

IV. Environmental Impact Analysis

K.4 Utilities and Service Systems—Energy

1. Introduction

This section of the Draft EIR analyzes the proposed Project’s potential impacts on energy resources. This analysis was prepared pursuant to Appendix F, Energy Conservation, of the CEQA Guidelines, which requires an EIR to include a discussion of potential energy impacts, with particular emphasis on avoiding or reducing the inefficient, wasteful and unnecessary consumption of energy. In accordance with the goal of Appendix F to conserve energy by decreasing overall per capita energy consumption, decreasing reliance on fossil fuels, and increasing reliance on renewable energy source, this section of the Draft EIR focuses on the following three resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section evaluates the demand for energy resources attributable to the Project during construction and operation; demonstrates whether the current and planned electrical, natural gas, and petroleum-based fuel supplies and distribution systems are adequate to meet the Project’s forecasted energy consumption; and makes a determination regarding the Project’s use and conservation of energy resources. The analysis herein is based, in part, on the *Energy Calculations for Arts Club Project* and the *8920 Sunset—Energy Requirements* (Energy Memo) prepared by KPFF (August 2016), included as Appendix K of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) Federal Regulations

(a) Federal Corporate Average Fuel Economy (CAFE) Standards

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for: (1) technological feasibility; (2) economic

practicality; (3) the effect of other standards on fuel economy; and (4) the need for the nation to conserve energy.¹

(b) Energy Independence and Security Act

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

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

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”²

(2) State

(a) California Building Standards Code (Title 24)

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

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) were

¹ For more information on the CAFE standards, refer to www.nhtsa.gov/fuel-economy, accessed July 27, 2016.

² A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

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 January 1, 2017.³ 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.⁴

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

The California Green Building Standards Code (CCR, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2014, with energy provisions effective July 1, 2014.⁵ The 2013 CALGreen Code includes mandatory measures for non-residential development related to site development; water use; weather resistance and moisture management; construction waste reduction, disposal, and recycling; building maintenance and operation; pollutant control; indoor air quality; environmental comfort; and outdoor air quality.⁶ The most recent update, which includes new residential measures for electric vehicle charging, became effective July 1, 2015.

(b) California's Renewable Portfolio Standard

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.⁷ The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible

³ California Energy Commission, *2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*, June 2015.

⁴ California Energy Commission, *2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*, June 2015.

⁵ California Building Standards Commission, *Building Standards Information Bulletin 13-07*, dated December 18, 2013.

⁶ *2013 California Green Building Standards Code Nonresidential Mandatory Measures*.

⁷ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.⁸

(c) Assembly Bill 32

As discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, Assembly Bill (AB) 32 (Health and Safety Code Sections 38500–38599), also known as the California Global Warming Solutions Act of 2006, commits the state to achieving year 2000 greenhouse gas (GHG) emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the CPUC and the CEC with providing information, analysis, and recommendations to the California Air Resources Board (CARB) regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.

(d) Assembly Bill 1493 (AB 1493)/Pavley Regulations

AB 1493 (commonly referred to as CARB’s Pavley regulations) was the first legislation to regulate GHG emissions from new passenger vehicles. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks) for model years 2009–2016.⁹ The Pavley regulations are expected to reduce GHG emissions from California’s passenger vehicles by about 30 percent in 2016, all while improving fuel efficiency and reducing motorists’ costs.¹⁰

(e) 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 2020.¹¹ Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS credits

⁸ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

⁹ *Clean Car Standards—Pavley, Assembly Bill 1943*, www.arb.ca.gov/cc/ccms/ccms.htm, accessed August 22, 2016.

¹⁰ *Clean Car Standards—Pavley, Assembly Bill 1943*, www.energy.ca.gov/low_carbon_fuel_standard/, accessed August 22, 2016.

¹¹ *Low Carbon Fuel Standard: Fuels and Transportation Division Emerging Fuels and Technologies Office*, www.energy.ca.gov/low_carbon_fuel_standard/, accessed August 22, 2016.

from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.¹²

(f) California Air Resources Board

(i) CARB's Advanced Clean Cars Regulation

Closely associated with the Pavley regulations, the Advanced Clean Car Standards emissions-control program (ACC program) was approved by CARB in 2012.¹³ The program combines the control of smog, soot-causing pollutants, and GHGs with requirements for greater numbers of zero-emission vehicles for model years 2017–2025.¹⁴ By 2025, when the rules would be fully implemented, new automobiles would emit 34 percent less GHGs and 75 percent less smog-forming emissions. In addition, environmentally superior cars would be available across the range of models (compacts, sport utility vehicles [SUVs], pickups, and minivans) and consumer savings on fuel costs would average \$6,000 over the life of the car.¹⁵

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

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

¹² *Low Carbon Fuel Standard: Fuels and Transportation Division Emerging Fuels and Technologies Office*, www.energy.ca.gov/low_carbon_fuel_standard/, accessed August 22, 2016.

¹³ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

¹⁴ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

¹⁵ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

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

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter (DPM), nitrogen oxides (NO_x), and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023. The regulation aims to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The newer emission-controlled models would use petroleum-based fuel in a more efficient manner.

(g) Sustainable Communities Strategy (SB 375)

SB 375, the Sustainable Communities and Climate Protection Act of 2008, coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32. SB 375 specifically requires the each Metropolitan Planning Organization (MPO) in the state to prepare a “sustainable communities strategy” (SCS) as a part of its Regional Transportation Plan (RTP) that would achieve the GHG emission reduction targets set by CARB for the years 2020 and 2035 by reducing vehicle miles traveled (VMT) from light-duty vehicles through the development of more compact, complete, and efficient communities.¹⁶

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG). SCAG’s first-ever SCS is included in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS), which was adopted by SCAG in April 2012. The goals and policies of the SCS that reduce VMT (and result in corresponding decreases in transportation-related fuel consumption) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. Recently, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS).¹⁷ The goals and policies of the 2016 RTP/SCS are the same as those in the 2012–2035 RTP/SCS. See further discussion below.

¹⁶ CARB, *Sustainable Communities*, www.arb.ca.gov/cc/sb375/sb375.htm, accessed August 22, 2016.

¹⁷ SCAG, *2016–2040 RTP/SCS*, adopted April 2016.

(h) Assembly Bill 758

AB 758 requires the CEC to develop a comprehensive program to achieve greater energy efficiency in the state's existing buildings. As part of the requirements of AB 758, the AB 758 Action Plan was released March 2015 and provides a 10-year roadmap that would result in accelerated growth of energy efficiency markets, more effective targeting and delivery of building upgrade services, improved quality of occupant and investor decisions, and vastly improved performance of California's buildings in service of those who own and occupy them. The AB 758 Action Plan provides a comprehensive framework centered on five goals, each with an objective and a series of strategies to achieve it.

(i) Senate Bill 1389

SB 1389 (Public Resources Code [PRC] Sections 25300–25323) requires the development of an integrated plan for electricity, natural gas, and transportation fuels in California. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. The most recently completed report, the 2015 Integrated Energy Policy Report, addresses a variety of issues including energy efficiency; benchmarking under the AB 758 Action Plan; strategies related to data collection for improved decisions in the *Existing Buildings Energy Efficiency Action Plan*, building energy efficiency standards; and achieving 50 percent renewable by energy 2030.¹⁸

(j) California Environmental Quality Act

In accordance with California Environmental Quality Act (CEQA) and Appendix F, Energy Conservation, of the CEQA Guidelines, in order to assure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related items that may be included throughout the various chapters of an EIR, including potential mitigation measures. In addition, while not described as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following items that may be considered in the energy analysis:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;

¹⁸ California Energy Commission, *2015 Integrated Energy Policy Report*, 2016.

- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and/or
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

(3) Regional

As discussed in Section IV.G, Land Use, of this Draft EIR, SCAG's 2016 RTP/SCS presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. On April 7, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, whose mission is "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians."¹⁹ The 2016 RTP/SCS includes land use strategies that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. More mixed-use, walkable, and urban infill development would be expected to accommodate a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single-family homes, as well as more compact commercial buildings types. Furthermore, the 2016 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increased transit use, active transportation opportunities, and promoting more walkable and mixed use communities which would potentially help to offset passenger vehicle miles traveled (VMT).

The 2016 RTP/SCS also establishes High-Quality Transit Areas (HQTA), which are generally described as walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor that has a minimum density of 20 dwelling units per acre with a 15-minute or less service frequency during peak commute hours.²⁰ Local jurisdictions are encouraged to focus housing and employment growth within HQTAs

¹⁹ SCAG, 2016–2040 RTP/SCS.

²⁰ SCAG, 2016–2040 RTP/SCS, 2006, p. 8.

to reduce VMT. The Project Site is located within a HQTA as designated by the 2016–2040 RTP/SCS.²¹

(4) Local

(a) *City of West Hollywood General Plan*

The Infrastructure, Resources, and Conservation Chapter of the General Plan describes the City’s management and provision of infrastructure resources in a sustainable manner. It covers topics such as water infrastructure and conservation, energy conservation, climate change, storm water, and management of the streets and other public and private infrastructure necessary for a high-quality urban development. This chapter of the General Plan addresses two topics from state-required elements—infrastructure, which is a required topic in the Circulation Element, and conservation of natural resources, which is a required topic in the Conservation Element. This chapter of the General Plan provides background information and policy guidance for these topics, organized as follows: water supply and conservation, energy supply and conservation, green building, climate change, air quality, wastewater infrastructure, stormwater management, recycling and solid waste, transportation infrastructure, and facilities for City operations. While some of these policies primarily address City-wide actions or actions that would be taken by the City as opposed to the developer or owner of a specific project, the collection of these policies as a whole encourages and facilitates an environment in which energy conservation is a priority. Relevant policies are as follows:

- **Policy IRC-2.3:** Require that development projects pay for their share of the costs of improvements to water, gas, power and other utilities that they necessitate.
- **Policy IRC-2.4:** On an ongoing basis, share information on projected growth in jobs and housing with service providers and regional agencies to ensure that there is sufficient infrastructure capacity to support future population growth in the City.
- **Policy IRC-3.1:** Allow for construction of new development only when there is sufficient water to supply that development, as determined by the service provider.

²¹ SCAG, 2016–2040 RTP/SCS, Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040 Plan, 2016, p. 77.

- **Policy IRC-3.6:** Require all new buildings to meet the following standards:
 - Achieve a reduction of water use of 40% less than baseline for buildings as calculated by the Energy Policy Act of 1992.
 - Reduce water consumption for outdoor landscape irrigation, consistent with the most recent City policy (see Chapter 15.52, Water Conservation Plan, in the City’s Municipal Code).
 - Comply with all prevailing state laws and City regulations regarding indoor and outdoor water conservation and efficiency in new construction.
- **Policy IRC-3.7:** Encourage existing residential and non-residential buildings to pursue strategies for water conservation, including:
 - Drought-tolerant landscaping
 - Drip irrigation systems for landscaping where appropriate
 - Low-flow fixtures in bathrooms and kitchens
- **Policy IRC-4.1:** Promote building energy efficiency improvements through strategies that may include the following:
 - Retrofits of existing buildings with energy efficiency technology
 - Expanded public outreach in partnership with Southern California Edison on energy efficiency upgrades
 - A voluntary energy audit program for residents and businesses
 - Diverse incentives for energy efficiency
- **Policy IRC-4.2:** Promote land use patterns and mobility decisions that result in reduced vehicle trips and therefore reduced overall energy use from the transportation sector.
- **Policy IRC-4.3:** Maximize the use of renewable energy in the City through strategies that may include the following:
 - A comprehensive renewable energy program that provides incentives, outreach, financing, or similar forms of assistance to residents and businesses in the City
 - Incentives to encourage commercial properties to develop solar energy production systems on private property and sell the energy to the public utility system

- **Policy IRC-4.4:** As feasible, coordinate with available energy efficiency and conservation programs – such as those administered by Southern California Edison, the United States Department of Energy, or other organizations – to reduce energy use.
- **Policy IRC-5.1:** As appropriate, update West Hollywood’s green building regulations regularly and continue to administer a Green Building Program and/or enforce green building requirements within the City.
- **Policy IRC-5.3:** Offer incentives for buildings to exceed the minimum Green Building Program requirements.
- **Policy IRC-6.9:** In conjunction with policies in the Mobility Chapter of this General Plan, encourage a shift in travel from single-occupant autos to walking, biking, public transit, and ride-sharing, with a focus on policies that promote the following:
 - Increase walking within the City
 - Increase transit use and reduce barriers to transit ridership
 - Increase ride-sharing
 - Promote alternatives to automobile ownership
- **Policy IRC-6.10:** Implement policies in the Infrastructure, Resources, and Conservation Chapter that reduce greenhouse gas emissions related to water and wastewater, energy, green building, recycling, and solid waste, and facilities for City operations, including policies that accomplish the following:
 - Reduce energy associated with the use, treatment, and conveyance of water and wastewater
 - Improve energy efficiency in existing buildings
 - Ensure high levels of energy performance in new construction
 - Maximize the use of renewable energy
 - Reduce the amount of waste sent to landfills
- **Policy IRC-7.2:** Support land use and transportation strategies to reduce driving rates and resulting air pollution, including pollution from commercial and passenger vehicles.

- **Policy IRC-7.3:** Promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.
- **Policy IRC-7.4:** Prohibit combustion or gasoline powered engines in leaf blowers.
- **Policy IRC-7.5:** Discourage the use of equipment with two-stroke engines and publicize the benefits and importance of alternative technologies.
- **Policy IRC-7.6:** Support increased local access to cleaner fuels and cleaner energy by encouraging fueling stations that provide cleaner fuels and energy to the community.
- **Policy IRC-10.1:** Aggressively seek to reduce West Hollywood's rate of waste disposal per capita.
- **Policy IRC-10.2:** Provide services for recycling and composting and expand these services over time, where appropriate.
- **Policy IRC-10.3:** Encourage all construction projects (regardless of size) to divert 80% of the construction waste debris away from landfills.
- **Policy IRC-10.4:** Provide ongoing education to residents and businesses about waste reduction, composting, and recycling.
- **Policy IRC-10.7:** Encourage the use of recycled building materials in public and private development projects.
- **Policy IRC-10.10:** Collaborate with other government agencies to promote waste reduction.

(b) City of West Hollywood General Plan 2035 Mobility Element

The Mobility Element of the West Hollywood General Plan 2035 (City of West Hollywood 2011a) sets forth strategies for creating a balanced and multi-modal transportation system. The policies in this element are relevant to this section of the EIR because creation of a multi-modal transportation system supports a reduction in the use of single-occupancy vehicles, which are typically associated with greater energy demand per capita when compared with alternative modes of transportation. Relevant policies are as follows:

- **Policy M-1.3:** Consider requiring development projects to include transit amenities and transit incentive programs.

- **Policy M-3.9:** Require new commercial development to provide for the construction of pedestrian rights of way to allow convenient and unimpeded circulation to, through, and within the property being developed.
- **Policy M-3.10:** Require design measures as appropriate to accommodate access by pedestrians, bicycles, and transit within new development and to provide connections to adjacent development.
- **Policy M-4.2:** As feasible, ensure that new development of commercial and multi-family residential uses enhance the City's bicycle network and facilities.
- **Policy M-5.8:** Allow for the collection of fees from developers to undertake the following infrastructure projects to support new development: sidewalk improvements, landscaping, bicycle infrastructure, traffic calming devices, traffic signals, and other improvements that promote/maintain the pedestrian-oriented character of the community (i.e., traffic calming devices and Transportation Demand Management programs).
- **Policy M-5.9:** Require new development to pay its share of transportation improvements necessitated by that development.
- **Policy M-8.16:** Encourage building owners and/or managers of new multi-family and commercial buildings to make parking spaces available to qualified car-share operators, and to allow public access to the car-share vehicles.

(c) City of West Hollywood Climate Action Plan

The City of West Hollywood's Climate Action Plan (CAP), which was released in September 2011, states that the City Council established a GHG emissions reduction target of 20 to 25 percent below 2008 emission levels by 2035. The target represents the community's aspirations to implement achievable emission reductions within West Hollywood's specific land use setting and location, as well as the anticipated benefits from the state's emission reducing legislative and regulatory actions. The CAP includes energy use and efficiency measures to support this target, which could potentially reduce total GHG emissions by 30.4 percent. Measures include developing a comprehensive outreach program to facilitate voluntary residential and commercial building energy efficiency improvements, working with Southern California Edison (SCE) to accelerate smart grid integration into the community, and requiring all new construction to achieve California Building Code Tier II Energy Efficiency Standards (Section 503.1.2).

(d) City of West Hollywood Green Building Ordinance

The City of West Hollywood adopted one of the nation's first green building ordinances, which became effective on October 1, 2007. All remodels, tenant

improvements, additions, and new construction after that date are required to comply with the City of West Hollywood Green Building Ordinance. Development projects must achieve a score of at least 65 on the City’s green building checklist to comply with the ordinance. The Green Building Requirements and Incentives for Private Development Ordinance focuses on the following: the establishment of new development standards that apply to all development, including all new residential and commercial projects, as well as remodels and tenant, improvements; development of a point system for new construction and incentives for projects that achieve “exemplary” status; and implementation of “green building” education and outreach program.

(e) City of West Hollywood Bicycle and Pedestrian Mobility Plan

The City of West Hollywood adopted the Bicycle and Pedestrian Mobility Plan (BPMP) in 2003. The BPMP includes options for safe and convenient pedestrian ways, an emergent network of bicycle routes, supporting bicycle infrastructure, and other relevant policies. To support the long-term vision of the BPMP, BPMP includes six goals: 1) promote bicycle transportation, 2) develop an enhanced bikeway network, 3) enhance bicycle transportation safety, 4) enhance pedestrian mobility, 5) enhance pedestrian safety, and 6) encourage more people to walk. The City is currently updating the BPMP which will include new ideas to the list of projects previously developed and identifies top-priority projects that best support the vision and goal of the BPMP.

(f) City of West Hollywood Solid Waste Programs and Ordinances

The recycling of solid waste materials also contributes to reduced energy consumption. Specifically, when products are manufactured using recycled materials, the amount of energy that would have otherwise been consumed to extract and process virgin source materials is reduced. For example, recycling one ton of aluminum cans conserves more than 207 million British thermal units (MMBtu), the equivalent of 36 barrels of oil or 1,665 gallons of gasoline.²² The City of West Hollywood has adopted programs and ordinances related to solid waste. These programs and ordinances include: (1) Section 19.20.180 of the WHMC, which states that each new multi-family and non-residential project is required to implement a recycling plan in compliance with regulations provided by the Director of Transportation and Public Works; and (2) Title 15, Article 2, the Solid Waste and Recyclables Collection Ordinance of the WHMC, which sets forth the provisions and requirements for solid waste and recyclable collections within the City. These solid waste reduction programs and ordinances not only help to reduce the number of trips to haul solid

²² *American Geosciences Institute, How Does Recycling Save Energy?, www.americangeosciences.org/critical-issues/faq/how-does-recycling-save-energy, accessed August 22, 2016.*

waste, reducing the amount of petroleum-based fuel, but they also help to reduce the energy used to process solid waste.

b. Existing Conditions

(1) Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

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

The Project Site is located within Southern California Edison's (SCE) 50,000-square-mile planning area, which includes portions of Central and Southern California.²³ SCE generates electricity from a variety of sources, including hydropower, coal, natural gas, sources, and renewable resources, such as wind, solar, and geothermal. In 2013, renewable resources made up 24 percent of SCE's power mix, according to its 2014 Power Content Label.^{24,25} According to the CPUC, approximately 76 billion kilowatt-hours (kWh) of electricity were used in SCE's service area in 2014. Demand forecasts anticipate that

²³ *Southern California Edison, Who We Are*, www.sce.com/wps/portal/home/about-us/who-we-are!/ut/p/b0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOINLdwdPTYDDTzdQ0xMDTydjMyN3Z08jUNcTFULsh0VAYBK1hw!, accessed August 22, 2016.

²⁴ *The Power Content Label was developed by the state to provide a snapshot of the power sources used by utilities in a given year. SCE's 2014 label provides data for 2013 as compared to statewide data for 2012.*

²⁵ *California Energy Commission, Utility Annual Power Content Labels for 2014*, www.energy.ca.gov/pcl/labels/, accessed August 22, 2016.

approximately 75 billion kWh of electricity will be used in SCE's service area in 2020.²⁶ Within Los Angeles County, annual non-residential electricity use is approximately 49 billion kWh per year, as reported by the state's Energy Consumption Data Management System for 2014.²⁷ SCE supplies electrical power to the Project Site from electrical service lines located in the Project vicinity. As shown in Table IV.K.4-1 on page IV.K.4-17, it is estimated that existing uses on the Project Site currently consume approximately 440,672 kWh of electricity per year.

(2) Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the state, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and, therefore, resource availability is typically not an issue. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet (cf).

Natural gas is provided to the Project Site by the Southern California Gas Company (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.4 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 Mexican border.²⁸

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico, West Texas, the Rocky Mountains, and Western Canada, as well as local California supplies.²⁹ The traditional, southwestern United States sources of natural gas would continue to supply most of SoCalGas's natural gas demand. The Rocky Mountain supply is available but is used as alternative supplementary supply source, and the use of Canadian gas in meeting

²⁶ *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed August 22, 2016.

²⁷ *California Energy Commission, Energy Consumption Data Management System*, www.ecdms.energy.ca.gov/gasbyplan.aspx, accessed August 22, 2016.

²⁸ *SoCalGas, Company Profile*, www.socalgas.com/about-us/company-info.shtml, accessed August 22, 2016.

²⁹ *California Gas and Electric Utilities, 2016 California Gas Report, 2016*, pp. 79–80.

**Table IV.K.4-1
Summary of Annual Energy Use from Existing Operations**

Source	Estimated Energy Demand ^a
Electricity	
Building	409 MWh
Water	32 MWh
Total Electricity	441 MWh
Natural Gas	
Building	174,271 cf
Transportation	
Gasoline	54,915 gallons
Diesel	9,506 gallons
<hr/> <i>MWh = megawatt-hours</i> <i>cf = cubic feet</i> ^a <i>Detailed calculations are provided in Appendix K of this Draft EIR.</i> <i>Source: Eyestone Environmental, 2017.</i>	

SoCalGas's demand is not expected to change significantly.³⁰ Gas supply available to SoCalGas from all sources was approximately 122 million cf per day in 2015 (the most recent year for which data is available).³¹ The total capacity of natural gas available to SoCalGas in 2016 is estimated to be 3.9 billion cubic feet per day. In 2020, the total capacity available is also estimated to be 3.9 billion cubic feet per day.³² This amount is approximately equivalent to 3.98 billion thousand British thermal units (kBtu) per day or 39.8 million therms per day. Over the course of a year, the available capacity would, therefore, be 14.5 billion therms per year, which is well above the existing and future anticipated natural gas demand in SoCalGas' service area.

SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project vicinity. As shown in Table IV.K.4-1, it is estimated that existing uses on the Project Site currently consume approximately 174,271 cf of natural gas per year.

³⁰ *California Gas and Electric Utilities, 2016 California Gas Report, 2016 pp. 79–80.*

³¹ *California Gas and Electric Utilities, 2016 California Gas Report, p. 79.*

³² *California Gas and Electric Utilities, 2016 California Gas Report, 2016.*

(3) Transportation Energy

According to the CEC, transportation accounts for nearly 37 percent of California’s total energy consumption.³³ In 2015, California consumed 15.1 billion gallons of gasoline and 2.82 billion gallons of diesel fuel.³⁴ Petroleum-based fuels currently account for 90 percent of California’s transportation energy sources.³⁵ However, the state is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT. Accordingly, gasoline consumption in California has declined. The CEC predicts that the demand for gasoline would continue to decline over the next 10 years, and that there will be an increase in the use of alternative fuels.³⁶

The existing on-site land uses currently generate a demand for transportation-related fuel use as a result of vehicle trips to and from the Project Site. The estimate of annual VMT associated with the existing uses on the Project Site is 1,096,872 VMT per year. As shown in Table IV.K.4-1 on page IV.K.4-17, this translates to 54,915 gallons of gasoline and 9,506 gallons of diesel per year.³⁷ Persons traveling to and from the Project Site also have multiple options for using public transportation to reduce transportation-related fuel use. Specifically, two transit service providers operate lines nearby the Project Site, including the Los Angeles County Metropolitan Transportation Authority (Metro) and the West Hollywood CityLine service (CityLine). Approximately 10 Metro and CityLine bus lines also provide service in the nearby vicinity of the Project Site, including eight Metro bus lines and two CityLine bus lines. In addition, the Project Site is located approximately 0.05 mile from several Metro bus stops at the intersection of Sunset Boulevard and San Vicente Boulevard. As explained further in Section IV.A, Aesthetics, Views, Light/Glare, Shading, of this Draft EIR, the Project Site is located within a designated Transit Priority Area under CEQA, which is defined as an area within one-half mile of an existing or planned major transit stop. For further discussion of public transit lines that serve Project area, refer to Section IV.J, Traffic, Access, and Parking, of this Draft EIR.

³³ *California Energy Commission, 2015 Integrated Energy Policy Report, 2016.*

³⁴ *California Board of Equalization, Net Taxable Gasoline Gallons 10 Year Report, and Net Taxable Diesel Gallons 10 Year Report, 2016.*

³⁵ *California Energy Commission, 2016–2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, March 2016.*

³⁶ *California Energy Commission, 2015 Integrated Energy Policy Report, 2016.*

³⁷ *Estimated gallons of gasoline and diesel derived from VMT multiplied by the percent fleet mix, and resulting total was divided by the miles per gallon for gasoline and diesel (18.7 miles/gallon and 7.4 miles/gallon respectively).*

3. Project Impacts

This analysis addresses the proposed Project's potential energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation is assessed. The proposed Project's estimated energy consumption was calculated using CalEEMod Version 2016.3.1. Specific analysis methodologies are discussed below.

a. Methodology

(1) Construction

Electricity usage associated with the supply and conveyance of water used for dust control during construction was calculated using the California Emissions Estimator Model (CalEEMod).³⁸ Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power was assumed to be negligible. In terms of natural gas, construction activities typically do not involve the consumption of natural gas. Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix B of this Draft EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook*. Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC 2014 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50 percent light duty gasoline auto and 50 percent light duty gasoline trucks. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix B of this Draft EIR for detailed calculations.

(2) Operation

Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) and natural gas consumption was calculated using demand factors provided in CalEEMod as part of the GHG analysis included in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. CalEEMod provides default factors

³⁸ California Air Pollution Control Officers Association, CalEEMod™ version 2016.3.1, www.caleemod.com, accessed July 24, 2017.

based on the 2013 Title 24 standards. The 2016 Title 24 standards, which went into effect January 1, 2017 are applicable to the proposed Project. This analysis accounts for the 2016 Title 24 standards, which are 28 percent more efficient than the 2013 Title 24 standards for residential construction and 5 percent more efficient for non-residential construction.³⁹

Energy impacts associated with transportation during operation were also assessed. Daily trip generation used in this analysis was based on the Traffic Study prepared for the proposed Project included in Appendix H of this Draft EIR. As discussed therein, the trip generation for the proposed Project was determined based on the in/out person data provided by Arts Club London, employee projections for Arts Club West Hollywood, and visitor trip generation rate based on total Arts Club membership. The daily Project-related trips were then input into CalEEMod, which calculated the annual VMT. The resulting annual VMT was used as part of the GHG analysis included in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. Based on this annual VMT, gasoline and diesel consumption rates were calculated using the EMFAC2014 miles per gallon specific to Los Angeles County. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated consistent with the CalEEMod default for Los Angeles County. Supporting calculations are provided in Appendix B of this Draft EIR. The proposed Project's estimated energy demands were also analyzed relative to existing and planned energy supplies provided by SCE and SoCalGas in 2020 (i.e., the proposed Project buildout year) to determine if these two energy utility companies will be able to meet the proposed Project's energy demands. Finally, the capacity of local infrastructure to accommodate the proposed Project's estimated electricity and natural gas demand was assessed based on the Energy Memo prepared by KPFF (August 2016), included as Appendix K of this Draft EIR.

b. Thresholds of Significance

Appendix F of the CEQA Guidelines states that the potentially significant energy implications of a project should be considered in an EIR and though Appendix F does not provide specific significance thresholds regarding energy, it provides direction as to the types of information, analysis, and mitigation measures that may be considered in evaluating a project.

According to Appendix F, the environmental impact analysis may include:

³⁹ *California Energy Commission, 2016 Building Energy Efficiency Standards Adoption Hearing presentation, June 10, 2015.*

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

Based on these factors, in the context of this guidance from the CEQA Guidelines, the Project would have a significant impact on energy use if it would:

- Cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance.
- Result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Conflict with adopted energy conservation plans; or
- Violate state or federal energy standards.

c. Project Design Features

The proposed Project would include project design features to improve energy efficiency as set forth in Section IV.D, Greenhouse Gas Emissions, Section IV.K.1, Utilities and Service System—Water Supply and Infrastructure, and Section IV.K.3, Utilities and Service System—Solid Waste, of this Draft EIR. Those project design features are listed below as they would also apply to the energy analysis.

Project Design Feature D-1: The Project shall achieve at least 90 points in the City's Green Points System.

Project Design Feature D-2: The Project shall achieve 15 percent better than the minimum standards of the California Energy Code.

Project Design Feature K.1-1: The Project design shall incorporate the following design features to support water conservation:

- High-efficiency clothes washers in common laundry rooms (commercial washers with water factor of 7.5 or less).
- No-flush or waterless urinals in all non-residential restrooms as appropriate.
- Non-residential restroom faucets with a maximum flow rate of 0.5 gallon per minute and of a self-closing design (i.e., that would automatically turn off when not in use)
- Non-residential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute. Restaurant kitchen faucets shall have pre-rinse self-closing spray heads with a maximum flow rate of 1.6 gallons per minute.
- Installation of tankless and on-demand water heaters in commercial kitchens and restrooms, when appropriate.
- Use of a demand (tankless or instantaneous) water heater system sufficient to serve the anticipated needs of the dwellings and/or solar-thermal water heaters, as appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of proper hydro-zoning, turf minimization, zoned irrigation and use of native/drought-tolerant plant materials.
- Use of landscape contouring to minimize precipitation runoff.

Project Design Feature K.3-1: During construction, the Project would implement a construction waste management plan to recycle and/or salvage a minimum of 80 percent of non-hazardous demolition and construction debris.

Project Design Feature K.3-2: Building materials with a minimum of 10 percent recycled-content would be used for the construction of the Project.

Project Design Feature K.3-3: During operation, the Project would have a solid waste diversion rate of at least 50 percent to comply with AB 939. The Project would adopt current available recycling practices, including off-site sorting of waste by third-party vendors, permitted by the City to achieve a minimum diversion of 50 percent.

Project Design Feature K.3-4: To comply with AB 341, the Project would provide for on-site recycling containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage

areas for such containers during construction and after the building is occupied.

Project Design Feature K.3-5: To comply with AB 1826, the Project shall arrange for organic waste recycling services.

d. Analysis of Project Impacts

(1) Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control (including supply and conveyance) and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. 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 worker 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).

As shown in Table IV.K.4-2 on page IV.K.4-24, a total of 747 kWh of electricity, 28,776 gallons of gasoline, and 87,400 gallons of diesel fuel is estimated to be consumed during the entire duration of Project construction. Project construction is expected to be completed by in 2020.

(a) Electricity

As shown in Table IV.K.4-2, a total of approximately 747 kWh of electricity is anticipated to be consumed during Project construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. In addition, construction activities associated with the proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during Project construction would not be wasteful, inefficient, or unnecessary.

Construction of the proposed Project's electrical infrastructure would primarily occur within the Project Site although some off-site construction activities to connect the proposed Project's electrical infrastructure with primary electrical distribution lines could occur. As detailed in the Energy Memo, if the existing electrical vault on Hilldale Avenue, which houses electrical lines, is congested, it may be possible that the Project Applicant

**Table IV.K.4-2
Summary of Energy Use During Project Construction**

Fuel Type	Quantity ^a
Electricity	
Water Consumption	747 kWh
Lighting, electronic equipment, and other construction activities necessitating electrical power	N/A ^b
Total Electricity	747 kWh
Gasoline	
On-Road Construction Equipment	28,776 gallons
Off-Road Construction Equipment	0 gallons
Total Gasoline	28,776 gallons
Diesel	
On-Road Construction Equipment	40,951 gallons
Off-Road Construction Equipment	46,449 gallons
Total Diesel	87,400 gallons
<hr/> <i>kWh = kilowatt-hours</i> ^a <i>Detailed calculations are provided in Appendix K of this Draft EIR.</i> ^b <i>Electricity usage associated with this line item is not easily quantifiable. Such electricity demand would be temporary, limited, and would cease upon the completion of construction.</i> <i>Source: Eystone Environmental, 2017.</i>	

would be required to upgrade the electrical vault to a larger structure. The Project Applicant would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within SCE easements are minimized. As such, construction of the proposed Project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

The electricity used for construction activities would be temporary and would be substantially less than that required for project operation. Moreover, electricity used during construction would have a negligible contribution to the project's overall energy consumption since the estimated construction electricity usage represents approximately 0.2 percent of the estimated net operational demand. As discussed below, such usage amount would be within the supply and infrastructure service capabilities of SCE. Therefore, construction of the proposed Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities,

the construction of which could cause significant environmental effects. Therefore, based on the above, construction-related impacts to electricity supply and infrastructure would be less than significant.

(b) Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus, there would be no demand generated by construction. However, the proposed Project would involve installation of new natural gas connections to serve the Project Site. Since the Project Site is located in an area already served by existing natural gas infrastructure, it is anticipated that the proposed Project would not require extensive off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. However, if the proposed Project requires the removal or relocation of underground gas lines, then, prior to ground disturbance, Project contractors would be required to notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Therefore, construction of the proposed Project would not result in an increase in demand for natural gas to affect available supply or distribution infrastructure capabilities and would not result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Construction-related impacts to natural gas supply and infrastructure would be less than significant.

(c) Transportation Energy

The petroleum-based fuel use summary provided above in Table IV.K.4-2 on page IV.K.4-24 represents the amount of transportation energy that could potentially be consumed during Project construction based on a conservative set of assumptions. As shown, on- and off-road vehicles would consume an estimated 28,776 gallons of gasoline and approximately 87,400 gallons of diesel fuel throughout the Project's entire construction duration. However, consumption of such resources would be temporary and would cease upon the completion of construction. The fuel usage during Project construction would account for approximately 0.0002 percent of the existing annual gasoline-related energy consumption and 0.004 percent of the existing annual diesel fuel-related energy consumption in the State of California.⁴⁰

⁴⁰ California Board of Equalization, *Net Taxable Gasoline Gallons 10 Year Report, and Net Taxable Diesel Gallons 10 Year Report, 2016*.

The City has adopted several plans and regulations to promote the reduction, reuse, recycling, and conversion of solid waste going to disposal systems during construction. These regulations are included in the West Hollywood General Plan 2035 (Policy IRC-10.3), the WHMC (Section 13.04.040), and the City of West Hollywood Green Building Ordinance. These solid waste regulations help to reduce the number of trips to haul solid waste, thereby reducing the amount of petroleum-based fuel consumed. Furthermore, as previously stated, recycling efforts indirectly reduce the energy necessary to create new products made of raw material, which is an energy-intensive process. In addition, the proposed Project includes several design features, such as Project Design Feature K.3-1, which would require the proposed Project to implement a construction waste management plan to recycle and/or salvage a minimum of 80 percent of non-hazardous demolition and construction debris, and Project Design Feature K.3-2, which would require building materials with a minimum of 10 percent recycled-content would be used for the construction of the proposed Project. Thus, through compliance with the City's construction-related solid waste recycling programs and project design features, the proposed Project would contribute to reduced energy consumption and in turn would reduce the wasteful, inefficient, and unnecessary consumption of energy. Based on the above, Project construction would not result in the wasteful, inefficient, and unnecessary consumption of transportation-related energy resources. As such, impacts regarding transportation energy would be less than significant.

(2) Operation

During operation of the proposed Project, energy would be consumed for multiple purposes, including, but not limited to, heating, ventilation, and air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed indirectly during Project operations related to water usage, solid waste disposal, and vehicle trips. As shown in Table IV.K.4-3 on page IV.K.4-27, the proposed Project's net new energy demand when considering the energy demands of the existing commercial building on-site and the project design features that would be implemented with the proposed Project, would be approximately 1,373 MWh of electricity per year, 1,367,505 cf of natural gas per year, 198,432 gallons of gasoline per year, and 34,670 gallons of diesel fuel per year.

(a) Electricity

As shown in Table IV.K.4-3, with compliance with applicable CALGreen requirements, buildout of the proposed Project would result in a projected increase in the on-site demand for electricity totaling approximately 1,373 MWh/year and accounts for a 22-percent reduction in electricity usage through the proposed Project's incorporation of the following project design features. In addition to complying with CALGreen requirements, the Project Applicant would also implement: (1) Project Design Feature D-1, which states

**Table IV.K.4-3
Summary of Annual Energy Use During Proposed Project Operation**

Source	Estimated Energy Demand ^a
Electricity	
Building	1,222 MWh
Water	151 MWh
Total Electricity	1,373 MWh
Natural Gas	
Building	1,367,505 cf
Transportation	
Gasoline	198,432 gallons
Diesel	34,670 gallons
<hr/> <i>MWh = megawatt-hours</i> <i>cf = cubic feet</i> ^a <i>Detailed calculations are provided in Appendix K of this Draft EIR.</i> <i>Source: Eyestone Environmental, 2017.</i>	

that the proposed Project shall achieve 90 points in the City's Green Points System, which exceeds the 60 points required for compliance; (2) Project Design Feature D-2, which states that the proposed Project shall achieve 15 percent better than the minimum standards of the California Energy Code; (3) Project Design Feature K.1-1, which states that the proposed Project would implement water conservation features, such as installation of high-efficiency clothes washer in common laundry rooms, no-flush or waterless urinals in all non-residential restrooms, and installation of tankless and on-demand water heaters in commercial kitchens and restrooms, among other features; (4) Project Design Feature K.3-2, which states that the proposed Project would utilize building materials with a minimum of 10 percent recycled-content; (5) Project Design Feature K.3-3, which states that the proposed Project would have a solid waste diversion target of at least 50 percent, which would indirectly reduce energy use by reducing the demand for new products made of raw material, an energy intensive process; (6) Project Design Feature K.3-4, which states that the proposed Project would provide for on-site recycling containers to promote recycling of paper, metal, glass, and other recyclable materials; and (7) Project Design Feature K.3-5, which states that the proposed Project would arrange for organic waste recycling services. In addition, SCE is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources procured by SCE include wind, solar, and geothermal sources. These sources account for 24 percent of

SCE's overall energy mix in 2014, the most recent year for which data is available.⁴¹ These off-site renewable sources of energy would be available to meet the proposed Project's energy demand, and therefore, compared to a similar project in another jurisdiction whose energy supplies are comprised of fewer renewable sources, the proposed Project would consume less non-renewable energy. Furthermore, the proposed Project would comply with Section 110.10 of Title 24, which includes mandatory requirements for solar-ready buildings, and, as such, would not preclude the potential use of alternate fuels. As discussed in Section II, Project Description, of this Draft EIR, the Project would also include various design methods and technologies to reduce energy demand, which could include, photovoltaic panels on portions of the roof deck, reduced window-to-wall ratios with glazed high performance exterior facades, energy efficient lighting, variant refrigerant flow piping systems, a building energy management system for controlled lighting and energy usage, among others. As described above, the electricity demand calculation for the proposed Project assumes compliance with Title 24 standards for 2016, which went into effect in 2017. In summary, although electricity consumption would increase on the Project Site due to the implementation of the proposed Project, the proposed Project's energy efficiency would go beyond code compliance and state regulatory requirements. Therefore, the proposed Project would not cause wasteful, inefficient, and unnecessary consumption of electricity during operation.

The availability of electricity depends upon adequate generation capacity and fuel supplies. The CEC analyzes energy usage throughout the state and publishes a demand forecast staff report every few years, the most recent of which covers the 2014–2024 year period. The CEC estimates electricity consumption within the SCE planning area would be 109,206 GWh in 2024 (the latest available forecast year).⁴² Based on the proposed Project's estimated electrical consumption of 1,373 MWh per year, the proposed Project would account for approximately 0.001 percent of the 2024 demand forecasted in the SCE planning area.⁴³ In addition, SCE has confirmed that the proposed Project's electricity demand can be served by the facilities in the Project area.⁴⁴ Furthermore, as previously

⁴¹ California Energy Commission, *Utility Annual Power Content Labels for 2014*, www.energy.ca.gov/pcl/labels/, accessed August 22, 2016.

⁴² The CEC's forecast includes three scenarios: a high energy demand case, a low energy demand case, and a mid energy demand case for SCE planning area. The consumption forecast for the low energy demand case is used in this calculation to provide a conservative analysis of the proposed Project (i.e., the proposed Project would represent a greater percentage of overall demand under this scenario). California Energy Commission, *Commission Final Report, California Energy Demand 2014–2024 Final Forecast*, January 2014, p. A-3.

⁴³ Assuming increased electricity consumption in the SCE planning area in 2028 based on continued population growth and development, the proposed Project would represent an even smaller percentage of total SCE demand in 2028.

⁴⁴ KPFF, *8920 Sunset—Energy Requirements*, August 2016. Refer to Appendix K of this Draft EIR.

described, the proposed Project would incorporate a variety of energy conservation measures to reduce energy usage. Additionally, the proposed Project would implement any necessary connections and upgrades required by SCE to ensure that SCE would be able to adequately serve the proposed Project. Therefore, it is anticipated that SCE's existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed Project's electricity demand. Accordingly, operation of the proposed Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Based on the above, operational impacts to electricity supply and infrastructure would be less than significant, and no mitigation measures would be required.

(b) Natural Gas

As provided in Table IV.K.4-3 on page IV.K.4-27, with compliance with applicable CALGreen requirements, buildout of the proposed Project is projected to generate a net increase in the on-site demand for natural gas totaling approximately 1,373,324 cf/yr and accounts for a 21-percent reduction in natural gas consumption with incorporation of the project design features that will be implemented with the proposed Project. 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 would implement project design features to further reduce energy use, including Project Design Feature D-1, which entails implementing conservation features that would reduce natural gas usage. In addition, as with electricity demand, the anticipated demand for natural gas for the proposed Project would be required to comply with the 2016 Title 24 standards, which was assumed for the CalEEMod calculations described above. Therefore, the proposed Project would not cause wasteful, inefficient, and unnecessary consumption of natural gas during operation.

As stated above, the proposed Project's estimated net increase in demand for natural gas is anticipated to be 1,367,505 cf/year, or approximately 3,747 cf/day, taking into account the natural gas demands of the existing commercial building on-site and the project design features that would be implemented with the proposed Project. Based on the 2016 California Gas Report, it is estimated that the natural gas consumption within SoCalGas' service area will be approximately 2.58 billion cf/day in 2020 (the proposed Project's buildout year).⁴⁵ As noted above, the Project Site is served by SoCalGas. The

⁴⁵ *California Gas and Electric Utilities, 2016 California Gas Report, 2016, p. 96.*

proposed Project would account for less than 0.0001 percent of the 2020 forecasted consumption in SoCalGas' service area. In addition, SoCalGas has confirmed that the Project's natural gas demand can be served by the facilities in the Project area and that such facilities have sufficient capacity to serve the proposed Project.⁴⁶ Furthermore, as also previously described, the proposed Project would incorporate a variety of energy conservation measures to reduce energy usage. Additionally, the proposed Project would implement any necessary connections and upgrades required by SoCalGas to ensure that SoCalGas would be able to adequately serve the proposed Project. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the proposed Project's net increase in demand for natural gas.

Based on the above, operation of the proposed Project would not result in an increase in demand for natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Operational impacts to natural gas supply and infrastructure would therefore be less than significant, and no mitigation measures would be required.

(c) Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. As summarized in Table IV.K.4-3 on page IV.K.4-27, when accounting for a 19-percent reduction from the measures that would be implemented to reduce VMT, the proposed Project's estimated petroleum-based fuel usage by vehicles accessing the Project Site (e.g., tenants, patrons, and delivery vehicles) less the existing fuel usage by vehicles accessing the Project Site would be approximately 198,432 gallons of gasoline and 34,670 gallons of diesel per year, or a total of 233,101 gallons of petroleum-based fuels annually.

The operational petroleum-based fuel usage calculations contained herein conservatively assumes that public transportation would not be used to travel to and from the Project Site. Due to the Project Site's location in an urbanized area and in close proximity to several bus routes would provide guest, visitors, and employees with various public transportation opportunities and the project design features that would encourage use of alternative transportation modes, it is expected that visitors, guests, and employees may use transit or non-vehicular modes of transportation to travel to and from the Project Site. The Project area is already served by approximately 10 Metro and CityLine bus lines

⁴⁶ KPFF, *8920 Sunset—Energy Requirements, August 2016. Refer to Appendix K of this Draft EIR.*

serve the Project Site, including 8 Metro bus lines and 2 CityLine bus lines. In addition, the Project Site is located approximately 0.05 mile from the Metro bus stops at the intersection of Sunset Boulevard and San Vicente Boulevard. Additionally, bicycle amenities, such as racks and personal lockers, would be expanded at various locations within and around the Project Site. Also, use of transit and non-vehicular modes of transportation is anticipated to increase over time, as local and regional plans and policies facilitating increased use and development of transit and non-vehicular transportation modes are implemented, which include SCAG's 2016–2040 RTP/SCS, the City of West Hollywood General Plan Mobility Element, and City of West Hollywood Bicycle and Pedestrian Mobility Plan. As discussed in Section IV.G, Land Use, the Project Site is located in a HQTAs designated by SCAG, which indicates that the Project Site is an appropriate site for increased density and employment opportunities from a “smart growth,” regional planning perspective. As such, the proposed Project's siting would minimize transportation fuel consumption through the reduction of VMT, as described above.

Based on the analysis above, the proposed Project would not cause wasteful, inefficient, and unnecessary consumption of petroleum-based fuel during operation. Therefore, impacts associated with operational transportation-related energy use would be less than significant and no mitigation measures would be required.

(3) Regulatory Consistency

The proposed Project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the 2013 CALGreen Code, California's Building Energy Efficiency Standards, and the City of West Hollywood Green Building Ordinance, described above. Additionally, the proposed Project would go beyond the requirements of the California Building Energy Efficiency Standards because the mixed-use building would be designed to meet LEED Gold certification or equivalent and would achieve at least a 15 percent improvement in energy efficiency over Title 24 requirements.

Furthermore, the proposed Project would be consistent with regional planning strategies that address energy conservation. As discussed above and in Section IV.G, Land Use, of this Draft EIR, these strategies include SCAG's 2016–2040 RTP/SCS, which focuses on creating livable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of the approach, the 2016–2040 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The proposed Project would be consistent with the energy efficiency policies emphasized in the 2016–2040 RTP/SCS. Most notably, the proposed Project would redevelop the existing Project Site with a new mixed use commercial building that would house, among other uses, the first West Coast location for

the Arts Club, art gallery, restaurants, and creative offices, located along Sunset Boulevard and Hilldale Avenue, which would provide greater proximity to neighborhood services and jobs and would be well-served by existing public transportation, including Metro and CityLine bus routes. This is evidenced by the Project Site's location within a designated HQTAs. The introduction of new job opportunities within a HQTAs, as proposed by the Project, is consistent with numerous policies in the 2016–2040 RTP/SCS related to locating new jobs near transit. Moreover, the ground floor of the proposed Project would incorporate a landscaped community plaza as well as visually and physically “penetrable” treatments along the Sunset Boulevard and Hilldale Avenue frontages featuring extensive windows and setbacks to humanize the ground floor level and encourage pedestrian activities with pedestrian-oriented gallery, retail, and lobby spaces. In addition, the proposed Project would comply with state energy efficiency requirements and would use electricity from SCE, which has a current renewable energy mix of 24 percent. All of these features would serve to reduce the consumption of electricity, natural gas, and transportation fuel associated with VMT.

Based on the analysis above, the proposed Project would not conflict with adopted energy conservation plans or violate state or federal energy standards. Impacts associated with regulatory consistency would be less than significant and no mitigation measures would be required.

(4) Conclusion

As demonstrated in the analysis above, the proposed Project would not cause wasteful, inefficient, and unnecessary consumption of energy during construction or operation; result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; conflict with adopted energy conservation plans; or violate state or federal energy standards. Therefore, Project impacts related to energy use or consumption would be less than significant during construction and operation, and no mitigation measures are required.

4. Cumulative Impacts

The geographic context for the cumulative impact analysis on electricity is the planning area of SCE, and the geographic context for the cumulative impact analysis on natural gas is the service area of SoCalGas. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the proposed Project in the context of both statewide energy use and regionwide transportation planning. The proposed Project, in conjunction with forecasted 2020 growth in these

geographies, would cumulatively increase the consumption of energy, thus potentially resulting in cumulative impacts with respect to energy use. Cumulative growth in the greater Project area through 2020 includes specific known development projects, as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this Draft EIR. These related projects primarily include retail/commercial, residential, office, and hotel uses.

(1) Electricity

Buildout of the proposed Project, related projects, and additional forecasted growth in the SCE planning area would cumulatively increase the demand for electricity supplies and infrastructure capacity. The CEC estimates electricity consumption within the SCE planning area would be 110,041 GWh in 2020 or an increase of 3,169 GWh from 2016 through 2020.⁴⁷ Based on the proposed Project's estimated electrical consumption of 1,373 MWh per year, the proposed Project would account for approximately 0.04 percent of the 2016 through 2020 demand forecasted in the SCE planning area.⁴⁸ Thus, although Project development would result in the use of renewable and non-renewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with growth expectations for the SCE planning area. Accordingly, cumulative impacts from the proposed Project and related projects related to electricity consumption would not be considered significant. Furthermore, as with the proposed Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

Electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SCE are on-going. It is expected that SCE would continue to expand delivery capacity as needed to meet demand increases within its planning area. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. As such, cumulative impacts with respect to electricity infrastructure would not be considered significant.

⁴⁷ The CEC's forecast includes three scenarios: a high energy demand case, a low energy demand case, and a mid energy demand case for the SCE planning area. The consumption forecast for the low energy demand case is used in this calculation to provide a conservative analysis of the proposed Project (i.e., the proposed Project would represent a greater percentage of overall demand under this scenario). California Energy Commission, Commission Staff Report, California Energy Demand 2017–2027 Energy Demand Updated Forecast, January 2017, p. 32.

⁴⁸ Assuming increased electricity consumption in the SCE planning area in 2028 based on continued population growth and development, the proposed Project would represent an even smaller percentage of total SCE demand in 2028.

(2) Natural Gas

Buildout of the proposed Project, related projects, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. Based on the 2016 California Gas Report, it is estimated by the California Energy and Electric Utilities that the natural gas consumption within SoCalGas' service area would be approximately 2.56 billion cf/day in 2020 (the proposed Project's buildout year).⁴⁹ Therefore, the proposed Project would account for approximately 0.0001 percent of the 2020 forecasted consumption in SoCalGas' service area. SoCalGas' forecasts take into account projected population growth and development based on local and regional plans. Although Project development would result in the use of natural gas resources, which could 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. Furthermore, future development projects would be expected to incorporate energy conservation features; comply with applicable regulations, including CALGreen and State energy standards under Title 24; and incorporate mitigation measures, as necessary. Accordingly, cumulative impacts from the proposed Project and related projects related to natural gas consumption would not be considered significant and no mitigation measures would be required.

Natural gas infrastructure is typically expanded in response to increasing demand and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. As such, cumulative impacts from the proposed Project and related projects with respect to natural gas infrastructure would not be considered significant and no mitigation measures would be required.

(3) Transportation Energy

Buildout of the proposed Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As described above, the State of California consumed 15.1 billion gallons of gasoline and 2.82 billion gallons of diesel fuel in 2015.⁵⁰ As described above, at buildout, estimated petroleum-based fuel usage by vehicles accessing the Project Site (e.g., tenants, patrons, and delivery vehicles) would consume a total of 198,432 gallons of gasoline and

⁴⁹ *California Gas and Electric Utilities, 2016 California Gas Report, 2016, p. 96.*

⁵⁰ *California Board of Equalization, Net Taxable Gasoline Gallons 10 Year Report, and Net Taxable Diesel Gallons 10 Year Report, 2016.*

34,670 gallons of diesel per year, or a total of 233,101 gallons of petroleum-based fuels. Thus, the proposed Project would account for approximately 0.001 percent of existing transportation-related energy consumption in the state. Thus, while there would be an increase in the consumption of petroleum-based fuels, the proposed Project's cumulative impacts related to transportation energy consumption would not be considered significant. Each related project would likewise be anticipated to represent a small proportion of overall demand. Additionally, as described above, petroleum currently accounts for 90 percent of California's transportation energy sources; however, over the last decade the state has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT, which would reduce reliance on petroleum fuels. According to the CEC, gasoline consumption has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline would continue to decline over the next 10 years and that there would be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. As with the proposed Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions.

Furthermore, as described above under subsection 3.d(3), Regulatory Consistency, the proposed Project would be consistent with the energy efficiency policies emphasized by the 2016–2040 RTP/SCS. Specifically, the proposed Project would redevelop the existing Project Site with a new nine-story building that would house, among other uses, the first West Coast location for the Arts Club, art gallery, restaurants, and creative offices, located along Sunset Boulevard and Hilldale Avenue. The ground floor of the proposed Project would incorporate a landscaped community plaza as well as visually and physically “penetrable” treatments along the Sunset Boulevard and Hilldale Avenue frontages featuring extensive windows and setbacks to humanize the ground floor level and encourage pedestrian activities with pedestrian-oriented gallery, retail, and lobby spaces. In addition, the proposed Project would provide greater proximity to neighborhood services and jobs and would be well-served by existing public transportation, including bus lines. The proposed Project also would introduce new job opportunities within a HQTA, which is consistent with numerous policies in the 2016–2040 RTP/SCS related to locating new jobs near transit. These features would serve to reduce VMT and associated transportation fuel consumption. By its very nature, the RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects; therefore, the proposed Project is consistent with the RTP/SCS. It is also anticipated that cumulative development would incorporate these attributes to varying degrees and in so doing would also reduce VMT and associated transportation fuel consumption on a cumulative basis. Based on the analyses presented above, cumulative transportation energy use impacts from the proposed Project and related projects would be considered less than significant and no mitigation measures would be required.

(4) Conclusion

Based on the analysis provided above, potential cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) would be less than significant, including considerations related to the wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance; an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; a conflict with adopted energy conservation plans; or a violation of state or federal energy standards. As such, the proposed Project's cumulative energy impacts are concluded to be less than significant and no mitigation measures would be required.

5. Mitigation Measures

Project-level and cumulative impacts with regard to energy use would be less than significant. Therefore, no mitigation measures are required.

6. Level of Significance after Mitigation

With implementation of the proposed Project design features discussed above, impacts related to energy use would be less than significant without mitigation.