circulation.

City of Inglewood Climate Action Plan

The Inglewood Energy and Climate Action Plan (ECAP) presents the City's community and municipal inventories, emissions forecasts, and recommended reduction targets for emissions to mitigate the City's impacts on climate change.³¹ The ECAP includes a business-as-usual (BAU) forecast that estimates future emissions in 2020 and 2035 from six sectors: Transportation, Residential Energy, Commercial/Municipal Energy, Industrial Energy, Solid Waste, and Water. The BAU forecast assumes a future under regulatory conditions as they existed in 2010, and it does not include the effects of updates to Title 24, the Renewables Portfolio Standard, and the Pavley Clean Car Standards on future GHG emissions. Under the BAU forecast, Inglewood's total GHG emissions are expected to increase approximately 14 percent from 2010 (594,273 MTCO_{2e}) to 2035 (678,283 MTCO_{2e}). On a per-service population (SP)³² basis, the increase is shown to be 4.5 percent, from 4.22 MTCO_{2e}/SP in 2010 to 4.41 MTCO_{2e}/SP in 2035. The GHG emissions reductions realized by state and local measures would be a direct result of energy efficiency upgrades aimed at increasing building energy performance, promoting renewable energy, and increasing vehicle fuel economy. The ECAP includes energy reductions from the following implementing strategies and actions:

³⁰ City of Inglewood, Department of Community Development and Housing, 1980. Land Use Element of the Inglewood General Plan. January 1980. Amended September 14, 2016.

³¹ City of Inglewood, 2013. *Inglewood Energy and Climate Action Plan*. Available: <https://www.cityofinglewood.org/225/Sustainability>. Accessed February 15, 2019. March 2013.

³² Service population = residents plus employees working within the City limits.

Strategy 1 – Lead by Example with Municipal Government Actions

- Continue Building and Facility Energy Upgrades to reduce energy use
- Replace all City-owned street, park, and traffic lights with LED lights
- Accelerate city vehicle fleet replacement
- Continue commute trip reduction program
- Planning for electric vehicle infrastructure

Strategy 2: Increase Energy Efficiency

- Make commercial buildings more efficient
- Increase the energy efficiency of residential buildings
- Increase the energy efficiency of street and traffic lights.

Strategy 3: Support Renewable Energy Generation

- Remove barriers to renewable energy generation
- Make renewable energy generation more affordable
- Educate potential customers

Strategy 4: Improve Transportation Options and Manage Transportation Demand

- Make roadways more efficient
- Improve transit
- Improve bicycle facilities
- Make parking more efficient
- Reduce commute trips
- Encourage land use intensification and diversity

Strategy 5: Reduce Consumption and Waste

- Use less water
- Produce less water
- Promote local food production

The ECAP strategies and local actions support reducing energy consumption.

3.5.5 Analysis, Impacts and Mitigation

Significance Criteria

The City has not adopted thresholds of significance for analysis of impacts to energy. The following thresholds of significance have been adapted from CEQA Guidelines section 15065 and CEQA Guidelines Appendix G. These thresholds are also based on Public Resources Code

section 21100, subdivision (b)(3), CEQA Guidelines section 15126.2, subdivision (b), and CEQA Guidelines Appendix F. A significant impact would occur if the Proposed Project would:

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

Methodology and Assumptions

The discussion below presents the methodology used to analyze the Proposed Project's potential energy usage, including electricity, natural gas, and transportation fuels. Specific assumptions and data sources needed to quantify energy consumption during both construction and operation is presented. The general basis for the energy calculations (see Appendix G of this Draft EIR) are those used for the GHG calculations, as discussed in Section 3.7, Greenhouse Gas Emissions, of this Draft EIR.

Baseline Conditions

Baseline annual energy consumption includes the operational energy use associated with LA Clippers games at the Staples Center, LA Clippers' team business operations, on-site training facilities, market-shifted non-NBA events, the existing on-site structures that would be removed and replaced with construction of the Proposed Project, and vehicle trips to and from the on-site uses. This energy use is currently occurring, and is therefore part of the existing environmental setting.

The analysis assumes that an annual average of 5 pre-season, 41 regular season, and 3 postseason LA Clippers home games would be hosted at the arena. The annual average number of post-season games was based on the average number of post-season home games per NBA team per year. These 48 LA Clippers home games are considered part of the Proposed Project baseline conditions. These games currently occur at Staples Center and the energy use associated with these games is considered part of the existing environmental setting.

The baseline conditions analysis conservatively assumes that a portion of the non-NBA game events (e.g., concerts, family shows, non-NBA sports games or other events) anticipated to occur at the Arena Site would be new events that would not otherwise occur in the Los Angeles area, and the other portion of non-NBA game events would have otherwise occurred at other venues in the Los Angeles area, but would be relocated at the Project Site, the latter of which are referred to as market-shifted events. The market-shifted events are considered part of the Adjusted Baseline conditions of the Proposed Project. That is because these events are already occurring in the Los Angeles area and, as such, the energy use associated with these events is part of the existing environmental setting.³³ See Table 3.7-4 in Section 3.7, Greenhouse Gas Emissions, for a detailed

³³ The estimate of the number of events that is new to the market, as opposed to market-shifted events, is based on an analysis of the Los Angeles market for events hosted at arenas, based on information regarding the number and growth of events at Staples Center and The Forum. Stone Planning. Stone Planning, Inglewood Basketball and Entertainment Center – Analysis of Future Events (May 2019).

account of the anticipated annual events at the Project Site and the number of market shifted events per event type.

The Proposed Project includes relocation of the existing LA Clippers team offices, which are located at 1212 South Flower Street, Los Angeles, California, and the existing LA Clippers training center, which is located at 6854 South Centinela Avenue in Los Angeles, California. Energy use at the existing team offices and training facilities are currently occurring, and are therefore arguably part of the existing environmental setting. The energy use at the existing team offices and training facilities are not, however, included in the “baseline” energy use. Although these uses would be relocated to the Project Site upon completion of construction, it is likely that these facilities would be backfilled with new tenants once they are vacated by the LA Clippers. This is particularly true of the current LA Clippers team offices in downtown Los Angeles, located in a multi-tenant office building where demand for commercial real estate is relatively high. For the LA Clippers’ training center, it would be speculative to assume the type of use the could occupy in the future given its unique design and space allocation, but for the purposes of this analysis it is assumed that a new tenant will backfill it with a similar emissions profile. Thus, the existing emissions from operations of both the team offices and the training center are not considered part of the baseline conditions against which the Proposed Project’s energy use will be measured.

Development of the Proposed Project would first require the redevelopment of the properties located within the Project Site. Several of these parcels are currently developed with existing on-site uses. Existing buildings within the Project Site include a 16,806 sf motel; 1,118 sf fast food restaurant; 28,809 sf light industrial building; 1,134 sf commercial building; and a 6,321 sf light manufacturing/industrial warehouse. Refer to Section 3.7, Greenhouse Gas Emissions, for more information regarding baseline conditions and assumptions.

Construction

The existing uses on the Project Sites would be demolished and removed to allow for development of the Proposed Project. See Chapter 2, Project Description, for a detailed account of the existing land uses.

Construction energy consumption would result from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, construction workers traveling to and from the Project Site, electricity consumed to light and cool the construction trailers, conveyance of water for dust control, and any electrically-driven construction equipment. 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. Construction emissions are forecasted by assuming a conservative estimate of construction activities with construction of the Proposed Project over approximately 40 months, from 3rd Quarter 2021 through 4th Quarter 2024 (i.e., assuming all construction occurs at the earliest

feasible date) and applying the mobile source emissions factors. If, for various site planning, financial, or other reasons, the onset of construction is delayed to a later date than assumed in the analysis, construction impacts would be similar to or less than those analyzed, because more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is due to the In-Use Off-Road Diesel-Fueled Fleets Regulation implemented by CARB that requires construction equipment fleet operators to phase-in less polluting heavy-duty equipment and trucks over time.³⁴

Electricity

Construction electricity use 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 activities. The construction office was assumed to be two 2,500 sf trailers and was modelled using CalEEMod's land use category for "General Office." In addition to outputting emissions, CalEEMod estimates electricity, natural gas, and water use. Electricity demand by construction equipment was estimated using default horsepower (hp) and load factors from CalEEMod and hours of operation per day.³⁵ The total horsepower-hours (hp-h) were then converted to kilowatt-hours (kWh) using a standard conversion factor.³⁶ Electricity use from water conveyance for dust control on-site was conservatively estimated using a standard water usage factor per square foot for irrigated landscaping areas that would be generally equivalent to conveying water to a construction site.³⁷ The calculated water usage was then converted to electricity used for conveyance using default CalEEMod electricity intensity factors for the South Coast Air Basin.³⁸ The electricity demand under existing, baseline conditions was then subtracted from the construction electricity use to determine the net electricity use during construction of the Proposed Project.

Natural Gas

Natural gas is not expected to be consumed in large quantity during construction of the Proposed Project because construction offices would not be heated and construction equipment and vehicles are primarily powered by either diesel, gasoline, or electricity. However, the Proposed Project could use compressed natural gas (CNG) powered forklifts during construction. Therefore, natural gas associated with construction activities was calculated by converting the hp

³⁴ California Air Resources Board, In-Use Off-Road Diesel-Fueled Fleets Regulation, Revised October 2016. https://www.arb.ca.gov/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf.

³⁵ South Coast Air Quality Management District, CalEEMod User's Guide Appendix D: Default Data Tables, October 2017. http://www.aqmd.gov/docs/default-source/calceemod/05_appendix-d2016-3-2.pdf?sfvrsn=4.

³⁶ Iowa State University, Energy Measurements and Conversions, 2008. <https://www.extension.iastate.edu/agdm/wholefarm/pdf/c6-86.pdf>. Accessed March 2019.

³⁷ US Department of Energy, Energy Efficiency and Renewable Energy, Federal Energy Management Program. "Guidelines for Estimating Unmetered Landscaping Water Use". July 2010. p. 12, Table 4. https://www.energy.gov/sites/prod/files/2013/10/f3/est_unmetered_landscape_wtr.pdf.

³⁸ South Coast Air Quality Management District, CalEEMod User's Guide Appendix D: Default Data Tables, October 2017. http://www.aqmd.gov/docs/default-source/calceemod/05_appendix-d2016-3-2.pdf?sfvrsn=4.

and usage factor provided in CalEEMod. The total hp-h of CNG-powered equipment was then multiplied by fuel usage estimates per hp-h to estimate the amount of CNG fuel used.³⁹

Transportation Fuels

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix estimated by the project applicant and usage factors provided in the CalEEMod construction output files included in Appendix D of this Draft EIR. The total hp was then multiplied by fuel usage estimates per hp-h from CARB's off-road vehicle (OFFROAD) model.⁴⁰

Fuel consumption from construction on-road worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances consistent with the air quality and greenhouse gas emissions modeling worksheets and CalEEMod construction output files. Total VMT for these on-road vehicles were then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC2017 model. The model was used to calculate fuel consumed based on the total annual VMT for each vehicle type. A combination of CalEEMod assumed trip lengths and client-provided specific trip lengths were used for worker commutes, vendor and concrete trucks, and haul truck trips. Consistent with CalEEMod, construction worker trips were assumed to include a mix of light duty gasoline automobiles and light duty gasoline trucks. Construction vendor truck were assumed to be a mix of medium-heavy duty and heavy duty diesel trucks and concrete and haul trucks were assumed to be heavy-duty diesel trucks. The fuel consumption of the baseline conditions was then subtracted from the construction fuel consumption to determine the net fuel consumption during construction of the Proposed Project. Refer to Appendix G of this Draft EIR for detailed energy calculations.

The energy usage required for construction of the Proposed Project has been estimated based on the number and type of construction equipment that would be used during construction by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). Energy for construction worker commuting trips was estimated based on the predicted number of workers for the various phases of construction and the estimated VMT based on the conservative values in the CalEEMod and EMFAC2017 models. The assessment also includes a discussion of the Proposed Project's compliance with relevant energy-related regulatory requirements and incorporation of GHG-PDF-1 that would minimize the amount of energy usage during construction. These measures are also discussed in Chapter 2, Project Description; Section 3.2, Air Quality; and Section 3.7, Greenhouse Gas Emissions, of this Draft EIR.

The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB OFFROAD emissions model, which is a state-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul

³⁹ International Gas Union, Natural Gas Conversion Guide, 2012. http://agnatural.pt/documentos/ver/natural-gas-conversion-guide_cb4f0ccd80ccaf88ca5ec336a38600867db5aaf1.pdf.

⁴⁰ California Air Resources Board, 2017. Off-Road Diesel Emission Factor Update for NO_x and PM. 2017. https://ww3.arb.ca.gov/msei/ordiesel/ordas_ef_fcf_2017.pdf.

trucks, vendor trucks, concrete trucks, and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC2017 emissions model, which is a state-approved model for estimating emissions from on-road vehicles and trucks.

Operation

Operational energy impacts were assessed based on the increase in energy demand compared to baseline conditions described above. Under CEQA, the existing environmental setting for an EIR is generally established at or around the time that the NOP for the EIR is published. On-site existing uses would be demolished and removed to allow for development of the Proposed Project. Therefore, operational energy associated with demolished existing uses is subtracted from the total operations of the Project to calculate the net energy consumed by the Proposed Project. Within the CalEEMod software, building electricity and natural gas usage rates were adjusted to account for prior Title 24 Building Energy Efficiency Standards for the existing uses.⁴¹ As stated above, the net change in operational energy demand is based on the difference between the existing baseline condition energy demand and the energy demand of the Proposed Project at full buildout.

Electricity

The Proposed Project's estimated electricity demand was analyzed relative to SCE's existing and planned energy supplies in 2024 (i.e., the Proposed Project buildout year)⁴² to determine whether the utility would be able to meet the Proposed Project's energy demands. Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from operation of the Proposed Project was calculated using demand factors provided in CalEEMod and adjusted for the Proposed Project's compliance with 2019 Title 24 building energy efficiency standards, which go into effect on January 1, 2020. Additionally, the Proposed Project's energy demand was analyzed relative to SCE's expected total capacity in 2024.

Electricity from water use associated with operation of the Proposed Project is calculated using CalEEMod and the Water Supply Assessment prepared for the Proposed Project, and the electrical intensity factors for water supply and distribution. Water-related energy intensities in CalEEMod are based on the CEC's report *Refining Estimates of Water-Related Energy Use in California*.⁴³ For more detail on the Water Supply Assessment, see Section 3.15, Utilities and Service Systems.

⁴¹ California Air Resources Board, 2016. CalEEMod User's Guide, Appendix E, Section 5, September 2016, http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/06_appendix-e2016-3-1.pdf?sfvrsn=2. Accessed December 26, 2018. Factors for the prior Title 24 standard are extrapolated based on the technical source documentation.

⁴² California Energy Commission, 2018. Electricity and Natural Gas Demand Forecast, 2018. Available: http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN222287_20180120T141708_The_California_Energy_Demand_20182030_Revised_Forecast.pdf. Accessed March 2019.

⁴³ California Energy Commission, *Refining Estimates of Water-Related Energy Use in California*, PIER Final Project Report, CEC-500-2006-118, 2006. Available: <https://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.pdf>. Accessed April 5, 2019.

Natural Gas

The Proposed Project's estimated natural gas demand was analyzed relative to SoCalGas' existing and planned energy supplies in 2024 (i.e., the Proposed Project buildout year)⁴⁴ to determine whether the utility would be able to meet the Proposed Project's energy demands. Furthermore, natural gas demand generated by the baseline conditions were calculated using demand factors provided in CalEEMod and subtracted from the Proposed Project's natural gas demand to obtain the net annual natural gas demand. Natural gas demand for the Proposed Project would be generated mainly by building heating/cooling and appliances.

Transportation Fuels

Mobile source emissions for the Proposed Project include event-day trips related to LA Clippers games and other events at the arena, commute trips by arena and sports team management employees, vendors and suppliers, concert/event attendees, and visitor trips associated with the accompanying development land uses.

Energy demand due to the transportation of residents, employees, vendors and suppliers, 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 for the Proposed Project, see Section 3.14, Transportation and Circulation, and Appendix K for additional transportation-related details. Fuel use was also estimated from diesel generators and light carts used to provide ancillary power and lighting to trailers and tour/team buses. The assessment also includes a discussion of the Proposed Project's compliance with relevant energy-related regulations, the incorporation of GHG-PDF-1 and WS-PDF-1, and the land use transportation characteristics that would minimize the amount of transportation energy usage during operations. These features and characteristics are also discussed in Chapter 2, Project Description, Section 3.2, Air Quality, Section 3.7, Greenhouse Gas Emissions, and Section 3.15, Utilities and Service Systems, of this Draft EIR.

Based on the Proposed Project's annual operational VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon in EMFAC2017. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated and deemed consistent with the CalEEMod defaults based on the Project Site's location within Los Angeles County. Supporting calculations are provided in Appendix G of this Draft EIR.

Project Design Features

The Proposed Project would include various Project Design Features (PDFs) that both directly and indirectly affect energy consumption and conservation. Section 3.7, *Greenhouse Gas Emissions*, provides details of the potential PDFs resulting from the Project's expected Leadership in Energy and Environmental Design (LEED) Gold Certification. A brief summary of the PDFs that could be applicable to energy are listed below:

⁴⁴ California Gas and Electric Utilities, 2018. California Gas Report, 2018, p. 101-103. While the Project's Development Agreement is through 2040, comparison to the analyzed buildout year of 2025 provides a conservative analysis as supply projections for electricity and natural gas increase in future years.

- *Location and Transportation.* The Proposed Project would be eligible for credits in the location and transportation category in the following areas: (1) the Project Site has access to high quality transit, (2) the Proposed Project would include bicycle and electric vehicle charging facilities, and (3) the Proposed Project would minimize its parking footprint.
- The Proposed Project would be eligible to achieve the Access to Quality Transit credit because local transit service to the Project Site would be provided by the Los Angeles Metropolitan Transportation Authority (Metro) in the form of future below- and at-grade light rail on the Metro Crenshaw/LAX Line, which is currently under construction and expected to be complete in 2019. The Proposed Project would provide shuttle pick-up and drop-off service at the following three Metro rail stations: the existing Metro Green Line – Hawthorne/Lennox Station, and the future Metro Crenshaw/LAX Line – Florence/La Brea Station and AMC 96th Street Stations. In addition, the Proposed Project is also served by above-ground, route bus service; the Project Site is located within ¼ mile of 8 existing Metro bus stops along the following four Metro routes, 117, 211/215, and 212/312.
- The Proposed Project would also provide electric vehicle charging stations for 8 percent of parking spaces, which would exceed the requirements for the Proposed Project to be eligible for the Green Vehicles credit.
- *Sustainable Sites.* The Proposed Project would be eligible for credits for rainwater management, open space, heat island reduction, and light pollution reduction. Credits for open space are based on the percentage of permeable surfaces, including roof-top gardens.
- *Water Efficiency.* The Proposed Project would be eligible for credits for the use of ultra-low flow fixtures in restrooms such as low flow faucets with aerators, dual flush toilets, and waterless urinals. These features would reduce indoor water use by a minimum of 40 percent and would be required to meet Universal Plumbing Code standards. The Proposed Project would also be eligible for credits for using 100 percent recycled water to service project landscaping designed for low water usage.
- *Energy and Atmosphere.* The Proposed Project would be eligible for credits for optimized energy performance and renewable energy production. The Proposed Project would include a 700-kilowatt (kW) PV system, generating approximately 1,085,000 kWh of carbon-free energy annually. The Proposed Project will also implement the following energy efficiency measures: Title 24 compliance; use of 100 percent light emitting diode (LED) lighting indoors and outdoors throughout the site; and implementation of high efficiency HVAC systems. In addition, the Proposed Project’s design would include compliance with CALGreen Code Voluntary Tier 1, which is estimated to achieve a 10 percent reduction in energy consumption over Title 24 2019 standards based on the preliminary design of the Proposed Project.
- *Materials and Resources.* The Proposed Project would be eligible for credits for Construction and Demolition Waste Management and sourcing of raw materials. The Proposed Project would recycle at least 75 percent of demolition materials, which exceeds the City of Inglewood’s target of 50 percent demolition waste recycling and is in accordance with state diversion targets that aim to divert a minimum of 75 percent of construction and demolition materials from landfill disposal.

- *Innovation.* The Proposed Project would be eligible for innovation credits. Innovative strategies include the following: implementation of the FanFirst/Occupant Comfort Survey,⁴⁵ green education program, LEED Operations + Management (O+M) Starter Kit (Pest Management and Green Cleaning Program), and the purchasing of 100 percent LED lamps.

Impacts and Mitigation Measures

Impact 3.5-1: The Proposed Project could cause wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation of the Proposed Project. (Less Than Significant)

Construction

During Project construction, energy would be consumed in the form of electricity for powering the construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses such as lights, water conveyance for dust control, and other construction activities. Natural gas would be used for CNG-powered offroad vehicles. 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 travel 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).

Table 3.5-3 provides a summary of the annual average electricity, natural gas, gasoline fuel, and diesel fuel estimated to be consumed during Project construction. Net construction energy use subtracts out all existing onsite use (see Table 3.5-2) from the construction energy use since the construction of the Proposed Project will require the demolition of all onsite existing uses. All offsite existing uses and market shifted events will still be operational during construction and therefore are left out of the net energy calculation. Each of these is discussed and analyzed in greater detail in the sections below.

Electricity

During construction of the Proposed Project, electricity would be consumed to power lighting, heating, and cooling in the construction trailers, outdoor lighting of the site, electric equipment, and supply and convey water for dust control. Electricity would be supplied to the Project Site by SCE and would be obtained from the existing electrical lines that connect to the Project Site.

⁴⁵ FanFirst Connected Comfort utilizes real time crowdsourced feedback during an event to adjust temperature in the arena bowl to increase fan comfort and reduce over cooling/wasted energy.

**TABLE 3.5-3
 SUMMARY OF NET ENERGY USE DURING PROJECT CONSTRUCTION ^{a,c}**

Energy Type	Annual Average Quantity During Construction ^b
Electricity	
Existing Onsite	(506 MWh)
Total Construction Electricity	4,743 MWh
<i>Offroad Equipment</i>	4,521 MWh
<i>Construction Office</i>	65 MWh
<i>Electricity from Water (Dust Control)</i>	157 MWh
Total Net Electricity	4,237 MWh
Natural Gas	
Existing Onsite	(1,566 MMBtu)
Offroad Equipment	
Total Net Natural Gas	
Gasoline	
Existing Onsite	(76,361 gallons)
On-Road Construction Equipment	280,621 gallons
Off-Road Construction Equipment	0 gallons
Total Net Gasoline	213,144 gallons
Diesel	
Existing Onsite	(7,567 gallons)
On-Road Construction Equipment	89,363 gallons
Off-Road Construction Equipment	195,070 gallons
Total Net Diesel	277,273 gallons [NOTE: Still finalizing construction energy #s]
NOTES:	
kWh = kilowatt-hours; N/A = not applicable	
^a Detailed calculations are provided in Appendix G of this Draft EIR.	
^b Totals may not add up due to rounding of decimals.	
^c Negative values are denoted using parentheses.	
SOURCE: ESA, 2019; CalEEMod, 2019.	

As shown in Table 3.5-3, annual average construction electricity usage would be approximately 4,743 MWh. The existing electricity usage at the Project Site is approximately 506 MWh annually; therefore, the average annual net construction electricity consumption would be increased by approximately 4,237 MWh per year and therefore would be within the supply and infrastructure capabilities of SCE (87,143 GWh net energy for 2018).⁴⁶ 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

⁴⁶ Southern California Edison, 2018 Annual Report, p. 2. <https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/eix-sce-2018-annual-report.pdf>.

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. 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, impacts from construction electrical demand would be **less than significant** and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Natural Gas

As stated above, construction activities, including the construction of new buildings and facilities, would consume natural gas in the form of CNG for powering a portion of the offroad equipment. Accordingly, natural gas would not be supplied to support Project construction activities; thus, there would be no expected demand generated by construction of the Proposed Project. Therefore, impacts from construction natural gas demand would be **less than significant** and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Transportation Energy

Table 3.5-3 reports the amount of petroleum-based transportation energy that could potentially be consumed during Project construction based on the conservative set of assumptions provided in Appendix G of this Draft EIR. As shown, the Project Site's current annual demand for diesel fuel is approximately 7,567 gallons and for gasoline is approximately 76,361 gallons. During Project construction, on- and off-road vehicles would consume an estimated annual average of approximately 284,432 gallons of diesel and approximately 280,621 gallons of gasoline. Project construction activities would last for approximately 40 months; therefore, the annual average net fuel consumption would be approximately 277,273 gallons of diesel and approximately 213,144 gallons of gasoline per year of construction. For comparison purposes only, and not for the purpose of determining significance, the fuel usage during Project construction would represent approximately 0.006 percent of the 2017 annual on-road gasoline-related energy consumption and 0.047 percent of the 2017 annual diesel fuel-related energy consumption in Los Angeles County,⁴⁷ as shown in Appendix G 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 proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.⁴⁸ The Proposed 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

⁴⁷ California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2017, https://www.energy.ca.gov/almanac/transportation_data/gasoline/2010-2017_A15_Results.xlsx. Accessed December 26, 2018.

⁴⁸ BP Global, Oil reserves, 2018, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil.html>. Accessed December 26, 2018.

emissions, but would also result in fuel savings in addition to compliance with Corporate Average Fuel Economy standards.

Construction of the Proposed 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 Title 13 of the California Code of Regulations, and fuel requirements in accordance with Section 93115 in Title 17 of the California Code of Regulations, and would comply with State 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 Proposed Project would divert mixed construction and demolition debris to City-certified construction and demolition waste processors using City-certified waste haulers, consistent with State diversion targets of 75 percent waste diversion by 2020 and consistent with achieving the USGBC LEED Gold Certification level or its equivalent as discussed in **GHG-PDF-1 (Green Building Features)**. Diversion of mixed construction and demolition debris would reduce truck trips to landfills, which are typically located some distance away from City centers, and 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 would result in less fuel combustion and energy consumption and thus minimize the Proposed Project's construction-related energy use. Therefore, construction of the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Operations

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, heating ventilation, and air conditioning (HVAC), lighting, EV charging, emergency generators, media truck generators, aerial lifts, and forklifts for building operations. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. On- and offsite existing uses shown in Table 3.5-2 are netted out of the Proposed Project's operational energy use. Market shifted events presented in **Table 3.5-4, Summary of Annual Energy Use During Project Operations**, are also netted from the Project's operational energy use. Note that the existing offsite operational uses are assumed to be relocating to the Project Site and the existing offsite building would be backfilled by other tenants and are then added back to the Proposed Project operational energy consumption. As shown in Table 3.5-4, the Proposed Project's annual net new energy demand would be approximately 27,837,773 kWh of electricity, 46,900,445 kBtu of natural gas, 1,865,819 gallons of gasoline, and 272,101 gallons of diesel fuel.

TABLE 3.5-4
SUMMARY OF ANNUAL ENERGY USE DURING PROJECT OPERATION ^{1,3}

Source	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gal)	Diesel (gal)
Existing Uses (2018)				
Offsite	738	1,058	94,270	9,341
Onsite	506	1,566	76,361	7,567
Subtotal	1,244	2,624	170,631	16,908
Shifted Events (2024)				
Staples Center	2,306	4,187	848,416	28,713
The Forum	692	1,823	265,517	5,781
Subtotal	2,999	6,010	1,113,933	34,494
Project (2024)				
<i>Arena Site</i>				
Arena	6,783	15,564		
Full-Service Restaurant/Bar/Coffee Shop/Quick Service Restaurant	835	6,205		
Retail	254	48	1,133,268	30,032
Outdoor Plaza	2	0		
Parking Garage	1,365	0		
Cooling Tower	63	-	-	-
EV Charging Stations	84	-	-	-
Emergency Generators	-	-	-	11,756
Media Truck Generators	-	-	-	2,783
Operational Heavy-Duty Equipment	-	-	-	3,291
Subtotal	9,385	21,817	1,133,268	47,862
<i>Ancillary Uses</i>				
West Parking Garage Site	6,531			
EV Charging (West Parking)	400			
East Parking Garage	767			
EV Charging (East Parking)	76	7,923	654,542	75,857
East Site Hotel	1,838			
East Site Transportation Hub	28			
Subtotal	9,639	7,923	654,542	75,857
Relocated Uses (Offices + Practice Facility)	738	1,068	78,326	9,077
Project Total	19,762	30,807	1,866,137	132,796
Net Total (Project + Backfill - Existing and Shifted Events)	15,519	22,173	581,573	81,395
SCE (2018)¹ / SoCalGas (2017)² / LA County Fuel Consumption (2017)³	87,143,000	923,282,100	3,659,000,000	590,196,078
Project Contribution	0.018%	0.002%	0.016%	0.014%

TABLE 3.5-4
SUMMARY OF ANNUAL ENERGY USE DURING PROJECT OPERATION^{1,3}

Source	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gal)	Diesel (gal)
NOTES:				
1 Southern California Edison, 2018 Annual Report, p.2. https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/eix-sce-2018-annual-report.pdf .				
2 California Gas and Electric Utilities, 2018 California Gas Report, p. 32. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf .				
3 California Energy Commission, California Annual Retail Fuel Outlet Report Results (2017). https://www.energy.ca.gov/almanac/transportation_data/gasoline/2010-2017_A15_Results.xlsx .				
4 All mobile emissions calculated using fleet mixes, vehicle types, fuel efficiencies, and fuel types from EMFAC2017.				
5 EMFAC2017 includes natural gas vehicles which are incorporated into natural gas totals in this table.				

Electricity

Compliance with 2019 Title 24 standards and applicable 2019 CALGreen requirements, at buildout, the Proposed Project would result in a projected net increase in the annual demand for electricity totaling between approximately 27,883,973 kWh for the Project, as shown in Table 3.5-X. In addition to compliance with CALGreen, the Proposed Project also incorporates GHG-PDF-1 (Green Building Features) as described in Section 3.7, *Greenhouse Gas Emissions*, of this Draft EIR, which includes building features to achieve the USGBC LEED Gold Certification level or its equivalent, to reduce indoor water use by 40 percent and outdoor water use by 50 percent. In addition, the Project incorporates WS-PDF-1 (Water Conservation Features) as discussed in Section 3.15, Utilities and Service Systems, to minimize water demand and associated energy needed for water conveyance. As shown therein, WS-PDF-1 includes the installation of low-flow and high efficiency showerheads, toilets, and urinals; landscaping consisting of native and drought-tolerant plants; and water efficient drip/subsurface irrigation and micro-spray.

SCE is required to procure at least 33 percent of its energy portfolio from renewable sources by 2020. SCE’s current sources include wind, solar, and geothermal sources. These sources accounted for 32 percent of SCE’s overall energy mix in 2017, the most recent year for which data are available, and represent the available off-site renewable sources of energy that would meet the Proposed Project’s energy demand.⁴⁹

Based on SCE’s collected data in its 2018 Annual Report, SC’s total system sales for 2017-2018 fiscal year (the latest data available) was 87,143,000 MWh of electricity.⁵⁰ As such, the Project-related net increase in annual electricity consumption of 15,519 MWh would represent approximately 0.018 percent of SCE’s supplied electricity. Furthermore, SCE’s projected energy demand for 2024 (the Proposed Project’s opening year) is estimated at 106,000,000 MWh.⁵¹ The Proposed Project’s future energy use would represent about 0.015 percent of total project sales

⁴⁹ California Energy Commission, Utility Annual Power Content Labels for 2017, SCE.

⁵⁰ Southern California Edison, 2018 Annual Report, p. 2. <https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/eix-sce-2018-annual-report.pdf>.

⁵¹ California Energy Commission. 2018. The California Energy Demand 2018-2030 Revised Forecast. http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN222287_20180120T141708_The_California_Energy_Demand_20182030_Revised_Forecast.pdf.

and would be within SCE's projected electricity supplies. As previously described, the Proposed Project incorporates a variety of energy and water conservation measures and features to reduce energy usage and minimize energy demand as evidenced by the Proposed Project's reduced contribution to overall sales between 2018 and 2026. Therefore, with the incorporation of these measures and features, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity and the impact would be **less than significant**.

Natural Gas

With compliance with 2019 Title 24 standards and applicable 2016 CALGreen requirements, at buildout, the Proposed Project is projected to generate a net increase in the on-site annual demand for natural gas totaling approximately 22,173 MMBtu, as shown in Table 3.5-4. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and CALGreen), the Proposed Project incorporates project design features to further reduce energy use. The Proposed Project incorporates GHG-PDF-1 (Green Building Features) as described in Section 3.7, *Greenhouse Gas Emissions*, of this Draft EIR, which includes building features to achieve the USGBC LEED Gold Certification level or its equivalent.

SoCalGas accounts for anticipated regional demand based on various factors including growth in employment by economic sector, growth in housing and population, and increasingly demanding State goals for reducing GHG emissions. SoCalGas accounts for an increase in employment and housing between 2018 to 2035. The Proposed Project would add jobs within the SoCalGas region and would be consistent with the growth projections set forth in the 2018 California Gas Report.⁵² Furthermore, the 2018 California Gas Report, estimates natural gas supplies within SoCalGas' planning area will be approximately 923,282,100 MMBtu in 2024 (the Proposed Project's buildout year).⁵³ As stated above, the Proposed Project's annual net increase in demand for natural gas is estimated to be approximately 22,173 MMBtu. The Proposed Project would account for approximately 0.002 percent of the 2024 forecasted annual consumption in SoCalGas' planning area and would fall within SoCalGas' projected consumption for the area and would be consistent with SoCalGas' anticipated regional demand from population or economic growth. Therefore, with the incorporation of these measures and features, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas and the impact would be **less than significant**.

Transportation Energy

During operation, Project-related vehicle use would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. The Project Site would be conveniently located to nearby shopping areas with a grocery store, restaurants, and retail/commercial land uses, and the Project Site itself is located close to multiple transit options, affording all of the Proposed Project's uses broad mobility without the need to use passenger

⁵² California Gas and Electric Utilities, 2018 California Gas Report, p. 63.
⁵³ California Gas and Electric Utilities, 2018 California Gas Report, p. 103.

vehicles. A majority of the vehicle fleet that would be used by the Proposed Project's employees and visitors would consist of light-duty automobiles and light-duty trucks, which are subject to fuel efficiency standards. Annual trips for the Proposed Project were estimated using trip rates provided in the Section 3.14, Transportation and Circulation, and Appendix K of this Draft EIR.

As reported in Table 3.5-4, the Proposed Project's estimated annual net increase in petroleum-based fuel usage would be approximately 581,573 gallons of gasoline and 81,395 gallons of diesel. Based on the California Energy Commission's *California Annual Retail Fuel Outlet Report*, Los Angeles County consumed 3,659,000,000 gallons of gasoline and 590,200,000 gallons of diesel fuel in 2017.⁵⁴ The Proposed Project would account for 0.016 percent of County gasoline consumption and 0.014 percent of County diesel consumption based on the available County fuel sales data for the year 2017.

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 proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.⁵⁵ The Proposed 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 savings in addition to compliance with CAFE standards.

The Proposed Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles for the reasons provided below. As discussed in detail in Section 3.7, Greenhouse Gas Emissions, the Proposed Project's design and its characteristics would be consistent with and would not conflict with the goals of the SCAG 2016 RTP/SCS. The Proposed Project's mixed use design and its increase in density located on an infill site within an HQTAs and in close proximity to existing high-quality transit, including within one half mile of a fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes or less during peak commute hours. The Project Site is adjacent to two bus lines (the 117 and 212/312 lines, which stop at the intersection of West Century Boulevard and South Prairie Avenue) and within one half mile of a third bus route (the combined 740/40 Metro bus), which are corridors that pick up passengers at intervals of 15 minute or less during peak commute hours.

The Project's close proximity to other retail, restaurant, entertainment, commercial, and job destinations, and its highly walkable environment support the conclusion that that the Project has been properly designed and located so that its development would achieve a reduction in VMT greater than the regional and statewide averages of approximately 21 percent [NOTE: Needs

⁵⁴ California Energy Commission, California Annual Retail Fuel Outlet Report, 2017, https://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed December 26, 2018.

⁵⁵ BP Global, Oil reserves, 2018, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil.html>. Accessed December 2018.

confirmation; placeholder for now] (refer to the detailed VMT analysis provided in Section 3.7, *Greenhouse Gas Emissions*, of this Draft EIR).⁵⁶ Additionally, the Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 8 percent of the parking spaces pursuant to the CALGreen Code and LAMC.

For these reason described above, the Proposed Project would minimize operational transportation fuel demand consistent with and not in conflict with state, regional, and City goals. Therefore, operation of the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and the impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.5-2: The Proposed Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less Than Significant)

CALGreen Code and Title 24

The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Project would comply with CALGreen and Title 24 requirements to reduce energy consumption by implementing energy efficient building designs, reducing indoor and outdoor water demand, providing EV charging spaces, and installing energy-efficient appliances and equipment.

The Project would be designed to obtain a LEED Gold level of certification. The Project will optimize building energy performance with a minimum of a 5 percent reduction from the CCR, Title 24, Part 11 baseline requirement (this corresponds to a minimum of 18 percent energy efficiency beyond the American Society of Heating, Refrigerating and Air-Conditioning Engineers [ASHRAE] Standard 90.1).

Because the Proposed Project would be designed and constructed by the design-build method, specific green building strategies to obtain LEED certification for each proposed building have

⁵⁶ CalEEMod, by default, assumes that trip distances in the South Coast Air Basin are slightly longer than the Statewide average. This is due to the fact that commute patterns in the South Coast Air Basin involve a substantial portion of the population commuting relatively far distances, which is documented in the SCAG 2016 RTP/SCS. The RTP/SCS shows that, even under future Plan conditions, upwards of 52 percent of all work trips would be 10 miles or longer (SCAG, Performance Measures Appendix, 2016, p. 13). The RTP/SCS does not specify the current percentage of work trips greater than 10 miles in the region, but it can be assumed that the percentage is currently greater than 52 percent since the goal of the RTP/SCS is to reduce overall per capita VMT in the region. It is thus reasonable to assume that the trip distances in South Coast Air Basin are analogous to the statewide average given that the default model trip distances in the South Coast Air Basin are slightly longer but still generally similar to the statewide average. Therefore, urban and compact infill projects could achieve VMT reduction on the order of up to approximately 65 percent in an urban area and 30 percent in a compact infill area compared to the South Coast Air Basin average.

not been identified. Refer to Section 3.7, Greenhouse Gas Emissions, for a comprehensive discussion of the Project's LEED Gold features that would meet or exceed CALGreen Code and Title 24 standards.

The Proposed Project would implement LEED efficiency strategies and incorporate water conservation, energy conservation, and other features consistent with the CALGreen, Title 24, and City sustainability goals. Overall the Project's features would support and promote the use of renewable energy and energy efficiency and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the Proposed Project's impacts would be less than significant.

SCAG 2016-40 RTP/SCS

SCAG's 2016 RTP/SCS is designed to support development of compact communities in existing urban areas, with more mixed-use and infill development, and reuse of developed land that is also served by high quality transit. The 2016 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by reducing VMT to achieve an 8 percent reduction in passenger vehicle emissions by 2020, 18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level on a per capita basis.

Section 3.7, Greenhouse Gas Emissions, details the IBEC TDM program and the measures taken to reduce vehicle trips, resulting in less gasoline and diesel fuel use. Overall, the Project would be consistent with the goals and policies of SCAG's 2016-40 RTP/SCS by supporting reductions in VMT to and from the Project Site. Although the 2016-40 RTP/SCS is not technically an energy efficiency plan, the reduction of VMT from the plan includes the co-benefit of reducing fossil fuel consumption from travel to and from the Project Site.

City of Inglewood ECAP

ECAP implementation are expected to reduce emissions by 18.8 percent below 2005 levels by 2020, enabling the City to meet its 2005 target. However, the City would need to reduce emissions by an additional 111,702 MT CO₂e per year by 2035 to meet its 2035 target. The ECAP identifies a number of strategies aimed at reducing emissions through increased energy efficiency, renewable energy generation, improved transit options, and reduced consumption and waste. See Section 3.7, Greenhouse Gas Emissions, for a detailed explanation of each strategy and the Project's consistency with the energy efficiency goal of the ECAP.

Summary

The Proposed Project would incorporate physical design features such that the Proposed Project would be consistent with applicable plans, policies and regulations adopted for the purpose of promoting renewable energy and overall energy efficiency and the impact would be **less than significant**.

Mitigation Measure

None required.

3.5.6 Cumulative Impacts

Impact 3.5-3: Implementation of the Proposed Project, in combination with related cumulative projects, could cause wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation of the Proposed Project. (Less Than Significant)

Electricity

The geographic context for the cumulative analysis of electricity is SCE's service area. Growth within this geography is anticipated to increase the demand for electricity and the need for infrastructure, such as new or expanded facilities.

Buildout of the Proposed Project, the cumulative projects, and additional growth forecasted to occur in the county would increase electricity consumption during Project construction and operation, and cumulatively increase the need for energy supplies. The CEC forecasts that SCE's projected sales in the Proposed Project buildout year of 2024, would be approximately 106,000 GWh. Under peak conditions, the Proposed Project would consume a net increase of 15,519 MWh on an annual basis. In comparison to the SCE power grid projected sales of 106,000 GWh for 2024, the Proposed Project would represent approximately 0.015 percent of the SCE projected sales in 2024.

Future development would result in the irreversible use of electricity resources that could limit future energy availability. However, the utility provider for the Proposed Project and cumulative projects have determined that the use of such resources would be minor compared to existing supply and infrastructure within the SCE service area and would be consistent with growth expectations. Furthermore, like the Proposed Project, other future development projects would be expected to incorporate energy conservation features, comply with applicable mandatory regulations including CALGreen Code and State energy standards under Title 24, and incorporate mitigation measures, as necessary. As discussed above and based on evidence from the CEC, the Proposed Project would not have a cumulatively considerable impact on existing energy resources either individually or incrementally when considered with the anticipated growth in the service areas. Accordingly, the Proposed Project's contribution to electricity consumption would not be cumulatively considerable, and the impact would be **less than significant**.

Natural Gas

The geographic context for the cumulative analysis of natural gas is the SoCalGas service area. Growth within these geography is anticipated to increase the demand for natural gas and the need for infrastructure, such as new or expanded facilities.

Buildout of the Proposed Project and cumulative projects in the SoCalGas service area is expected to increase natural gas consumption and the need for natural gas supplies. According to the 2018 California Gas Report, SoCalGas is forecasted to require 923,282,100 MMBtu in the year 2024, the Proposed Project's build out year.⁵⁷ The Proposed Project is estimated to increase natural gas demand by 22,173 MMBtu per year, accounting for approximately 0.002 percent of SoCalGas' projected natural gas demand for the year 2024.

Although future development projects would result in irreversible use of natural gas resources which would limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas' service area. Further, like the Proposed Project, other future development projects would be expected to incorporate energy conservation features, comply with applicable mandatory regulations including CALGreen and State energy standards in Title 24, and incorporate mitigation measures, as necessary. Therefore, the Proposed Project would not have a cumulatively considerable contribution to natural gas consumption and the impact would be **less than significant**.

Transportation Energy

The geographic context for the cumulative analysis of transportation energy is the SCAG regional area. Growth within these geography is anticipated to increase the demand for transportation and the need for infrastructure, such as new or expanded facilities.

Buildout of the Proposed Project and related projects in the region would be expected to increase overall VMT; however, the effect on transportation fuel demand would be minimized by future improvements to vehicle fuel economy pursuant to federal and state regulations. By 2025, vehicles are required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 35.5 mpg standard in the 2012-2016 standards. As discussed previously, the Proposed Project would support statewide efforts to improve transportation energy efficiency. Siting land use development projects at infill sites is consistent with the state's overall goals to reduce VMT pursuant to SB 375 and as outlined in the 2016 RTP/SCS for the region, which seeks improved access and mobility by placing "destinations closer together, thereby decreasing the time and cost of traveling between them" (SCAG, 2016).⁵⁸ Related projects would need to demonstrate consistency with these goals and incorporate mitigation measures as required under CEQA, which would also ensure cumulative projects contribute to transportation energy efficiency. Therefore, as the Proposed Project would incorporate land use characteristics consistent with state goals for reducing VMT, the Proposed Project would not have a cumulatively considerable contribution to transportation energy consumption, and the impact would be **less than significant**.

⁵⁷ California Gas and Electric Utilities, 2018. 2018 California Gas Report, Prepared in Compliance with California Public Utilities Decision D.95-01-039.

⁵⁸ To come

Impact 3.5-4: Implementation of the Proposed Project, in combination with related cumulative projects, could conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less Than Significant)

The geographic scope of analysis for cumulative impacts related to compliance with state or local plans for renewable energy or energy efficiency includes those past, present, and reasonably foreseeable cumulative projects located within the in the City of Inglewood and the SCAG regional area, as identified in Table 3.0-2, Cumulative Projects List (see Chapter 3.0, Section 3.0.5).

All present and reasonably foreseeable cumulative projects would be required to comply with CALGreen and Title 24 energy efficiency requirements, which would reduce energy consumption by implementing energy efficient building designs and installing energy-efficient appliances and equipment, among other measures. Cumulative development would comply with Title 24 regulations and would support and promote the use of renewable energy and energy efficiency. Therefore, cumulative development would not conflict with or obstruct implementation of Title 24 standards for renewable energy or energy efficiency.

All of the cumulative projects included in Table 3.0-1 are within the SCAG regional area and would be subject to the guidance provided in the SCAG 2016 RTP/SCS. Further, the projects included in Table 3.0-1 are infill projects which would be constructed within existing urbanized areas. These projects would support development of compact communities in existing urban areas, with more mixed-use and infill development, and reuse of developed land that is also served by high quality transit. Development of more infill areas supports the reduction of VMT by locating jobs and housing in closer proximity to each other, thereby reducing energy consumption and GHG emissions. Overall, the cumulative projects would be consistent with the goals and policies of SCAG's 2016-40 RTP/SCS by more closely locating jobs and housing closer to each other. Although the 2016-40 RTP/SCS is not technically an energy efficiency plan, the reduction of VMT from the plan includes the co-benefit of reducing fossil fuel consumption from travel to and from project sites within the cumulative context.

Based on evaluation of the Cumulative Projects List presented in Table 3.0-2, 32 of the 147 cumulative projects are located within the City of Inglewood (Cumulative Projects numbers 42 through 73). Each of those 32 cumulative projects in the City of Inglewood would be expected to comply with the energy efficiency goal established in the ECAP. The ECAP identifies a number of strategies aimed at reducing emissions through increased energy efficiency, renewable energy generation, improved transit options, and reduced consumption and waste.

Therefore, cumulative development would not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.