## **3.10 ENERGY**

This section describes existing setting related to energy, identifies associated regulatory requirements, and evaluates energy impacts related to implementation of The Bond Project (project or proposed project). This analysis is based on emission calculations and California Emissions Estimator Model (CalEEMod) outputs provided as Appendix B to this EIR.

# 3.10.1 Environmental Setting

## **Electricity**

According to the U.S. Energy Information Administration (EIA), California used approximately 257,268 gigawatt hours of electricity in 2017 (EIA 2019a). By sector in 2017, commercial uses utilized 46% of the state's electricity, followed by 35% for residential uses, and 19% for industrial uses (EIA 2019a). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is lower than any other state except Hawaii (EIA 2018a).

Southern California Edison (SCE) provides electricity to West Hollywood residents and businesses, including those located on the project site. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. SCE administers various energy efficiency and conservation programs that may be available to residents, businesses, and other organizations in West Hollywood (City of West Hollywood 2011a). According to the California Public Utilities Commission (CPUC), approximately 84 billion kilowatt-hours (kWh) of electricity were used in SCE's service area in 2017. Demand forecasts anticipate that approximately 75 billion kWh of electricity will be used in SCE's service area in 2020 (CPUC 2018).

SCE receives electric power from a variety of sources. According to CPUC's 2018 California Renewables Portfolio Standard Annual Report, 32% of SCE's power came from eligible renewables, such as biomass/waste, geothermal, small hydroelectric, solar, and wind sources (CPUC 2018). SCE maintains a lower percentage of renewable energy procurement when compared with California's two other large investor-owned utilities – Pacific Gas and Energy Company and San Diego Gas & Electric Company, both of which procured 33% and 44% of their electric power, respectively, from eligible renewables (CPUC 2018). SCE also maintains a slightly lower percentage of renewables relative to statewide procurement. The California Energy Commission (CEC) estimates that about 29% of the state's electricity retail sales in 2017 came from renewable energy (CEC 2018). The California Renewables Portfolio Standard (RPS) Program establishes a goal for California to increase the amount of electricity generated from renewable energy resources to 20% by 2010 and to 33% by 2020. Recent

legislation revised the current RPS target for California to obtain 50% of total retail electricity sales from renewable sources by 2030, with interim targets of 40% by 2024, and 45% by 2027 (CPUC 2016). In September 2017, the City joined the Clean Power Alliance, which includes more than 30 member jurisdictions in Los Angeles and Ventura Counties. Through the Alliance, all power customers in the City have the opportunity to obtain cleaner power from renewable energy sources at a competitive price. Community Choice Aggregation (also known as Community Choice Energy) is a way for government agencies to buy and/or generate cleaner electricity for residents and businesses (City of West Hollywood 2019). Community Choice Aggregation creates a partnership between the municipality and the existing utility provider, giving local governments the option to purchase up to 100% renewable electricity – such as solar, wind, bioenergy, geothermal, and hydroelectric – at competitive rates and helping communities achieve their climate action goals. The participating municipality can buy power from cleaner sources than offered by the existing utility (e.g., SCE), while still working with SCE to deliver energy to customers.

Within Los Angeles County, annual non-residential electricity use is approximately 48 billion kWh per year, while residential electricity use is approximately 19 billion kWh per year, as reported by the state's Energy Consumption Data Management System for 2017 (ECDMS 2016). More specifically, within the City of West Hollywood (City), annual electricity consumption (encompassing both residential and non-residential) is approximately 335,380,279 kWh (City of West Hollywood 2010). Existing electricity use at the project site is estimated to be approximately 149,907 kWh per year (Appendix B).

#### **Natural Gas**

According to the EIA, California used approximately 2,110,829 million cubic feet of natural gas in 2017 (EIA 2019b). Natural gas is used for cooking, space heating, generating electricity, and as an alternative transportation fuel. The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 30% of the natural gas delivered by California utilities in 2017. Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 70% of the natural gas delivered by California utilities in 2017 (EIA 2019b).

The Southern California Gas Company (SoCalGas) provides the City of West Hollywood with natural gas service. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. A SoCalGas service yard is located within the City limits, adjacent to the West Hollywood Gateway Center (City of West Hollywood 2011a). In the California Energy Demand midenergy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas' service territory. As of 2017, approximately 7,206 million therms<sup>1</sup> were used in SoCalGas' service area per year. The proposed project is expected to begin construction in 2020. By 2020, natural

1

One Therm is equal to 100,000 Btu or 100 kBtu.

gas demand is anticipated to be approximately 7,876 million therms per year in SoCalGas' service area (CEC 2017). The total capacity of natural gas available to SoCalGas in 2016 was 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<sup>2</sup> (California Gas and Electric Utilities 2016). 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. Within the City of West Hollywood, annual natural gas consumption is approximately 16,940,221 therms (SoCalGas 2009, as cited in City of West Hollywood 2010). Existing natural gas use at the project site is estimated to be 279,813 kBTU per year (Appendix B). This is approximately equal to 2,799 therms per year.

#### Petroleum

According to the CEC, California used approximately 18.6 billion gallons of petroleum in 2017 (EIA 2019c). This equates to a daily use of approximately 51 million gallons of petroleum. By sector, transportation uses utilize approximately 85.5% of the state's petroleum, followed by 11.1% from industrial, 2.5% from commercial, 0.9% from residential, and 0.01% from electric power uses (EIA 2018b). Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 3.10.2, below. As such, the CEC anticipates an overall decrease of gasoline demand in the state over the next decade.

## **Existing Site Conditions**

Operational energy use from the existing land uses were estimated to present the net change in energy consumption. The estimation of operational energy consumption generated under existing conditions was based on approximately 10,000 square feet of gym, 7 dwelling units in a low-rise complex, and 82 surface parking spots currently on site. See Section 3.10.4, Methodology, for a description of the methodology and assumptions applied to estimate energy use from the existing use of the project site.

# 3.10.2 Relevant Plan, Policies, and Ordinances

#### **Federal**

# Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National

One cubic foot of natural gas has approximately 1,020 BTUs of natural gas or 1.02 kBTUs of natural gas.

Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

## Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased corporate average fuel economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable fuel standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2017). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of greenhouse gas (GHG) emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program ("RFS2") includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

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

#### State

## Warren-Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

### State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

#### Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted Senate Bill (SB) 32, which extended the horizon year of the state's

codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board (CARB) prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

### California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The current Title 24 standards are the 2016 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2017. The 2019 Title 24 Building Energy Efficiency Standards, which will be effective January 1, 2020, will further reduce energy used and associated GHG emissions compared to current standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2016 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

Title 24 also includes Part 11, the California Green Building Standards (CALGreen). The CALGreen standards took effect in January 2011, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The 2016 CALGreen standards became effective on January 1, 2017. The mandatory standards require the following:

- 20% mandatory reduction in indoor water use
- 50% diversion of construction and demolition waste from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency

#### Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law SB 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by

the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the CPUC.

The CEC has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds carbon dioxide (CO<sub>2</sub>) per megawatt-hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of GHGs;
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the state's standards for environmental impact; and
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (EPS) (Perata, Chapter 598, Statutes of 2006).

### Assembly Bill 1493

Adopted in 2002 by the state legislature, Assembly Bill (AB) 1493 ("Pavley" regulations) required that the CARB develop and adopt, no later than January 1, 2005, regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.

The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005 and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions."

The EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, CARB adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September 2009 amendments will allow for California's enforcement of the Pavley rule while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles.

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

#### Executive Order S-1-07

Issued on January 18, 2007, Executive Order (EO) S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

#### Senate Bill 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see EO S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative planning strategy.

In September 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the SCAG are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG prepared its RTP/SCS, which was adopted by the SCAG Regional Council on April 4, 2012. The plan quantified a 9% reduction by 2020 and a

16% reduction by 2035. On June 4, 2012, the CARB executive officer issued an executive order accepting SCAG's quantification of GHG reductions and the determination that the SCS would achieve the GHG emission reduction targets established by CARB. On April 7, 2016, SCAG adopted the 2016–2040 RTP/SCS which looks to build on the success of the 2012–2035 RTP/SCS. Targets for SCAG region in the updated plan includes an 8% per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18% reduction by 2035, and a 21% reduction by 2040 compared with 2005 levels (SCAG 2016).

#### Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM, and NO<sub>x</sub> emissions from existing diesel vehicles operating in California. Amendments to this regulation were approved by CARB on April 25, 2014.

The regulation applies to nearly all diesel fueled, dual-fueled, or alternative diesel-fueled trucks and buses with a gross vehicle weight rating greater than 14,000 pounds that are privately or federally owned and for privately and publicly owned school buses. The purpose of this regulation is to reduce emissions of diesel PM, NO<sub>x</sub>, and other criteria pollutants from in-use diesel-fueled vehicles.

After January 1, 2012, heavier trucks and buses with a gross vehicle weight rating greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Fleets that comply with the schedule must install the best available PM filter on 1996 model year and newer engines and replace the vehicle 8 years later. Trucks with 1995 model year and older engines must be replaced starting in 2015. Replacements with a 2010 model year or newer engines meet the final requirements, but owners can also replace with used trucks that have a future compliance date on the schedule. For example, a replacement with a 2007 model year engine complies until 2023. By 2023, all trucks and buses must have 2010 model year engines with few exceptions. No reporting is required if complying with this schedule (CARB 2014).

#### Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB will propose new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG

emissions by 34% in 2025. The zero-emissions vehicles (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

#### Executive Order B-16-12

Governor Brown issued EO S-16-12 on March 23, 2012. The EO requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It orders CARB, the CEC, the CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate ZEVs, each with infrastructure plans and streamlined permitting
- The state's manufacturing sector will be expanding ZEV and component manufacturing
- The private sector's investment in ZEV infrastructure will be growing
- The state's academic and research institutions will be contributing to ZEV research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's ZEV infrastructure will be able to support up to one million vehicles
- The costs of ZEV will be competitive with conventional combustion vehicles
- ZEVs will be accessible to mainstream consumers
- There will be widespread use of ZEVs for public transportation and freight transport
- Transportation sector GHG emissions will be falling as a result of the switch to ZEVs
- Electric vehicle charging will be integrated into the electricity grid
- The private sector's role in the supply chain for ZEV component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million ZEVs will be on California roads and their market share will be expanding
- Californians will have easy access to ZEV infrastructure

- The ZEV industry will be a strong and sustainable part of California's economy
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the EO establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

## Cap-and-Trade Program

To achieve the goals of AB 32, the Climate Change Scoping Plan: A Framework for Change included an early action to develop a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system. The cap-and-trade regulation, which is a key element of California's climate plan, took effect in January 2012 and compliance obligation began in January 2013. The cap-and-trade program sets a statewide limit on sources responsible for 85% of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions. The first phase of the cap-and-trade regulation included electricity generated in and imported into California, large combustion sources (i.e., generally those emitting more than 25,000 MT CO<sub>2</sub>e per year), and certain industrial sectors. The second phase added providers of transportation fuels and other combustion fuels (e.g., natural gas, propane) to the cap-and-trade program. The regulation requires that emissions generated by these facilities and combustion of fuels be reduced over time under a declining "cap."

#### Renewable Energy Sources

Established in 2002 under SB 1078, and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33% of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal, landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires

the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

According to CPUC's 2016 Biennial RPS Program Update, 23.2% of SCE's power came from eligible renewables during the 2014–2016 compliance period (CPUC 2016). By 2020, SCE is required to produce 33% of its electricity from renewable sources. This represents the off-site renewable sources available to the project through electricity provided by SCE.

### Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

#### Local

### City of West Hollywood General Plan 2035 Infrastructure, Resources, and Conservation

The Infrastructure, Resources, and Conservation Element of the West Hollywood General Plan 2035 (City of West Hollywood 2011a) addresses topics pertinent to this section of the EIR, including energy supply and conservation, green building, water supply and conservation, recycling and solid waste, and transportation infrastructure. The element establishes policies intended to foster energy conservation and efficiency. Policies from this element that are relevant to the proposed project are listed below. 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.

• **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.
- **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).
  - o 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
  - o 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:
  - o 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

- o 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:
  - o Increase walking within the City
  - Increase transit use and reduce barriers to transit ridership
  - Increase ride-sharing
  - o 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:
  - o Reduce energy associated with the use, treatment, and conveyance of water and wastewater
  - Improve energy efficiency in existing buildings
  - o Ensure high levels of energy performance in new construction
  - o 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.

## 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.

### City of West Hollywood Climate Action Plan

The City of West Hollywood's CAP recommends a series of actions that the City, residents, property owners, and businesses can take to reduce their contributions to global climate change by reducing GHG emissions. Reductions in GHG emissions are generally correlated with energy savings. The City's CAP outlines a course of action to reduce municipal and communitywide GHG emissions. The City's CAP seeks to:

- Provide clear guidance to City staff and decision-makers regarding when and how to implement key actions to reduce GHG emissions.
- Place the City on a path to reduce annual communitywide GHG emissions by 20% to 25% below 2008 business-as-usual emission levels by 2035.
- Inspire residents, property owners, and businesses to participate in community efforts to reduce GHG emissions.
- Demonstrate West Hollywood's ability to respond to and comply with California GHG reduction legislation and guidelines.

The City's CAP includes strategies and performance indicators to reduce GHG emissions from both municipal and communitywide activities within the City (City of West Hollywood 2011b).

In addition, the City's CAP includes an Energy Use and Efficiency strategy sector that recommends ways to increase energy efficiency in existing buildings, enhance energy performance for new construction, and increase use of renewable energy

#### City of West Hollywood's Green Building Ordinance

The City adopted one of the nation's first mandatory green building ordinances, which became effective in 2007. The Green Building Ordinance addresses construction and demolition waste, requires new buildings to anticipate future solar panel installations, regulates use of materials with

volatile organic compounds, requires Energy Star appliances, requires transportation demand management strategies and minimum bicycle facilities, and refers to and builds upon California Title 24 standards for energy performance. The Green Building Ordinance includes a point system for new construction with incentives for projects that achieve "exemplary" status. The point system was designed to emphasize locally available materials, encourage green elements to be incorporated early into project design, and provide flexibility to alter green elements as the project evolves (City of West Hollywood 2011a). The proposed project would be required to comply with the City's Green Building Ordinance.

## 2011 Bicycle Task Force Report

The Bicycle Task Force was created in 2010 upon City Council direction. The Bicycle Task Force was comprised of 18 members from a wide spectrum of community interests, including representation from City commissions. The Bicycle Task Force was charged with preparing a range of recommendations to improve bicycle mobility throughout the City and with developing recommendations for community education on bicycle safety. Other goals for the Bicycle Task Force included learning and duplicating best practices from other cities with successful bike programs, identifying local routes for various types of bike lanes to expand and modify existing routes, and educating the community on cycling and pedestrian safety. In response to these goals, the Bicycle Task Force prepared the Bicycle Task Force Report to summarize its recommendations. The four primary goals identified in this report (City of West Hollywood 2011c) are as follows:

- Enhance cycling as a safe, healthy, and enjoyable form of transportation and recreation
- Increase the number and types of cyclists who commute in and through the City
- Reduce auto congestion throughout the City
- Provide infrastructure improvements to increase safety and connectivity

#### 2003 Bicycle and Pedestrian Mobility Plan

The West Hollywood Bicycle and Pedestrian Mobility Plan set forth goals, objectives, policy actions, and design guidelines to improve and facilitate bicycle and pedestrian transportation. This is an 18-year plan that provides a blueprint for improving quality of life, creating a more sustainable environment, reducing traffic congestion, vehicle exhaust, emissions, noise, and energy consumption. This plan lays out the policy framework for the implementation of an overall vision for the City that consists of the following overarching goals:

- People can conveniently walk and/or bicycle to their destinations
- People can rely on support facilities at their worksites and at other destinations
- People feel safe walking and bicycling anywhere

- People from all age groups feel comfortable walking or bicycling
- People with disabilities can more easily travel in the city
- Visitors are attracted by the enhanced walking and cycling environment
- Commercial streets are exciting places to visit (City of West Hollywood 2003)

# 3.10.3 Thresholds of Significance

Appendix G of the CEQA Guidelines does not contain significance thresholds related to energy. The following significance criteria included in Appendix F of the CEQA Guidelines (14 CCR 15000 et seq.) assist in determining the significance of an energy consumption impact.

A significant impact related to energy consumption would occur if the project would:

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

# 3.10.4 Methodology

A brief overview of the methodology applied to assess the project's potential impacts is provided below:

- **Electricity:** Proposed project and existing on-site electricity usage data were determined using CalEEMod Version 2016.3.2. Electricity demand within SCE's service area was obtained from CPUC reports (specifically, the RPS Program Updates). Electricity demand within the City was obtained from the City's General Plan EIR.
- Natural Gas: Proposed project and existing on-site natural gas usage data were provided using CalEEMod. Regional natural gas demand data was obtained from CEC reports (specifically, the California Energy Demand Forecast). Natural gas demand within the City was obtained from the City's General Plan EIR. Information on natural gas supply was obtained from the 2016 California Gas Report.
- **Petroleum:** Potential impacts were assessed through projected traffic trip generation during construction and operation, as provided by the CalEEMod outputs and the traffic impact report that was prepared for the proposed project (Appendix B and Appendix G, respectively). Fuel consumption from construction equipment was estimated by converting the total CO<sub>2</sub> emissions from each construction phase to gallons using conversion factors

for CO<sub>2</sub> to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO<sub>2</sub> per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO<sub>2</sub> per gallon (The Climate Registry 2019). Heavy-duty construction equipment associated with construction activities and haul trucks involved in relocating dirt around the project site are assumed to use diesel fuel. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles. Fuel consumption from worker and vendor trips was estimated by converting the total CO<sub>2</sub> emissions from the construction phase to gallons using the conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled. The fuel consumption resulting from the project's operational phase would be attributable to employees and customers traveling to and from the project site. Similar to construction worker and vendor trips, fuel consumption for operation was estimated by converting the total CO<sub>2</sub> emissions from the retail and commercial land use type to gallons using the conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. The employee and customer vehicles were assumed to be 92% gasoline powered and 8% diesel powered for the proposed project. The employee and customer vehicles were assumed to be 93% gasoline-fueled and 7% dieselfueled for the existing scenario.

# 3.10.5 Impact Analysis

<u>Threshold ENG-1.</u> Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the project would increase the demand for electricity and natural gas at the project site and gasoline consumption in the project area during construction and operation relative to existing uses.

### **Electricity**

#### Construction Use

Temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers would be provided by SCE. The electricity used for such activities would be temporary, would be substantially less than that required for project operation, and would therefore have a negligible contribution to the proposed project's overall energy consumption.

## Operational Use

The operational phase would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. CalEEMod was used to estimate project emissions from electricity uses (see Appendix B for calculations). Default electricity generation rates in CalEEMod were used based on the proposed land use and climate zone. The CalEEMod land use for art gallery was based on the land use for a library, since art gallery is not an available land use under CalEEMod. CalEEMod Version 2016.3.2 assumes compliance with current Title 24 standards for 2016.<sup>3</sup> According to these estimations, the proposed project would consume approximately 1,572,871 kWh per year. The electricity consumption at the project site under existing conditions was also calculated using CalEEMod and is estimated to be 149,907 kWh per year. As such, upon project implementation, electricity demand and consumption at the project site would increase by 1,422,964 kWh per year (Appendix B). As described in Section 3.10.1, electricity is supplied to the project site by SCE. As of 2017, approximately 84 billion kWh of electricity were used in SCE's service area. Annual retail sales of electricity in SCE's service area are forecasted to be approximately 75 billion kWh in 2020 (CPUC 2018). The increase in electricity consumption with implementation of the proposed project represents 0.0017% of SCE's existing demand and approximately 0.0019% of SCE's total forecasted electricity sales in 2020 (approximate time of project buildout). As such, under both existing and future conditions, the increase in electricity demand at the project site would be negligible relative to the electricity use in SCE's service area.

As described above, the electricity demand calculation for the proposed project assumes compliance with Title 24 standards for 2016. Additionally, the demand calculations do not take into account the project's energy-saving design features that would result in exceedances of the code requirements. As such, the proposed project's electricity use would be more efficient than what is required and would likely be even lower than the calculations presented above. The proposed project's relationship to efficiency requirements and project-specific design features that would minimize electricity use are summarized below.

The proposed project's green building features would involve participation in Energy Star (residential) or Savings by Design (commercial) programs (see Section 2.4 of this EIR for a complete list of the proposed project's sustainable design features). These aspects of the project

The proposed project is anticipated to be subject to compliance with the 2019 Title 24 Building Energy Efficiency Standards, which apply to building permits filed on or after January 1, 2020. As such, the proposed project is anticipated to result in a reduction in energy demand compared to the energy demand assumptions included in CalEEMod Version 2016.3.2 that assume compliance with the 2016 Title 24 Building Energy Efficiency Standards, which the energy calculations are based on. Section 3.10.2 provides a summary of the anticipated energy reductions associated with compliance with the 2019 Title 24 Standards compared to the 2016 Title 24 Standards.

design would reduce energy associated with indoor and outdoor lighting, as well as the building's climate control equipment.

Peak electricity use for a typical full-service hotel occurs in the winter and summer seasons. In Southern California specifically, peak use is expected to occur during the summer months when HVAC systems are used most heavily. On a daily basis, peak electricity use in hotels typically occurs in the evenings (ACEEE 2010). For residential uses, the peak use is expected to occur during the weekday hours of 12:00 p.m.–6:00 p.m. on a daily basis and annually during the summer months (June through September) (SCE 2014). Within SCE's service area, peak electricity use occurs in the summer (June through September). During the day, peak use occurs between 12:00 p.m. and 6:00 p.m. during the summer, and between 8:00 a.m. and 9:00 p.m. during the winter (SCE 2017). As such, the proposed project's peak electricity use is expected to align generally with typical peak use patterns in the region. The regulations and design features described above would reduce the proposed project's effect on peak and base periods of electricity demand.

In summary, although electricity consumption would increase at the project site due to the implementation of the proposed project, the proposed project would comply with the City's mandatory green building ordinance through implementing energy-efficiency measures. Although the proposed project meets these standards, it also will exceed these standards. In addition, the proposed project is expected to exceed energy standards set by Title 24 by 10%. Construction electricity usage would be minimal relative to the proposed project's overall energy consumption. For these reasons, electricity consumption of the proposed project would not be considered inefficient or wasteful, and impacts would be **less than significant.** 

## **Natural Gas**

#### Construction Use

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the proposed project's overall energy consumption.

## Operational Use

The operation of the proposed hotel use would require natural gas for various purposes, including building heating and cooling, service water heating, kitchen appliances, and laundry equipment (ACEEE 2010). Similarly, the operation of the proposed residential units would require natural gas for space heating, water heating, and to power appliances (EIA 2010). Default natural gas

usage rates in CalEEMod for the proposed land use and climate zone were used and adjusted based on compliance with 2016 Title 24 standards (see Appendix B for calculations). According to these estimations, the proposed project would consume approximately 3,071,276 kBTU per year. The natural gas consumption at the project site under existing conditions was also calculated using CalEEMod. Under existing conditions, it is estimated that 279,813 kBTU per year is used at the project site by the existing commercial and residential uses. As such, upon project implementation, natural gas demand at the project site would increase by 2,791,463 kBTU per year (Appendix B). This amount of natural gas is equivalent to 29,921 therms. Natural gas is supplied to the project site by SoCalGas. As of 2017, approximately 7,206 million therms of natural gas were used in SoCalGas' service area per year. Around the time of project buildout in 2020, natural gas demand is anticipated to be approximately 7,876 million therms per year in SoCalGas' service area (CEC 2017). Thus, the expected increase in use represents approximately 0.039% of SoCalGas' existing 2017 demand and 0.035% of SoCalGas' future 2020 demand. As such, the expected increase in natural gas consumption with the implementation of the proposed project is negligible compared to SoCalGas' available supply.

As with electricity usage, demand calculation for the proposed project assumes compliance with Title 24 standards for 2016. Additionally, the proposed project would be designed to exceed Title 24 energy efficiency requirements by 10%. Project-specific sustainable design features are listed in Section 2.4 of this EIR and include energy-efficient heating and cooling equipment, which would minimize the proposed project's natural gas use.

Peak natural gas use for full-service hotels typically occurs between March and May, although the variation in natural gas use throughout the year is not substantial (ACEEE 2010). Peak natural gas use for households typically occurs in the winter months (EIA 2016). In Southern California, peak demand occurs in winter (California Gas and Electric Utilities 2016). As such, the proposed project's peak natural gas use is expected to align generally with typical peak use patterns in the region. In addition, the regulations and design features described above would reduce the proposed project's effect on peak and base periods of natural gas demand.

In summary, although natural gas usage would increase due to the implementation of the proposed project, the proposed project's energy efficiency would exceed code requirements and would be increased through green building standards. For these reasons, the natural gas consumption of the proposed project would not be considered inefficient or wasteful, and impacts would be **less than significant.** 

#### **Petroleum**

#### Construction Use

Heavy-duty construction equipment of various types would be used during each phase of project construction. The CalEEMod analysis discussed in Section 3.2, Air Quality, and included in Appendix B lists the assumed equipment usage for each phase of construction. Based on that analysis, over all phases of construction, diesel-fueled construction equipment would run for an estimated 21,400 hours as summarized in Table 3.10-1.

Table 3.10-1
Hours of Operation for Construction Equipment

Construction Phase	Hours of Equipment Use		
Phase 1 Demolition / Shoring & Sound Wall	105		
Phase 2 Demolition / Disassembly	140		
Grading / Site Preparation	3,655		
Parking / Foundation	5,600		
Superstructure / Framing	5,600		
Common Areas / Shell / Roofing	5,600		
Exterior Finishes / Interiors / TI / Landscaping	700		
Total	21,400		

Source: Appendix B.

The estimated diesel fuel use from construction equipment is shown in Table 3.10-2, Construction Equipment Diesel Demand.

Table 3.10-2
Construction Equipment Diesel Demand

	Pieces of	Equipment CO <sub>2</sub>		
Phase	Equipment <sup>a</sup>	(MT) <sup>a</sup>	kg CO₂/Gallon <sup>b</sup>	Gallons
Phase 1 Demolition / Shoring & Sound Wall	1	3.00	10.21	293.98
Phase 2 Demolition / Disassembly	1	2.41	10.21	235.73
Grading / Site Preparation	6	105.20	10.21	10,303.79
Parking / Foundation	10	74.02	10.21	7,250.12
Superstructure / Framing	8	66.38	10.21	6,501.39
Common Areas / Shell / Roofing	8	66.38	10.21	6,501.39
Exterior Finishes / Interiors / TI / Landscaping	2	14.92	10.21	1,461.26
			Total	32,547.66

#### Sources:

a Appendix B

b The Climate Registry 2019.

**Notes:**  $CO_2$  = carbon dioxide; MT = metric ton; kg = kilogram.

Calculations for total worker, vendor, and hauler fuel consumption are provided in Table 3.10-3, Construction Worker Vehicle Gasoline Demand; Table 3.10-4, Construction Vendor Truck Diesel Demand; and Table 3.10-5, Construction Haul Truck Diesel Demand.

Table 3.10-3 Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO <sub>2</sub> (MT) <sup>2</sup>	kg CO₂/Gallon♭	Gallons
Phase 1 Demolition / Shoring & Sound Wall	60	0.31	8.78	34.93
Phase 2 Demolition / Disassembly	80	0.41	8.78	46.57
Grading / Site Preparation	1,360	6.95	8.78	791.65
Parking / Foundation	2,080	10.61	8.78	1,207.86
Superstructure / Framing	12,400	61.36	8.78	6,988.38
Common Areas / Shell / Roofing	12,400	61.36	8.78	6,988.38
Exterior Finishes / Interiors / TI / Landscaping	1,250	6.19	8.78	704.48
		•	Total	16,762.26

#### Sources:

Appendix B

b The Climate Registry 2019.

**Notes:** CO<sub>2</sub> = carbon dioxide; MT = metric ton; kg = kilogram.

Table 3.10-4 Construction Vendor Truck Diesel Demand

		Vehicle CO <sub>2</sub>		
Phase	Trips	(MT) <sup>a</sup>	kg/CO₂/Gallon <sup>b</sup>	Gallons
Phase 1 Demolition / Shoring & Sound Wall	0	0.00	10.21	0.00
Phase 2 Demolition / Disassembly	0	0.00	10.21	0.00
Grading / Site Preparation	0	0.00	10.21	0.00
Parking / Foundation	160	1.99	10.21	194.85
Superstructure / Framing	3,600	44.44	10.21	4,352.34
Common Areas / Shell / Roofing	3,600	44.44	10.21	4,352.34
Exterior Finishes / Interiors / TI / Landscaping	100	1.23	10.21	120.90
			Total	9,020.43

#### Sources:

a Appendix B

b The Climate Registry 2019.

Notes: CO<sub>2</sub> = carbon dioxide; MT = metric ton; kg = kilogram.

Table 3.10-5 Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle CO <sub>2</sub> (MT) <sup>a</sup>	kg CO <sub>2</sub> /Gallon <sup>b</sup>	Gallons
Phase 1 Demolition / Shoring & Sound Wall	0	0.00	10.21	0.00
Phase 2 Demolition / Disassembly	802	43.10	10.21	4,221.54

Table 3.10-5 Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle CO <sub>2</sub> (MT) <sup>a</sup>	kg CO <sub>2</sub> /Gallon <sup>b</sup>	Gallons
Grading / Site Preparation	7,384	396.84	10.21	38,867.63
Parking / Foundation	0	0.00	10.21	0.00
Superstructure / Framing	0	0.00	10.21	0.00
Common Areas / Shell / Roofing	0	0.00	10.21	0.00
Exterior Finishes / Interiors / TI / Landscaping	0	0.00	10.21	0.00
			Total	43,089.17

#### Sources:

a Appendix B

Notes: CO<sub>2</sub> = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 3.10-3 through 3.10-6, the project is estimated to consume 101,420 gallons of petroleum during the construction phase. By comparison, approximately 12.2 billion gallons of petroleum would be consumed in California over the course of the project's construction phase based on the California daily petroleum consumption estimate of approximately 52.9 million gallons per day (CEC 2016b). Also, for comparison, countywide total petroleum use by vehicles is expected to be 4.5 billion gallons per year by 2019 (CARB 2018). The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to project construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. While the proposed project's impacts in the category of GHG emissions was determined to be less than significant, the project would be required to comply with mitigation measure 3.15-1 from the Final Program EIR for the City's General Plan and CAP. This measure addresses and reduces construction-related GHG emissions in the City (see Section 3.4 of this EIR for details). Reducing GHG emissions during construction would help reduce construction-related fuel usage. Further, due to the fact that the proposed project would be built on an urban infill site, construction worker trip and haul truck trip distances are anticipated to be reduced as compared to sites that are not located in urban centers. In addition, the project site is well served by public transportation services and more construction workers would be anticipated to use public transportation to access the project site during construction as compared to other sites that have fewer public transportation opportunities. Therefore, construction worker trips and associated petroleum consumption would be expected to be reduced compared to similar construction projects in suburban locations.

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b The Climate Registry 2019.

Therefore, because petroleum use during construction would be temporary and relatively minimal, and would not be wasteful or inefficient, impacts would be less than significant.

## Operational Use

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site, as well as fuels used for alternative modes of transportation that may be used by employees, visitors, residents, and guests of the proposed mixed-use project.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the vehicle miles traveled as a result of project operation. The annual unmitigated vehicle miles traveled (VMT) attributable to the proposed project is expected to be 3,378,041 VMT (Appendix B). The proposed project would consume 157,040 gallons of gasoline per year and 12,209 gallons of diesel per year from operation of vehicle trips traveling to and from the project site, or 169,249 gallons of petroleum per year.

Under existing conditions at the project site, the commercial uses are estimated to result in 697,830 VMT per year (Appendix B). The existing scenario would consume 34,547 gallons of gasoline per year and 2,277 gallons of diesel per year from operation of vehicle trips traveling to and from the project site, or 36.823 gallons of petroleum per year. As such, implementation of the proposed project would lead to an increase in gasoline consumption of 132,426 gallons of petroleum per year, due to the increased number of people who would be traveling to and from the project site. By comparison, California as a whole consumes approximately 26 billion gallons of petroleum per year. The anticipated increase in consumption associated with one year of project operation is 0.0005% of the statewide use.

Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by the visitors, employees, residents, and guests of the proposed project is expected to increase. As such, the amount of gasoline consumed as a result of vehicular trips to and from the project site during operation would decrease over time. As discussed under Section 3.10.2, there are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and ZEVs in California (CARB 2017). Additionally, in response to SB 375, CARB has adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by the year 2020 and 13% by the year 2035 for light-duty passenger vehicles in the SCAG planning area. This reduction would occur by reducing vehicle miles traveled through the integration of land use planning and transportation

(SCAG 2012). As such, operation of the proposed project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy.

Additionally, the operational VMT calculation described above (3,378,041 VMT per year) conservatively assumes that public transportation would not be used to travel to and from the project site. However, due to the urban setting of the proposed project and its location in the Santa Monica/Fairfax Transit District Commercial Sub-area, which supports a significant number of transit routes and transfer points, 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 a variety of bus transit lines extending along the major roadways near the project site, including Santa Monica Boulevard. The closest bus line stops to the project site include Santa Monica Boulevard/North Ogden Drive and Santa Monica Boulevard/Orange Grove Avenue (see Section 3.8, Transportation and Traffic, and Appendix G for details). Also, use of transit and nonvehicular 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. Section 3.10.2 summarizes some of these plans and policies, 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. Additionally, projectspecific sustainable design features would include EV charging electric infrastructure consistent with state and local requirements as identified at the time of plan check submittal and other transportation features, as described in Section 2.4 of this EIR. Such features include preparation and implementation of a Transportation Demand Management Plan and provision of on-site bicycle storage and preferential parking for low-emission/fuel-efficient vehicles and carpools/vanpools for visitors and employees. Additionally, the proposed project design would encourage pedestrian circulation in the project area by employing design features that improve the landscape and streetscape, making the area more pedestrian friendly.

In summary, although project implementation would result in an increase in petroleum use during construction and operation, over time vehicles would use less petroleum due to advances in fuel economy. Additionally, the proposed project would include a variety of features that are expected to reduce the number of vehicles traveling to and from the site during operation. For example, the project would include implementation of a Transportation Demand Management Plan, would be accessible via a variety of major bus lines, would include on-site bicycle infrastructure, and would enhance the pedestrian-friendliness of the project area (see Section 2.4 of this EIR for details on the proposed project's sustainable design features). As such, while the proposed project would generate more vehicle trips when compared to existing conditions, it would add non-vehicular transportation amenities to the site that are not currently present, such as enhanced streetscape, bicycle parking and storage, and preferred parking for low-emission/fuel-efficient vehicles and carpools/vanpools. Furthermore, when viewed on a regional scale, the proposed project is an urban infill project located within a major population center that

serves an existing demand for hotel rooms and residential units. When compared with new development projects sited on previously undeveloped land and away from population centers, infill projects are generally expected to involve fewer vehicles miles traveled during operation. Given these considerations, the petroleum consumption associated with the proposed project would not be considered inefficient or wasteful, and impacts would be less than significant.

# Threshold ENG-2. Would the project conflict with existing or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for residential and non-residential buildings constructed in California in order to reduce energy demand and consumption. Additionally, the proposed project would exceed the requirements of the California Building Energy Efficiency Standards by 10% through its energy efficiency and renewable energy sustainable design features. As such, the proposed project would exceed California code requirements for energy efficiency.

Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the proposed project under the California Green Building Standards Code. As discussed under the previous threshold, the proposed project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with CALGreen's Title 24 Part 11 Tier 2 voluntary efficiency measures, the proposed project would have at least 75% of its construction and demolition waste diverted from landfills<sup>4</sup>. In addition, the proposed project is subject to the City's mandatory green building program and green building checklist (see Section 2.4, Sustainable Design Features, for a full list of green components incorporated into the project design).

The proposed project would also be consistent with the energy use and efficiency strategies of the City's CAP as illustrated in Section 3.4, Table 3.4-4, Project Consistency with Applicable City of West Hollywood's Climate Action Plan Reduction Measures. As explained in Table 3.4-4, the proposed project would pre-plumb and provide conduit for solar water heating, install a solar water heating system for domestic hot water and pool heating, and install a 0.5kilowatt photovoltaic system.

Furthermore, as explained in Section 3.10.1, the City joined the Clean Power Alliance in 2017. As part of the City's commitment to protecting the environment and building resiliency, the West Hollywood City Council selected 100% Green Power as the default option for the community in February 2018, which provides 100% renewable energy. The City's residents and businesses

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City of West Hollywood standards for construction waste diversion are more stringent. In accordance with these local standards, the proposed project would be required to divert 80% of construction and demolition waste (City of West Hollywood 2014).

are automatically enrolled into the default renewable energy tier selected by the City. However, understanding the diverse needs of the community, projects can change the service by selecting one of Clean Power Alliance's other two rate options: Lean Power (36% renewable energy content) or Clean Power (50% renewable energy content) (City of West Hollywood 2019). Under any of the three options, the proposed project would include renewable energy as part of the power content mix and would be consistent with the City's renewable energy commitment.

Because the proposed project would comply with and exceed the existing energy standards and regulations, the project would result in a **less than significant impact** associated with the potential to conflict with energy standards and regulations.

# 3.10.6 Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

# 3.10.7 Level of Significance after Mitigation

Impacts would be less than significant.

## 3.10.8 References Cited

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