IV. Environmental Impact Analysis

C. Energy

1. Introduction

This section of the Draft EIR provides the content and analysis required by Public Resources Code (PRC) Section 21100(b)(3) and described in Appendix F to the Guidelines for the Implementation of the California Environmental Quality Act (CEQA) (14 California Code of Regulations [CCR] Sections 15000 et seq.) and the Energy section of Appendix G to the Guidelines. In accordance with 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 significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (PRC Section 21100(b)(3)).

Consistent with the goals of Appendix F to conserve energy by decreasing overall per capita energy consumption, decreasing reliance on fossil fuels, and increasing reliance on renewable energy sources, and related questions in Appendix G, this section analyzes the Project's potential impacts on energy resources, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section evaluates the demand for energy resources attributable to the Project and makes a determination as to whether the Project would result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction and operation and whether the Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Appendix G to the Guidelines, includes questions to assist lead agencies when assessing a project's potential energy impacts.

This section also 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. The information presented herein is based, in part, on the *Energy Calculations for Senior Residential Community at the Bellwood Project* prepared by Eyestone Environmental which is included as Appendix D of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) Federal

First established by 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. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.[1]

When these standards are raised, automakers respond by creating a more fuel-efficient fleet. The NHTSA sets standards to increase CAFE levels rapidly over the next several years, which will improve the nation's energy security and save consumer's money at the gas pump, while also reducing greenhouse gas (GHG) emissions. In 2012, the NHTSA established final passenger car and light truck CAFE standards for model years 2017 through 2021, which the agency projects will require in model year 2021, on average, a combined fleet-wide fuel economy of 40.3 to 41.0 miles per gallons (mpg).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.[2]

On April 2, 2018, the USEPA signed the Mid-term Evaluation Final Determination which found that the model year 2022–2025 GHG standards are not appropriate and should

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[1] *For more information on the CAFE standards, refer to www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy, accessed November 11, 2020.*

[2] *The emission reductions attributable to the regulations for medium- and heavy-duty trucks were not included in the Project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the Project.*

be revised.[3] On August 24, 2018, the USEPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the Clean Air Act to establish more stringent standards.[4] On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the State's GHG and Zero-Emission Vehicle (ZEV) programs under Section 209 of the Clean Air Act.[5] The withdrawal of the waiver became effective November 26, 2019. In response, several states including California have filed a lawsuit challenging the withdrawal of the EPA waiver.[6] As of December 2020, the lawsuit is still ongoing.

On August 2, 2018, USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule to amend the existing CAFE and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026.[7] On March 31, 2020, USEPA and NHTSA issued the SAFE Vehicles Rule, setting fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026.[8]

(a) 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,

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[3] *Federal Register, Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022–2025 Light-Duty Vehicles, www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty, accessed November 11, 2020.*

[4] *Regulations, The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, www.regulations.gov/document?D=EPA-HQ-OAR-2018-0283-0756, accessed November 11, 2020.*

[5] *84 Federal Register 51310.*

[6] *United States District Court for the District Court of Columbia, State of California vs. Chao, Case 1:19-cv-02826, 2019.*

[7] *Federal Register, Notice of Proposed Rulemaking, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021—2026 Passenger Cars and Light Trucks, www.federalregister.gov/documents/2018/08/24/2018-16820/the-safer-affordable-fuel-efficient-safe-vehicles-rule-for-model-years-2021-2026-passenger-cars-and, accessed November 11, 2020.*

[8] *Federal Register, Final Rule, The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks.*

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."[9]

(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, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. On May 9, 2018, the CEC adopted the 2019 Title 24 Standards, went into effect on January 1, 2020. The 2019 standards continue to improve upon the previous (2016) Title 24 standards for new construction of, and additions and alterations to, residential and non-residential buildings.[10] The 2019 Title 24 Standards represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the Zero Net Energy (ZNE) goal."[11] Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent

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[9] *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.*

[10] *CEC, 2019 Building Energy Efficiency Standards.*

[11] *CEC, 2019 Building Energy Efficiency Standards, p. iv.*

less energy than those under the 2016 standards. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.[12]

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

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2017. The 2016 CALGreen Code includes mandatory measures for non-residential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality.[13] The CalGreen code is updated regularly with the latest version (2019) in effect since January 1, 2020. Most mandatory measure changes in the 2019 CALGreen Code from the previous 2016 CALGreen Code were related to the definitions and to the clarification or addition of referenced manuals, handbooks, and standards. For example, several definitions related to outdoor water use were clarified to present a more generic reference to irrigation requirements for residential developments. In addition, the 2019 CALGreen Code resulted in minor changes to voluntary measures related to landscaping water usage and indoor air quality. Compliance with the CALGreen Code is enforced through the building permit process.

(b) California's Renewable Portfolio Standard

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) require retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.[14] The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.[15] The CEC's responsibilities include: (1) certifying renewable facilities as eligible for the RPS; and (2) designing and implementing a tracking and verification system to ensure that renewable energy output is counted only once for the

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[12] *CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.*

[13] *California Building Standards Commission, Guide to the 2016 California Green Building Standards Code Nonresidential, January 2017.*

[14] *CPUC, California Renewables Portfolio Standard (RPS), www.cpuc.ca.gov/RPS_Homepage/, accessed November 11, 2020.*

[15] *CPUC, California Renewables Portfolio Standard (RPS), www.cpuc.ca.gov/RPS_Homepage/, accessed November 11, 2020.*

purpose of the RPS and verifying retail product claims in California or other states. In 2018, SB 100, discussed further below, increased the RPS to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

(c) Senate Bill 350

Senate Bill (SB) 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of Executive Order B-30-15, issued in April 2015, which established a new statewide policy goal to reduce greenhouse gas (GHG) emissions 40 percent below their 1990 levels by 2030. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030; and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030.[16]

(d) Senate Bill 100

Senate Bill (SB) 100, signed September 10, 2018, is the 100 Percent Clean Energy Act of 2018. SB 100 updates the goals of California's Renewable Portfolio Standard and SB 350, as discussed above, to the following: achieve 50 percent renewable resources target by December 31, 2026, and achieve a 60-percent target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.[17]

(e) 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.[18] After adopting these initial GHG standards for passenger vehicles, CARB adopted continuing standards for future model years. It was expected that the Pavley regulations would reduce GHG emissions from California's passenger vehicles by about 30 percent in 2016, while improving fuel efficiency

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[16] *Senate Bill 350 (2015–2016 Reg, Session) Stats 2015, ch. 547.*

[17] *Senate Bill 100 (2017–2018 Reg. Session) Stats 2018, ch. 312.*

[18] *CARB, Clean Car Standards—Pavley, Assembly Bill 1943, www.arb.ca.gov/cc/ccms/ccms.htm, last reviewed January 11, 2017, accessed May 11, 2021.*

and reducing motorists' costs.[19] While the main purpose is to reduce GHG emissions, the Pavley regulations would also result in better fuel efficiency. In comparison to the Federal CAFE standard of 35 miles per gallon (mpg), the California average fuel economy would be 43 mpg in 2020.[20]

(f) California Air Resources Board Advanced Clean Cars Program

Closely associated with the Pavley regulations, the Advanced Clean Cars emissions-control program was approved by CARB in 2012.[21] The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles for model years 2015–2025.[22] The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[23] In March 2017, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV program for cars and light trucks sold in California through 2025.[24] In particular, implementation of the ZEV and PHEV regulations reduce transportation fuel consumption by increasing the number of vehicles that are partially or fully electric-powered.

On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the State's GHG and ZEV programs under Section 209 of the Clean Air Act.[25] The withdrawal of the waiver became effective November 26, 2019. In response, several

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[19] *CARB, Clean Car Standards—Pavley, Assembly Bill 1943, www.arb.ca.gov/cc/ccms/ccms.htm, last reviewed January 11, 2017, accessed May 11, 2021.*

[20] *CARB, Addendum to February 25 Technical Assessment, Comparison of Greenhouse Gas Reductions for the United States and Canada under ARB Regulations and Proposed 2011–2015 Model Year Fuel Economy Standards, May 8, 2008.*

[21] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017, accessed May 11, 2021.*

[22] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017, accessed May 11, 2021.*

[23] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017, accessed May 11, 2021.*

[24] *CARB, News Release, CARB finds vehicle standards are achievable and cost-effective, www.arb.ca.gov/newsrel/newsrelease.php?id=908, accessed May 17, 2018.*

[25] *84 FR 51310*

states including California have filed a lawsuit challenging the withdrawal of the EPA waiver.[26] As of December 2020, the lawsuit is still ongoing.

(i) 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, CCR, Division 3, Chapter 10, Section 2485) 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 measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. This measure 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 fuels used by the vehicle.

(ii) CARB's In-Use Off-Road Diesel Fueled Fleets Regulation

Since off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of an older fleet that do not have emission controls. In 2007, CARB approved the "In-Use Off-Road Diesel Fueled Fleets Regulation" to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation sets an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. It also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. Revised in October 2016, the regulation enforced off-road restrictions on fleets adding vehicles with older tier engines, and started enforcing beginning July 1, 2014. By each annual compliance deadline, a fleet must demonstrate that it has either met the fleet average target for that year, or has completed the Best Available Control Technology (BACT) requirements. Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028.

(g) Sustainable Communities Strategy (SB 375)

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32. SB 375

[26] *United States District Court for the District Court of Columbia, State of California vs. Chao, Case 1:19-cv-02826, 2019.*

specifically requires each Metropolitan Planning Organization (MPO) to prepare a "sustainable communities strategy" (SCS) as part of its Regional Transportation Plan (RTP), which is required by the state and federal government, that will achieve 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.[27]

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG). SCAG's first-ever SCS was included in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS), which was adopted by SCAG in April 2012. SCAG has since adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS) and the 2020–2045 RTP/SCS.[28] 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. Specific goals of the 2020–2045 RTP/SCS include reducing greenhouse gas emissions and improve air quality; leverage new transportation technologies and data-driven solutions that result in more efficient travel; and encourage development of diverse housing types in areas that are supported by multiple transportation options. These goals would serve to reduce transportation fuel usage. See further discussion below.

(h) Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code Sections 25300–25323) requires the development of an integrated plan for electricity, natural gas, and transportation fuels. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report (IEPR) every two years. In 2018, the CEC decided to write the Integrated Energy Policy Report in two volumes. Volume I, which was published on August 1, 2018, highlights the implementation of California's policies and the role they have played in establishing a clean energy economy. Volume II was adopted February 20, 2019, provides more detail on several key energy issues and encompasses new analyses.[29] The IEPR contains recommendations on energy usage policies such as decarbonizing buildings, doubling energy efficiency savings, increasing flexibility in the electrical system to integrate more renewable energy, and reducing petroleum use in cars and trucks by up to 50 percent.

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[27] *CARB, Sustainable Communities, www.arb.ca.gov/cc/sb375/sb375.htm, page last updated April 26, 2018, accessed May 11, 2021.*

[28] *SCAG, 2016 RTP/SCS, dated April 2016. SCAG 2020–2045 RTP/SCS, dated September 2020*

[29] *2018 Integrated Energy Policy Report, Volume I, August 2018.*

(i) California Environmental Quality Act

Appendix F of the CEQA Guidelines provides a list of energy-related items that may be included throughout the various chapters of an EIR, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. In addition, Appendix G provides questions for the lead agency to consider in the discussion of energy use in an EIR, where topics are applicable or relevant to the project, as detailed below in Subsection 3.a.

(3) Regional

As discussed in Section IV.E, Land Use and Planning, of this Draft EIR, SCAG's 2016–2040 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, the mission of which is "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians." The 2016–2040 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 building types. Furthermore, the 2016–2040 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promoting more walkable and mixed-use communities, which would potentially help to reduce VMT.

The 2020–2045 RTP/SCS was adopted by SCAG on September 3, 2020. It was determined by the California Air Resources Board (CARB) on October 30, 2020, that the 2020–2045 RTP/SCS would meet the region's GHG reduction target. The goals and policies of the 2020–2045 RTP/SCS are similar to, and consistent with, those of the 2016–2040 RTP/SCS. For purposes of this analysis, both SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS are discussed.

The 2020–2045 RTP/SCS vision for the region incorporates a range of best practices for increasing transportation choices, reducing dependence on personal automobiles, further improving air quality and encouraging growth in walkable, mixed-use communities with ready access to transit infrastructure and employment. More and varied housing types and employment opportunities would be located in and near job centers, transit stations and walkable neighborhoods where goods and services are easily accessible via shorter trips.

The 2016–2040 and 2020–2045 RTP/SCS also establishes High-Quality Transit Areas (HQTA), which are described as generally walkable transit villages or corridors that are within 0.5-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.[30] Local jurisdictions are encouraged to focus housing and employment growth within HQTAs to reduce VMT. The Project Site is located within a HQTA as designated by the 2020–2045 RTP/SCS.[31] The Project Site is also located approximately 0.5-mile south of the Metro Purple Line station at Constellation Boulevard and Avenue of the Stars that is currently being constructed. In addition, the Project Site is served by six Metro bus lines, one Culver City Bus and three Santa Monica Big Blue Bus lines.

(4) Local

(a) City of Los Angeles Green Building Code

To achieve the goals outlined in its policy documents addressing climate change, in April 2008, the City adopted the Green Building Program Ordinance to address the impacts of new development. In 2011, 2014, 2016, and 2019, Chapter IX, Article 9, of the Los Angeles Municipal Code (LAMC), referred to as the Los Angeles Green Building Code, was amended to incorporate various provisions of the CALGreen Code. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings. Mandatory measures include installation of electrical raceways to future electric vehicle supply equipment (EVSE), reduce water use by 20 percent compared to maximum allowable water use per plumbing fixture as required by the LAMC, and use of roofing material to reduce the heat island effect.

(b) City of Los Angeles Sustainable City pLAn/L.A.'s Green New Deal

In April 2019, Mayor Eric Garcetti released the Green New Deal, a program of actions designed to create sustainability-based performance targets through 2050 designed to advance economic, environmental, and equity objectives. L.A.s Green New Deal is the first four-year update to the City's first Sustainable City pLAn that was released in 2015. The 2019 Sustainable City pLAn/L.A.'s Green New Deal has established targets, such as 100-percent renewable energy by 2045, installation of 10,000 publicly available EV chargers

[30] *SCAG, 2020–2045 RTP/SCS, p. 23.*

[31] *SCAG, 2020–2045 RTP/SCS; Exhibit 3.8: High-Quality Transit Areas in the SCAG Region for 2045 Plan, p. 90.*

by 2022 and 28,000 by 2028, diversion of 100 percent of waste by 2050, and recycling of 100 percent of wastewater by 2035.

(c) City of Los Angeles 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, in 2015, 3.61 million tons of aluminum were produced by recycling in the United States, saving enough energy to provide electricity to 7.5 million homes.[32] In 1989, California enacted Assembly Bill 939 (AB 939), the California Integrated Waste Management Act which establishes a hierarchy for waste management practices such as source reduction, recycling, and environmentally safe land disposal.[33] The City of Los Angeles includes programs and ordinances related to solid waste. They include: (1) the City of Los Angeles Solid Waste Management Policy Plan, which was adopted in 1993 and is a long-range policy plan promoting source reduction for recycling for a minimum of 50 percent of the City's waste by 2000 and 70 percent of the waste by 2020; (2) the RENEW LA Plan, which is a Resource Management Blueprint with the aim to achieve a zero waste goal through reducing, reusing, recycling, or converting the resources now going to disposal so as to achieve an overall diversion level of 90 percent or more by 2025; (3) the Waste Hauler Permit Program (Ordinance 181,519), which requires all private waste haulers collecting solid waste, including construction and demolition waste, to obtain AB 939 Compliance Permits and to transport construction and demolition waste to City certified construction and demolition processing facilities; and (4) the Exclusive Franchise System Ordinance (Ordinance No. 182,986), which, among other requirements, sets maximum annual disposal levels and specific diversion requirements for franchised waste haulers in the City to promote solid waste diversion from landfills in an effort to meet the City's zero waste goals. These solid waste reduction programs and ordinances help to reduce the number of trips to haul solid waste, therefore reducing the amount of petroleum-based fuel, and also help to reduce the energy used to process solid waste.

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[32] *American Geosciences Institute, How Does Recycling Save Energy?, www.americangeosciences.org/critical-issues/faq/how-does-recycling-save-energy, accessed November 11, 2020..*

[33] *CalRecycle, History of California Solid Waste Law, 1985–1989, www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989.htm, accessed November 11, 2020.*

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

LADWP generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to LADWP's 2017 Power Strategic Long-Term Resources Plan, the LADWP has a net dependable generation capacity greater than 7,531 MW.[34] In 2017, the LADWP power system experienced an instantaneous peak demand of 6,432 MW.[35] Approximately 32 percent of LADWP's 2018 electricity purchases were from renewable

[34] *LADWP, 2017 Power Strategic Long-Term Resources Plan.*

[35] *LADWP, 2017 Retail Electric Sales and Demand Forecast, p. 6.*

sources, which is similar to the 31 percent statewide percentage of electricity purchases from renewable sources.[36]

LADWP supplies electrical power to the Project Site from electrical service lines located in the Project vicinity. Existing electricity usage was estimated based on the same methodology contained in the GHG analysis included in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR (California Emissions Estimator Model [CalEEMod] Version 2016.3.2). It is estimated that existing uses on the Project Site currently consume approximately 683,895 kWh of electricity per year.[37]

(2) Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, 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 21.8 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.[38]

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.[39] The traditional, southwestern United States sources of natural gas will

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[36] *California Energy Commission, Utility Annual Power Content Labels for 2018, www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label-pcl-copy/annual-power, accessed February 18, 2021.*

[37] *Eyestone Environmental, Energy Calculations for Senior Residential Community at the Bellwood Project. See Appendix D of this Draft EIR.*

[38] *SoCalGas, Company Profile, www.socalgas.com/about-us/company-info.shtml, accessed November 11, 2020.*

[39] *California Gas and Electric Utilities, 2018 California Gas Report, p. 80.*

continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.[40] Gas supply available to SoCalGas from California sources averaged 323 million cf per day in 2017 (the most recent year for which data are available).[41] SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project vicinity. It is estimated that existing uses on the Project Site currently consume approximately 1,947,257 cf of natural gas per year.[42]

(3) Transportation Energy

According to the CEC, transportation accounts for nearly 40 percent of California's total energy consumption in 2017.[43] In 2018, California consumed 15.6 billion gallons of gasoline and 3.1 billion gallons of diesel fuel.[44,45] Petroleum-based fuels currently account for 90 percent of California's transportation energy sources.[46] 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 will continue to decline over the next 10 years, and there will be an increase in the use of alternative fuels.[47] According to CARB's EMFAC Web Database, Los Angeles County on-road transportation sources consumed 4.1 billion gallons of gasoline and 634 million gallons of diesel fuel in 2019.[48]

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

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40 *U.S. Energy Information Administration, California State Profile and Energy Estimates, www.eia.gov/state/print.php?sid=CA, accessed May 11, 2021.*

41 *California Gas and Electric Utilities, 2018 California Gas Report, p. 80.*

42 *Eyestone Environmental, Energy Calculations for Senior Residential Community at the Bellwood Project. See Appendix D of this Draft EIR.*

43 *CEC, 2016 Integrated Energy Policy Report, docketed January 18, 2017, p. 4.*

44 *California Board of Equalization, Net Taxable Gasoline Gallons 10-Year Report.*

45 *California Board of Equalization, Net Taxable Diesel Gallons 10-Year Report.*

46 *CEC, 2016–2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, March 2016.*

47 *CEC, 2015 Integrated Energy Policy Report, docketed June 29, 2016, p. 113.*

48 *California Air Resources Board, EMFAC2017 Web Database.*

associated with the existing Project Site uses is 2,214,856 VMT per year.[49] This translates to 86,796 gallons of gasoline and 14,567 gallons of diesel per year.[50] Persons traveling to and from the Project Site also have the option of using public transportation to reduce transportation-related fuel use. Specifically, two transit service providers operate lines within the Project Site area, including Metro, Culver City Bus and Santa Monica Big Blue Bus which are within 0.25-mile of the site. Antelope Valley Transit Authority, Santa Clarita Transit, and LADOT Commuter Express are also located within 0.5-mile of the site. As discussed in Section IV.I, Transportation, of this Draft EIR, the Project Site is located approximately 0.5-mile from the future Metro Purple Line rail station at Constellation Boulevard and Avenue of the Stars. For further discussion of public transit lines that serve the Project area, refer to Section IV.I, Transportation, of this Draft EIR.

3. Project Impacts

a. Thresholds of Significance

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

Threshold (a): Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Threshold (b): Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

With regard to Threshold (a), this analysis relies upon Appendix F of the CEQA Guidelines, prepared in response to the requirement in PRC Section 21100(b)(3), which states that an EIR shall include a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

In addition, with regard to potential impacts to energy, the *L.A. CEQA Thresholds Guide* states that a determination of significance shall be made on a case-by case basis, considering the following factors:

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[49] *Eyestone Environmental, Energy Calculations for Senior Residential Community at the Bellwood Project. See Appendix D of this Draft EIR.*

[50] *Eyestone Environmental, Energy Calculations for Senior Residential Community at the Bellwood Project. See Appendix D of this Draft EIR.*

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure; or capacity-enhancing alterations to existing facilities;

- Whether and when the needed infrastructure was anticipated by adopted plans; and

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

In accordance with Appendix F and the *L.A. CEQA Thresholds Guide*, the following factors will be considered in determining whether this threshold of significance is met:

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

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity;

3. The effects of the project on peak and base period demands for electricity and other forms of energy;

4. The degree to which the project complies with existing energy standards;

5. The effects of the project on energy resources;

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

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

8. Whether the project conflicts with adopted energy conservation plans.

With regard to Threshold (b), the Project will be evaluated for consistency with adopted energy conservation plans and policies relevant to the Project. Such adopted energy conservation plans and policies include Title 24 energy efficiency requirements, CalGreen Code, and City building codes.

b. Methodology

Appendix F provides the following topics that the lead agency may consider in the discussion of energy use in an EIR, where topics are applicable or relevant to the project:

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

(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. Electricity usage associated with the supply and conveyance of water used for dust control during construction was calculated using CalEEMod.[51] Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power was calculated based on data provided in South Coast Air Quality Management District (SCAQMD) construction surveys (i.e., construction activity, horsepower, load factor, and hours of use per day).[52]

In terms of natural gas, construction activities 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., the hauling of demolition material to off-site reuse and disposal facilities). Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix

[51] *California Air Pollution Control Officers Association, CalEEMod™ version 2016.3.2 User's Guide, November 2017.*

[52] *CalEEMod Users Guide. Appendix E1, Technical Source Documentation. October 2017.*

and usage factors provided in the CalEEMod construction output files included in Appendix D 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 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 2017 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 D 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 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.

Energy impacts associated with transportation during operation were also assessed. Daily trip generation used in this analysis was based on the *Transportation Assessment for the Senior Residential Community at the Bellwood Project* dated February 2021 and revised in April 2021 (see Appendix H of this Draft EIR). As discussed therein, the trip generation and VMT for the Project was determined based on the LADOT VMT Calculator for the applicable land uses. Based on this annual VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon calculated using EMFAC2017. 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 D of this Draft EIR. These calculations were used to determine if the Project would cause the wasteful, inefficient and/or unnecessary consumption of energy as required by Appendix F guidelines.

The Project's estimated energy demands were also analyzed relative to LADWP's and SoCalGas' existing and planned energy supplies in 2023 (i.e., the Project buildout year) to determine if these two energy utility companies would be able to meet the Project's energy demands.

c. Project Design Features

The Project would include project design features designed to improve energy efficiency as set forth in Section IV.B, Air Quality, and Section IV.D, Greenhouse Gas

Emissions, of this Draft EIR, including Project Design Features AQ-PDF-1, GHG-PDF-1, and GHG-PDF-2. These measures include, but are not limited to, installation of occupancy-controlled light switches and thermostats, installation of time-controlled lighting, provisions to encourage pedestrian and bicycle use, use of power pole electricity during construction activities and limits on the number of natural gas fueled fireplaces on the Project Site.

d. Analysis of Project Impacts

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

(1) Impact Analysis

The following analysis considers the eight criteria factors in the Thresholds of Significance subsection above to determine whether Threshold (a) would be exceeded.

> *(a) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*

As discussed above, the Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption (during operation only), and transportation fuels such as diesel and gasoline. The analysis below includes the Project's energy requirements and energy use efficiencies by fuel type for each stage of the Project (construction, operations, maintenance and removal activities).[53]

For purposes of this analysis, Project maintenance would include activities such as repair of structures, landscaping and architectural coatings, which could potentially use electricity and petroleum-based fuels. Energy usage related to Project maintenance activities are assumed to be included as part of Project operations. If the Project were to be built and were to be removed at the end-of-life phase, Project removal activities would include demolition or abandonment of the Project Site. However, it is not known when the Project would be removed. Therefore, analysis of energy usage related to Project removal activities would be speculative. For this reason, energy usage related to Project removal was not analyzed.

[53] *Removal activities relate to the life of a project.*

(i) Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electric equipment, or other construction activities necessitating electrical power. Electricity from these construction activities would be limited in comparison to existing operational electricity usage at the Project Site given that construction activities would be intermittent and temporary. 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.C-1 on page IV.C-22, a total of 17,268 kWh of electricity, 33,541 gallons of gasoline, and 153,345 gallons of diesel is estimated to be consumed during Project construction. Project construction is expected to start in 2021 and be completed by 2023.

Electricity

During construction of the Project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electric equipment, and other construction activities necessitating electrical power. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electrical lines that connect to the Project Site. This would be consistent with suggested measures in the *L.A. CEQA Thresholds Guide* and AQ-PDF-1 which would require the use of electricity from power poles rather than temporary gasoline or diesel powered generators where available.

As shown in Table IV.C-1, a total of approximately 17,268 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, long-term building construction lighting (longer than 120 days) is subject to Title 24 requirements which includes limits on the lighting wattage, which would result in the conservation of energy.[54] As such, the demand for electricity during construction would not cause wasteful, inefficient, and unnecessary use of energy.

[54] *California Building Energy Efficiency Standards, Title 24, Part 6, §110.9, §130.0, and §130.2.*

Table IV.C-1
Summary of Energy Use During Project Construction[a]

Fuel Type	Quantity
Electricity	
Water Consumption	2,047 kWh
Lighting, electric equipment, and other construction activities necessitating electrical power[b]	15,221 kWh
Total Electricity	**17,268 kWh**
Gasoline	
On-Road Construction Equipment[c]	33,541 gallons
Off-Road Construction Equipment[d]	0 gallons
Total Gasoline	**33,541 gallons**
Diesel	
On-Road Construction Equipment[c]	88,202 gallons
Off-Road Construction Equipment[d]	65,142 gallons
Total Diesel	**153,345 gallons**

kWh = kilowatt hours

[a] *Detailed calculations are provided in Appendix D of this Draft EIR. Totals may not add up due to rounding.*

[b] *Electricity usage is based on SCAQMD construction site survey data and typical requirements for power generators. Such electricity demand would be temporary, limited, and would cease upon the completion of construction.*

[c] *On-Road equipment includes worker trips, vendor trips, and haul trips.*

[d] *Off-Road equipment includes bulldozers, backhoes, cranes, and other types of heavy-duty equipment. Off-road equipment is assumed to be powered with diesel fuel.*

Source: Eyestone Environmental, 2020.

The estimated construction electricity usage represents approximately 2 percent of the estimated net annual operational demand which, as discussed below, would be within the supply capabilities of LADWP.[55] Moreover, construction electricity usage would be less than the electricity usage from existing uses removed at the Project Site.

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

[55] *The percentage is derived by taking the total amount of electricity usage during construction (17,268 kWh) and dividing that number by the total amount of net electricity usage during operation (899,296 kWh) to arrive at 2 percent.*

be supplied to support Project construction activities; thus there would be no demand generated by construction.

Transportation Energy

The petroleum-based fuel use summary provided in Table IV.C-1 on page IV.C-22 represents the amount of transportation energy that could potentially be consumed during Project construction based on a conservative set of assumptions, provided in Appendix D, of this Draft EIR. As shown, on- and off-road vehicles would consume an estimated 33,541 gallons of gasoline and approximately 153,345 gallons of diesel fuel throughout the Project's construction (an approximately 3-year duration). For comparison purposes, the fuel usage during Project construction would represent approximately 0.001 percent of the 2021 annual on-road gasoline-related energy consumption and 0.01 percent of the 2021 annual diesel fuel–related energy consumption in Los Angeles County, as shown in Appendix D, of this Draft EIR. Moreover, the temporary construction-period gasoline consumption would be offset by removal of existing uses. For construction-period diesel consumption, the removal of existing uses would also partially offset the temporary net increase in diesel fuel consumption.

Trucks and equipment used during proposed construction activities would comply with CARB's anti-idling regulations as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. In addition to reducing criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy and reduce fuel consumption. In addition, on-road vehicles (i.e., haul trucks, worker vehicles) would be subject to Federal and State fuel efficiency requirements. Therefore, Project construction activities would comply with existing energy standards with regard to transportation fuel consumption. As such, the demand for petroleum-based fuel during construction would not cause wasteful, inefficient, and unnecessary use of energy.

Construction Materials

The energy analysis does not include a full life cycle analysis of energy usage that would occur over the production/transport of materials during the production process used during the construction of the project or used during the operational life of the project, or the end of life for the materials and processes that would occur as an indirect result of the project. Estimating the energy usage associated with these processes would be too speculative for meaningful consideration, would require analysis beyond the current state-of-the-art in impact assessment, and may lead to a false or misleading level of precision in reporting. Manufacture and transport of materials during the production process related to Project construction and operation is expected to be regulated under regulatory energy efficiency requirements. It should be noted that transport of materials to the Project Site is included in the energy analysis above. Therefore, it is assumed that energy usage related to

construction and operational materials would be consistent with current regulatory requirements regarding energy usage.

(ii) Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. As shown in Table IV.C-2 on page IV.C-25, the Project's net new energy demand would be approximately 899,296 kWh of electricity per year, 539,350 cf of natural gas per year. When taking into account removal of existing uses, the Project would result in a net increase of 229 gallons of gasoline per year and 42 gallons of diesel fuel per year consumed.

Electricity

As shown in Table IV.C-2, with compliance with Title 24 standards and applicable CALGreen Code requirements, buildout of the Project would result in a projected net increase in the on-site demand for electricity totaling approximately 889,296 kWh per year. In addition to complying with CALGreen Code, the Applicant would also implement GHG-PDF-1 in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, which states that the design of new buildings would incorporate sustainability features (e.g., Energy Star–labeled products) and incorporate water conservation features, such as drip/subsurface irrigation. Also, under GHG-PDF-1, the Project would use LED lighting, which would reduce electricity used for lighting purposes compared to non-LED lighting. These measures would reduce the Project's energy demand in comparison to the Project without such reduction features. In addition, the Project would be subject to the 2019 Title 24 standards. Residential and nonresidential buildings built in compliance with the 2019 standards will use about 30 to 53 percent less energy than those under the 2016 standards.[56] This analysis conservatively includes a 10-percent reduction from the 2016 standards in the CalEEMod calculated energy use to account for compliance with 2019 Title 24 standards.

LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources procured by LADWP include wind, solar, and geothermal sources. These sources account for 32 percent of LADWP's overall energy mix in 2018, the most recent year for which data are available.[57] This represents the available off-site renewable sources of energy that would meet the Project's energy demand.

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[56] *CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.*

[57] *LADWP 2018 Power Content Label.*

Table IV.C-2
Summary of Annual Net New Energy Use During Project Operation[a]

Source	Existing Energy Demand	Project Energy Demand	Net Energy Demand
Electricity			
Building	558,067 kWh	1,360,427 kWh	802,360 kWh
Water[b]	125,828 kWh	184,383 kWh	58,555 kWh
EV Chargers[c]	0 kWh	38,381 kWh	38,381 kWh
Total Electricity[d]	683,895 kWh	1,583,191 kWh	**899,296 kWh**
Natural Gas			
Building	1,947,257 cf	2,409,465 cf	462,208 cf
Fireplaces[e]	0 cf	77,143 cf	77,143 cf
Total Natural Gas[d]	1,947,257 cf	2,486,608 cf	**539,350 cf**
Transportation			
Gasoline	39,879 gal	40,107 gal	229 gal
Diesel	7,360 gal	7,402 gal	42 gal
Total Transportation[f]	47,240 gal	47,510 gal	**271 gal**

cf = cubic feet

gal = gallons

kWh = thousand kilowatt hours

[a] *Detailed calculations are provided in Appendix D of this Draft EIR. Totals may not add up due to rounding.*

[b] *Calculations assume compliance with Project Design Feature GHG-PDF-1 provided in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR.*

[c] *Consistent with City code requirements, The Project would provide at least 30 percent of Code-required parking spaces with the capability of supporting electric vehicle supply equipment (EVSE) and that a minimum of 10 percent of Code-required parking spaces would be further equipped with EV charging stations.*

[d] *Electricity and natural gas estimates assume compliance with applicable 2019 CALGreen requirements and implementation of GHG-PDF-1, in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR.*

[e] *Calculations assume compliance with Project Design Feature GHG-PDF-2 provided in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR*

[f] *Transportation fuel estimates include project characteristics entered into the VMT Calculator (bicycle parking). Fuel estimates conservatively do not include reductions in fuel usage associated with implementation of EV Chargers.*

Source: Eyestone Environmental, 2020.

The use of renewable energy would indirectly reduce use of fossil fuels required for electricity generation (natural gas, coal, oil). While the electricity usage rate for a given land use would not be directly affected by the availability of renewable energy, the consumption of fossil fuels required for electricity generation would be reduced.

In addition, the Project would comply with Section 110.10 of Title 24, which includes mandatory requirements for solar-ready buildings which would allow for installation of solar panels at a later date, and, as such, would not preclude the potential use of alternative sources of energy.

Based on LADWP's 2017 Power Strategic Long-Term Resources Plan, LADWP forecasts that its total energy sales in the 2023–2024 fiscal year (the Project's buildout year) will be 23,033 GWh of electricity.[58,59] As such, the Project-related net increase in annual electricity consumption of 899,296 kWh per year would represent less than 0.004 percent of LADWP's projected sales in 2023. In addition, as previously described, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

Natural Gas

As provided in Table IV.C-2 on page IV.C-25, with compliance with Title 24 standards and applicable CALGreen Code requirements, buildout of the Project is projected to generate a net increase in the on-site demand for natural gas totaling approximately 539,350 cf per year. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and CALGreen Code), the Project would implement project design features to further reduce energy use. Specifically, the Applicant would implement GHG-PDF-1 in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, which states that the design of new buildings would incorporate sustainability features (e.g., Energy Star–labeled products). As discussed above, the Project would be subject to the 2019 Title 24 standards. However, CalEEMod default energy usage parameters are based on 2016 Title 24 standards. This analysis conservatively includes a 10-percent reduction in the CalEEMod calculated energy use to account for compliance with 2019 Title 24 standards. In addition, the Project would implement GHG-PDF-2 which limits the use of natural gas fireplaces to common areas and the top floor residential dwelling units. In comparison to CalEEMod defaults which assumes natural gas fireplaces in most residential units, implementation of GHG-PDF-2 would reduce natural gas usage by 21 percent. In order to meet the Title 24 energy performance requirement, the Project may also include use of efficient water heaters, cooking equipment and other major support appliances.

As stated above, the Project's estimated net increase in demand for natural gas is 539,350 cf per year, or approximately 1,478 cf per day. Based on the 2020 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within

[58] *LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.*

[59] *LADWP, 2017 Power Strategic Long-Term Resources Plan, Appendix A, Table A-1.*

SoCalGas' planning area will be approximately 2.40 billion cf/day in 2023 (the Project's buildout year).[60] The Project would account for approximately 0.00006 percent of the 2023 forecasted consumption in SoCalGas' planning area. In addition, as previously described, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

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 noted above, the Project Site is located in a HQTA 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. [61],[62] As discussed in Section IV.I, Transportation, of this Draft EIR, the Project Site is located approximately 0.5-mile from the future Metro Purple Line rail station, as well as the Metro, Culver City Bus, Santa Monica Big Blue Bus lines, Santa Clarita Transit and LADOT Commuter Express which would provide service within the Project vicinity and would provide employees, residents, and guests with various public transportation opportunities. In accordance with the LAMC, the Project would provide bicycle parking spaces consistent with code.

The Project's location near mass transit and installation of bicycle parking spaces would encourage alternative modes of transportation, reducing VMT and associated energy usage. As such, the Project would minimize transportation fuel consumption through the reduction of VMT, as described above and discussed further in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. With incorporation of these VMT reducing measures and

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[60] *California Gas and Electric Utilities, 2020 California Gas Report pp. 144–145. Interpolated between 2021 and 2035 estimates.*

[61] *SCAG, 2020–2045 RTP/SCS, Exhibit 3.8: High Quality Transit Areas in the SCAG Region for 2045 Plan, p. 90.*

[62] *Smart growth is an approach to development that encourages a mix of building types and uses, diverse housing and transportation options, development within existing neighborhoods, and community engagement. Smart growth includes the following ten principles: mix land uses; take advantage of compact building design; create a range of housing opportunities and choices; create walkable neighborhoods; foster distinctive, attractive communities with a strong sense of place; preserve open space, farmland, natural beauty, and critical environmental areas; strengthen and direct development towards existing communities; provide a variety of transportation choices; make development decisions predictable, fair, and cost effective; and encourage community and stakeholder collaboration in development decisions. Source: U.S. Environmental Protection Agency and the International City/County Management Association, This is Smart Growth, 2014; Smart Growth America, What is smart growth?, https://smartgrowthamerica.org/our-vision/what-is-smart-growth/, accessed November 11, 2020; SCAG, Glossary, "Smart Growth Principles," https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_glossary-plan_0.pdf?1606001349, accessed April 27, 2021.*

taking into account removal of existing uses and associated vehicle trips, net transportation-fuel usage would be reduced by 24 percent for both gasoline and diesel fuels.

As summarized in Table IV.C-2 on page IV.C-25, when accounting for the measures that would be implemented to reduce VMT as well as removal of existing uses, the Project's estimated petroleum-based fuel usage would result in a net increase of 229 gallons of gasoline and 42 gallons of diesel per year, or a total of 271 gallons of petroleum-based fuels annually.

(iii) Summary of Energy Requirements and Energy Use Efficiencies

As previously discussed, CEQA Guidelines Appendix F and Appendix G recommend quantification of a 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 Project's energy requirements were calculated based on the methodology contained in CalEEMod for electricity and natural gas usage. Project VMT data from the VMT Calculator output was used to calculate transportation fuel usage. The calculations also took into account energy efficiency measures such as Title 24, CalGreen Code, and vehicle fuel economy standards. Table IV.C-1 on page IV.C-22 and Table IV.C-2 provide a summary of Project construction and operational energy usage, respectively. During Project construction activities, a total of 17,268 kWh of electricity would be consumed along with 186,886 gallons of transportation fuel (gasoline and diesel). During Project operations, a total of 899,296 kWh of electricity, 539,350 cf of natural gas along with 271 gallons of transportation fuel would be consumed on an annual basis. When accounting for project design features and increased energy efficiency measures, operational electricity usage would be reduced by 6 percent, natural gas usage would be reduced by 21 percent when compared to a project without energy efficiency measures. Transportation fuel usage would be reduced by 24 percent when compared to a project without VMT reducing features. Details are provided in Appendix D of this Draft EIR.

(b) The effects of the project on local and regional energy supplies and on requirements for additional capacity

(i) Construction

As discussed above, electricity would be intermittently consumed during the conveyance of the water used to control fugitive dust, as well as to provide electricity for temporary lighting and other general construction activities. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage, as shown in Table IV.C-1, represents approximately

2 percent of the estimated net annual operational demand which, as discussed below, would be within the supply and infrastructure service capabilities of LADWP.[63] Furthermore, the electricity demand during construction would be offset with the removal of the existing on-site uses which currently generate a demand for electricity. 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, resulting in a net decrease when compared to existing operations. As discussed above, transportation fuel usage during Project construction activities would represent approximately 0.001 percent of gasoline usage and 0.01 percent of diesel usage within Los Angeles County, respectively. As energy consumption during Project construction activities would be relatively negligible, the Project would not affect regional energy consumption during the construction period.

(ii) Operation

Based on LADWP's 2017 Power Strategic Long-Term Resources Plan, LADWP forecasts that its total energy sales in the 2023–2024 fiscal year (the Project's buildout year) will be 23,033 GWh of electricity.[64,65] As such, the Project-related net increase in annual electricity consumption of 899,296 kWh per year would represent less than 0.004 percent of LADWP's projected sales in 2023.[66] Furthermore, LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project area.[67] Therefore, it is anticipated that LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's electricity demand.

As stated above, the Project's estimated net increase in demand for natural gas is 539,350 cf per year, or approximately 1,478 cf per day. Based on the 2020 California Gas Report, the California Energy and Electric Utilities estimated natural gas consumption within SoCalGas' planning area will be approximately 2.40 billion cf/day in 2023 (the Project's buildout year).[68] The Project would account for approximately 0.00006 percent of the 2023 forecasted consumption in SoCalGas' planning area.

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[63] *The percentage is derived by taking the total amount of electricity usage during construction (17,268 kWh) and dividing that number by the total amount of net electricity usage during operation (899,296 kWh) to arrive at 2 percent.*

[64] *LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.*

[65] *LADWP, 2017 Power Strategic Long-Term Resources Plan, Appendix A, Table A-1.*

[66] *LADWP, 2017 Power Strategic Long-Term Resources Plan, December 2017, Appendix A.*

[67] *Fuscoe Engineering Inc., Water, Sewer, and Energy Infrastructure Assessment Report – Senior Residential Community at the Bellwood, February 2020. Refer to Appendix J of this Draft EIR.*

[68] *California Gas and Electric Utilities, 2018 California Gas Report p. 97.*

At buildout, the Project would result in a net increase of 229 gallons of gasoline and 42 gallons of diesel per year, or a total net increase of 271 gallons of petroleum-based fuels consumed per year, as shown in Appendix D, of this Draft EIR.

In sum, energy consumption during Project operations would be relatively negligible and energy requirements are within LADWP's and SoCalGas' service provision. Project operation would not affect regional energy supplies.

(c) The effects of the project on peak and base period demands for electricity and other forms of energy

As discussed above, electricity demand during construction and operation of the Project would have a negligible effect on the overall capacity of LADWP's power grid and base load conditions. With regard to peak load conditions, the LADWP power system experienced an all time high peak of 6,432 MW on August 31, 2017.[69] The LADWP also estimates a peak load based on two years of data known as base case peak demand to account for typical peak conditions. Based on LADWP estimates for 2017, the base case peak demand for the power grid is 5,854 MW.[70] Under peak conditions, the Project would consume 320 kW during peak load conditions.[71] In comparison to the LADWP power grid base peak load of 5,854 MW in 2017, the Project would represent approximately 0.005 percent of the LADWP base peak load conditions. In addition, LADWP's annual growth projection in peak demand of the electrical power grid of 0.4 percent would be sufficient to account for future electrical demand by the Project.[72] Therefore, Project electricity consumption during operational activities would have a negligible effect on peak load conditions of the power grid.

(d) The degree to which the project complies with existing energy standards

Although Title 24 requirements typically apply to energy usage for buildings, long-term construction lighting (greater than 120 days) providing illumination for the Project Site and staging areas would also comply with applicable Title 24 requirements (includes limits on the wattage allowed per specific area). In addition, construction equipment would comply with energy efficiency requirements contained in the Federal Energy Independence and Security Act or previous Energy Policy Acts for electrical motors and equipment.[73] Electricity and

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[69] *LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.*

[70] *LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.*

[71] *Eyestone Environmental, Energy Calculations for Senior Residential Community at The Bellwood Project, See Appendix D of this Draft EIR.*

[72] *LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.*

[73] *Energy Independence and Security Act of 2007, Pub.L. 110-140.*

Natural Gas usage during Project operations presented in Table IV.C-2 on page IV.C-25 would comply with 2019 Title 24 standards and applicable CalGreen and Los Angeles Green Building Code requirements. Therefore, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage.

With regard to transportation fuels, trucks and equipment used during proposed construction activities, the Project would comply with CARB's anti-idling regulations as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy. During Project operations, vehicles travelling to and from the Project Site are assumed to comply with CAFE fuel economy. Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE standards, as required.

Based on the above, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage, as well as transportation fuel consumption.

(e) Effects of the Project on Energy Resources

As discussed above, LADWP's electricity generation is derived from a mix of non-renewable and renewable sources such as coal, natural gas, solar, geothermal wind and hydropower. The LADWP's most recently adopted 2017 Power Strategic Long-Term Resources Plan identifies adequate resources (natural gas, coal) to support future generation capacity.

Natural gas supplied to Southern California is mainly sourced from out of state with a small portion originating in California. Sources of natural gas for the Southern California region are obtained from locations throughout the western United States as well as Canada.[74] According to the U.S. Energy Information Administration (EIA), the United States currently has over 80 years of natural gas reserves based on 2015 consumption.[75] Compliance with energy standards is expected to result in more efficient use of natural gas (lower consumption) in future years. Therefore, Project construction and operation activities would have a negligible effect on natural gas supply.

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[74] *California Gas and Electric Utilities, 2018 California Gas Report.*

[75] *U.S. Energy Information Administration, Frequently Asked Questions, www.eia.gov/tools/faqs/faq.php?id=58&t=8, accessed November 11, 2020.*

With regard to on-site energy resources, the Project Site does not contain any significant sources of renewable (i.e., water, solar, wind, geothermal) or non-renewable energy, such as coal, natural gas, petroleum. In addition, the Project would not generate power using non-renewable sources or associated energy transmission lines. Therefore, the Project construction and operation activities would not conflict with existing or planned energy resources.

Transportation fuels (gasoline and diesel) are produced from crude oil which is imported from various regions around the world. According to the EIA's International Energy Outlook 2019, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2050.[76] The EIA's International Energy Outlook 2020 indicates that motor gasoline and distillate fuel oil's combined share of total transportation energy consumption decreases from 84 percent in 2019 to 74 percent in 2050. Increases in fuel economy standards drive the decrease in U.S. motor gasoline consumption, which declines by 19 percent through 2050.

The Project would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards which are designed to reduce GHG emissions but would also result in fuel savings in addition to compliance with CAFE standards. Also, the Project would include provisions for alternative modes of transportation by providing for bicycle parking spaces. In addition, the Project is located within an HQTA, which would encourage use of mass transit, further reducing transportation fuel usage during Project operations. Therefore, Project construction and operation activities would have a negligible effect on the transportation fuel supply.

As discussed above in Subsection 2.a, Regulatory Framework, one of the objectives of SB 350 is to increase procurement of California's electricity from renewable sources from 33 percent to 50 percent by 2030. As of September 2018, SB 100 was signed, which would require retail sellers of electric services to increase procurement from eligible renewable energy resources to 50 percent renewable resources target by December 31, 2026, and 60 percent by December 31, 2030. Accordingly, LADWP is required to procure at least 60 percent of their energy portfolio from renewable sources by 2030. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources account for 32 percent of LADWP's overall energy mix in 2018, the most recent year for which data are available.[77] This represents the available off-site renewable sources of

[76] *U.S. Energy Information Administration, Frequently Asked Questions, www.eia.gov/tools/faqs/faq.php?id=58&t=8, accessed November 11, 2020.*

[77] *California Energy Commission, Utility Annual Power Content Labels for 2018 (Version: July 2019).*

energy that would meet the Project's energy demand. The Project's use of renewable energy would indirectly reduce use of fuels required for electricity generation (natural gas, coal, oil). While the Project's electricity usage rate would not be directly affected by the availability of renewable energy, the Project's usage of renewable energy would indirectly avoid consumption of fossil fuels.

With regard to on-site renewable energy sources, the Project would include the provision of conduit that is appropriate for future photovoltaic and solar thermal collectors, consistent with requirements of the LA Green Building Code. The Project would also comply with Title 24 requirements for "Solar Ready Buildings" which requires a certain area of rooftop to be set aside for installation of solar panels. However, due to the Project Site's location, other on-site renewable energy sources would not be feasible to install on-site as there are no local sources of energy from the following sources: biodiesel, biomass hydroelectric and small hydroelectric, digester gas, methane, fuel cells, landfill gas, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, or multi-fuel facilities using renewable fuels. Furthermore, wind-powered energy is not viable on the Project Site due to the lack of sufficient wind in the Los Angeles basin. Specifically, based on a map of California's wind resource potential, the Project Site is not identified as an area with wind resource potential.[78]

(f) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives

The Project represents an infill development within an existing urbanized area that would introduce a new senior residential use on the Project Site, within an HQTA. The Project would provide 192 residential units in close proximity to retail, restaurant, entertainment and other commercial uses would allow for more residents to live closer to these areas, reducing the vehicle miles traveled. The design, which includes dedicated bicycle parking facilities with 72 bicycle parking spaces and an improved streetscape with pedestrian amenities, also encourages non-automotive forms of transportation such as walking or biking to nearby destinations. Pedestrian access would be maintained on both side of Bellwood Avenue and amenities including trees and lighting would enhance the pedestrian experience. In addition, the Project would be located approximately 0.5-mile from the future Metro Purple Line Station. In addition, the Project Site is served by the Metro Bus, Culver City Bus and Santa Monica Big Blue Bus lines which are within 0.25-mile of the site. Antelope Valley Transit Authority, Santa Clarita Transit, and LADOT Commuter Express are also located within 0.5-mile of the site. With the reduction in trips due to accessibility to mass transit and alternative modes of transportation, the Project results in a VMT reduction of approximately 23 percent (see Appendix H of this Draft EIR) compared to a Project without

[78] *CEC, Wind Resource Area & Wind Resources, 2018.*

Reduction Features, with a corresponding reduction in the Project's petroleum-based fuel usage.[79] Therefore, the Project would encourage the use of efficient transportation alternatives.

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

The current City of Los Angeles Green Building Code requires compliance with the CalGreen Code and California's Building Energy Efficiency Standards (Title 24). Residential and nonresidential buildings built in compliance with the 2019 standards will use about 30 to 53 percent less energy than those under the 2016 standards.[80] In addition, Project Design Feature GHG-PDF-1 would incorporate sustainability features beyond 2019 Title 24 requirements such as use of Energy Star appliances, LED lighting and fenestration designed for solar orientation. Therefore, the Project would incorporate measures that are above and beyond current State and City energy conservation requirements.

Project Design Feature GHG-PDF-1 in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, of this Draft EIR, states that the Project would implement water-efficient plantings with drought-tolerant species, among other sustainability features. A reduction in water usage would in turn reduce the amount of electricity used for water conveyance. In addition, GHG-PDF-2 would also limit the number of natural gas-fueled fireplaces resulting in less natural gas consumed during operations. Therefore, the Project would incorporate measures that are above and beyond current State and City energy conservation requirements.

The City has also adopted several plans and regulations to promote the reduction, reuse, recycling, and conversion of solid waste going to disposal systems. These regulations include the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, the City of Los Angeles Space Allocation Ordinance (Ordinance No. 171,687), and the Exclusive Franchise System Ordinance (Ordinance No. 182,986). These solid waste reduction programs and ordinances help to reduce the number of trips associated with hauling solid waste, thereby reducing the amount of petroleum-based fuel consumed. Furthermore, recycling efforts indirectly reduce the energy necessary to create new products made of raw material, which is an energy-intensive process. As discussed in the Initial Study included as Appendix A of this Draft EIR, the Project would be consistent with the applicable regulations associated with solid waste. Specifically, the Project would provide adequate

[79] *The Project without Reduction Features scenario does not account for energy efficiency measures or trip reductions.*

[80] *CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.*

storage areas in accordance with Ordinance No. 171,687, which requires that development projects include an on-site recycling area or room of specified size.[81] The Project would also comply with State and City waste diversion goals, as applicable, by providing clearly marked, source-sorted receptacles to facilitate recycling. Thus, through compliance with the City's construction-related solid waste recycling programs, the Project would contribute to reduced fuel-related energy consumption.

Based on the above, with compliance with state and local energy efficiency standards, the Project would meet and/or exceed all applicable energy conservation policies and regulations.

(h) Whether the Project conflicts with adopted energy conservation plans

The Project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the CALGreen Code and California's Building Energy Efficiency Standards, which have been incorporated into the City's Green Building Code.

With regard to transportation uses, the Project design would reduce VMT within the region and encourage use of alternative modes of transportation. The Project would be consistent with regional planning strategies that address energy conservation. As discussed above and in Section IV.E, Land Use and Planning, of this Draft EIR, SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS focuses on creating livable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. Also, as discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project would be consistent with the SCAG 2016–2040 RTP/SCS and 2020–2045 RTP/SCS, which includes goals to reduce VMT and corresponding decrease in fuel consumption. As part of the approach, the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The Project would be consistent with the energy efficiency policies emphasized in the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS. Most notably, the Project would be a residential development located in an area with nearby commercial uses with sidewalks and crosswalks in the Project vicinity to promote walking. The 2016–2040 RTP/SCS also establishes High-Quality Transit Areas (HQTA), which are described as generally walkable transit villages or corridors that are within 0.5-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.[82] Local

[81] *Ordinance No. 171,687, adopted by the Los Angeles City Council on August 6, 1997.*

[82] *SCAG, 2016 RTP/SCS, p. 8.*

jurisdictions are encouraged to focus housing and employment growth within HQTAs to reduce VMT. The Project Site is located within a HQTA as designated by the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS.[83,84]The Project would provide greater proximity to neighborhood services, jobs, and residences and would be well-served by existing public transportation, including existing Metro, Culver City Bus and Santa Monica Big Blue Bus lines and a future Metro Purple Line station.

The introduction of new housing and job opportunities within a HQTA, as proposed by the Project, is consistent with numerous policies in the 2016–2040 RTP/SCS and 2020–2045 related to locating new housing and jobs near transit. The 2016–2040 RTP/SCS and 2020–2045 would result in an estimated 8-percent decrease in VMT by 2020, an 18-percent decrease in VMT by 2035, and a 21-percent decrease in VMT by 2040. Subsequent to adoption of the 2016–2040 RTP/SCS, CARB adopted in 2018 a new target requiring a 19-percent decrease in VMT for the SCAG region by 2035. This new target has been incorporated in the 2020–2045 RTP/SCS. On October 30, 2020, CARB certified the 2020–2045 RTP/SCS to meet the region's GHG emissions reduction targets consistent with SB 375.[85] The 2016–2040 RTP/SCS and 2020–2045 RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the state's GHG emission reduction goals.

As discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project daily per capita VMT is 9.9 miles which is 46 percent less than Los Angeles County's 18.4 daily per capita VMT for the 2040 Plan Year and 48 percent less than Los Angeles County's 19.2 daily per capita VMT for the 2045 Plan Year. This reduction in VMT is substantially better than the goals of the 2016–2040 and 2020–2045 RTP/SCS with an estimated 19-percent decrease in per capita GHG emissions from passenger vehicles by 2035.[86] In addition, the Project would comply with state energy efficiency requirements and Title 24 requirements, and would use electricity from LADWP, which has a current renewable energy mix of 32 percent. All of these features would serve to reduce the consumption of electricity, natural gas, and transportation fuel. Based on the above, the Project would not conflict with adopted energy conservation plans.

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[83] *SCAG, 2016 RTP/SCS; Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040 Plan, p. 77.*

[84] *SCAG, 2020–2045 RTP/SCS, Connect SoCal; Exhibit 3.8 Priority Growth Areas—High-Quality Transit Areas, p. 91.*

[85] *California Air Resources Board. Executive Order G-20-239. October 30, 2020*

[86] *CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035 in comparison to a 2005 baseline. Implementation of the 2020–2045 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.*

(i) Conclusion Regarding Significance Threshold a

As demonstrated in the analysis above, the Project would not result in potentially significant environmental impacts due to wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation. The Project's energy requirements would not significantly affect local and regional supplies or capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. As discussed previously, gasoline fuel usage for the region is expected to decline over the next 10 years. Transportation fuel supply is not expected to decrease significantly over this same period and supplies would be sufficient to meet Project demand. Therefore, electricity generation capacity and supplies of natural gas and transportation fuels would also be sufficient to meet the needs of Project-related construction and operations. During operations, the Project would comply with existing energy efficiency requirements such as CalGreen Code and would include energy conservation measures beyond requirements. **In summary, the Project's energy demands would comply with existing energy efficiency standards and would not cause wasteful, inefficient, or unnecessary use of energy. Therefore, Project impacts related to energy use under Threshold (a) would be less than significant during construction and operation.**

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project-level impacts related to energy use were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

As discussed in Subsection 3.d.(1)(a)(h) above, the energy conservation policies and plans relevant to the Project include the California Title 24 energy standards, the 2019 CALGreen Code, and the City of Los Angeles Green Building Code. As these conservation policies are mandatory under the City of LA Building Code, the Project would not conflict with applicable plans for renewable energy or energy efficiency.

With regard to transportation related energy usage, the Project would comply with goals of the SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS, which incorporates VMT targets established by SB 375. The Project's residential development and proximity to public transportation would serve to reduce VMT and associated transportation fuel usage within the region. In addition, vehicle trips generated during Project operations would comply with CAFE fuel economy standards, as required. During construction activities, the Project would be required to comply with CARB anti-idling regulations and the In-Use Off-Road Diesel Fleet regulations.

Based on the above, the Project would not conflict with adopted energy conservation plans, or violate state or federal energy standards. **Therefore, Project impacts associated with regulatory consistency under Threshold (b) would be less than significant.**

(2) Mitigation Measures

Project-level impacts related to conflicts with plans would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to conflicts with plans were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) Threshold (a) (Wasteful, Inefficient, and Unnecessary Use of Energy)

Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Based on the information presented in Section III, Environmental Setting, of this Draft EIR, there are six related projects located within the vicinity of the Project Site. The geographic context for the cumulative analysis of electricity is LADWP's service area and the geographic context for the cumulative analysis of natural gas is SoCalGas' service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Project in the context of County-wide consumption. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy.

(i) Electricity

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, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for LADWP's service area. The Project also would incorporate energy efficiency measures to make the Project comply with the 2019 Title 24 standards. Residential and nonresidential buildings built in compliance with the 2019 standards will use about 30 to 53 percent less energy than those under the 2016 standards.[87] Furthermore, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

Additionally, as discussed above, LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources accounted for 32 percent of LADWP's overall energy mix in 2018, the most recent year for which data are available.[88] This represents the available off-site renewable sources of energy that could meet the Project's and related projects energy demand. Therefore, the Project and related projects within LADWP's service area would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently. **As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.**

(ii) Natural Gas

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, would be reduced by measures rendering the Project more energy-efficient, and would be consistent with regional and local growth expectations for SoCalGas' service area. The Project also would incorporate energy efficiency measures, as required by GHG-PDF-1 and reduce natural gas usage by limiting the number of natural gas-fueled fireplaces, as required by GHG-PDF-2. Furthermore, future development projects within SoCalGas' service area would be expected to incorporate energy conservation features, comply with applicable regulations including the CALGreen Code and State energy standards under Title 24, and incorporate mitigation measures, as necessary. **As such, cumulative impacts related to**

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[87] *CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.*

[88] *California Energy Commission, Utility Annual Power Content Labels for 2018, (Version: July 2019).*

wasteful, inefficient and unnecessary use of natural gas would not be cumulatively considerable and, thus, would be less than significant.

(iii) Transportation Energy

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As described above, at buildout, the Project would result in an increase of 229 gallons of gasoline and 42 gallons of diesel per year, or a total of 271 gallons of petroleum-based fuels consumed per year, as shown in Appendix D of this Draft EIR.

Related projects in the Project vicinity would also be infill projects locating uses near other residential and commercial uses which would reduce distance travelled as well as consumption of transportation fuel. As analyzed above, Project transportation fuel usage would represent a small percentage of total fuel consumption within Los Angeles County. While it is speculative to assess transportation fuel usage from related projects, it is expected that cumulative transportation fuel usage resulting from the Project and related projects would be consistent with projections discussed above.

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 vehicle miles traveled which would reduce reliance on petroleum fuels. According to the California Department of Tax and Fee Administration, gasoline consumption has increased by 4 percent from 2010 to 2018;.[89] However, this increase is mainly due to population increases as the per capita gasoline consumption is showing a downward trend.[90] The CEC also predicts that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity in future years. As with the Project, other future development projects in the vicinity of the Project Site would be expected to reduce VMT by encouraging the use of alternative modes of transportation (mass transit and bicycling) and other design features (pedestrian accessibility) that promote VMT reductions.

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[89] *California Department of Tax and Fee Administration, Fuel Taxes Statistics & Reports, www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm, accessed November 11, 2020.*

[90] *Eno Center for Transportation, How Have Different State Populations Changed Their Gasoline Consumption?, www.enotrans.org/article/how-have-different-state-populations-changed-their-gasoline-consumption/, accessed May 11, 2021.*

Furthermore, as described above, the Project would be consistent with the energy efficiency policies emphasized by the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS. Specifically, the Project would be a residential development located in an area that is characterized by a high degree of pedestrian accessibility with sidewalks and crosswalks in the Project vicinity to promote walking. The Project would provide greater proximity to neighborhood services, and would be well-served by existing public transportation, including existing Metro, Culver City Bus and Santa Monica Big Blue Bus lines and a future Metro Purple Line station. The Project also would introduce new housing and job opportunities within a HQTA, which is consistent with numerous policies in the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS related to locating new jobs near transit.[91] Although there are no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the 2016–2040 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040.[92] Implementation of the 2016–2040 RTP/SCS would result in an estimated 8-percent decrease in per capita GHG emissions by 2020, 18-percent decrease in per capita GHG emissions by 2035, and 21-percent decrease in per capita GHG emissions by 2040. As discussed above, CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. It is anticipated that in future years, SB 375 would have more stringent reduction targets. Implementation of the 2020–2045 RTP/SCS is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's GHG emission reduction goals. In addition, the Project would further reduce VMT through such measures as transit accessibility as estimated by the VMT Calculator, which would be consistent with the reduction in transportation emission per capita provided in the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS.

Although the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS is intended to reduce GHG emissions, the reduction in VMT would also result in reduced transportation fuel consumption. By its very nature, the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS are a regional planning tool that addresses cumulative growth and resulting environmental effects. In addition, it is assumed that related projects in the Project Site vicinity would reduce VMT, consistent with the goals of the 2016–2040 RTP/SCS and 2020–2045. **Therefore, based on the above, and as the Project is consistent with the 2016–2040 RTP/SCS and 2020–**

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[91] *The City's ZIMAS identifies a portion of the Project Site as also located in Transit Priority Area as defined by Public Resources Code Section 20199. Public Resources Code Section 21099 defines a "transit priority area" as an area within 0.5-mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."*

[92] *SCAG, 2016 RTP/SCS, April 2016, p. 153.*

2045 RTP/SCS, its contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

(iv) Conclusion

Based on the analysis provided above, the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) would not result in a cumulatively considerable effect related to potentially significant environmental impacts due to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation. As such, the Project's impacts would not be cumulatively considerable; therefore, cumulative energy impacts under Threshold (a) are concluded to be less than significant.

(b) Consistency with State or Local Plans

Related and other future projects within the Project area would be required to comply with energy conservation and renewable energy plans and polices described above, including Title 24, CALGreen Code, and the City of Los Angeles Green Building Code. As related projects would be required to meet the same energy consumption standards, there would be no significant cumulative impacts with regard to consistency with energy conservation plans.

Furthermore, as described above, the Project would be consistent with the policies emphasized by the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS. The Project is an infill development near transit within an existing urbanized area that would concentrate new residential uses within an HQTA, thus reducing VMT. As discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project results in a VMT reduction of approximately 24 percent in comparison to a standard project as estimated by CalEEMod. As discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, per capita VMT is 9.9 miles, which would be consistent with the reduction in transportation emission per capita provided in the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS and with CARB's updated 2035 target. As discussed previously, this represents a per capita VMT reduction of 46 percent in comparison to the Los Angeles County VMT per capita for the 2040 Plan year and 48 percent in comparison to the Los Angeles County VMT per capita for the 2045 Plan Year when compared to SCAG regional estimates. This reduction in VMT is substantially better that the goals of the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS with an estimated 19-percent decrease in per capita GHG emissions from passenger vehicles by 2035.[93] Therefore, the Project is consistent with the 2016–2040 RTP/SCS and 2020–2045

[93] *CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2020–2045 RTP/SCS would fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.*

RTP/SCS and would not be cumulatively considerable with regard to consistency with energy conservation plans.

(2) Mitigation Measures

Cumulative impacts related to energy use and conflicts with plans would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to energy use and conflicts with plans were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.