

3.5 Energy

This section describes the existing environment and regulatory setting for energy within Menlo Park related to the Willow Village Master Plan Project (Proposed Project). It describes the potential impacts related to energy resources and energy consumption that would result from implementation of the Proposed Project. This section incorporates information from the *Assessment of Energy Use and Impact, Willow Village Project* (Energy Assessment) prepared by Ramboll for the Proposed Project and peer reviewed by ICF (see Appendix 3.5-1).

Issues identified in response to the Notice of Preparation (NOP) (Appendix 1) were considered in preparing this analysis. Applicable comments included requests to remove energy offsets and credit options.

Existing Conditions

Environmental Setting

Energy resources in California include natural gas, electric, water, wind, oil, coal, solar, geothermal, and nuclear resources. Energy production and energy use both result in the depletion of nonrenewable resources, such as oil, natural gas, and coal, and emissions of pollutants.

State Energy Resources and Use

California's diverse portfolio of energy resources produced approximately 2,449.4 trillion British thermal units (BTUs) in 2019.¹ According to the California Energy Commission, total electric generation for California in 2019 (the most recent year for which data are available) was approximately 277,704 gigawatt hours. California's non-carbon-dioxide-emitting electric generation categories, including nuclear, hydroelectric, and renewable generation, accounted for more than 57 percent of total in-state generation in 2019. California's in-state electric generation was approximately 200,475 gigawatt hours.² Excluding offshore areas, the state ranked seventh in the nation in crude oil production in 2019 (the most recent year for which data are available), producing the equivalent of approximately 920.1 trillion BTUs.³ Other energy sources in the state include natural gas (220.8 trillion BTUs), nuclear (168.8 trillion BTUs), and biofuel (31.4 trillion BTUs).^{4,5,6}

¹ U.S. Energy Information Administration. 2021e. *Table P5B—Primary Energy Production Estimates, Renewable and Total Energy, in Trillion BTU, Ranked by State, 2019*. Available: https://www.eia.gov/state/seds/sep_prod/pdf/P5B.pdf. Accessed: March 14, 2022.

² California Energy Commission. 2021. 2019. *Total System Electric Generation*. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation#:~:text=In%202019%2C%20total%20generation%20for,to%2055%20percent%20in%202018>. Accessed: March 14, 2022.

³ U.S. Energy Information Administration. 2021f. *Table P5A—Primary Energy Production Estimates, Fossil Fuels and Nuclear Energy, in Trillion BTU, Ranked by State, 2019*. Available: https://www.eia.gov/state/seds/sep_prod/pdf/P5A.pdf. Accessed: March 14, 2022.

⁴ No coal production occurs in California.

⁵ U.S. Energy Information Administration. 2021e. *Table P5B—Primary Energy Production Estimates, Renewable and Total Energy, in Trillion BTU, Ranked by State, 2019*.

⁶ U.S. Energy Information Administration. 2021f. *Table P5A—Primary Energy Production Estimates, Fossil Fuels and Nuclear Energy, in Trillion BTU, Ranked by State, 2019*.

With a relatively mild Mediterranean climate and strict energy-efficiency requirements, California has lower energy consumption rates than other parts of the United States. According to the U.S. Energy Information Administration, California consumed approximately 7,802.3 trillion BTUs of energy in 2019.^{7,8} California's per capita energy consumption of approximately 197.8 million BTUs was ranked second lowest in the nation as of 2019.⁹

In 2019, the transportation sector consumed the greatest amount of energy (3,073.3 trillion BTUs, or 39 percent), followed by the industrial (1,805.2 trillion BTUs, or 23 percent), commercial (1,468.1 trillion BTUs, or 19 percent), and residential (1,455.7 trillion BTUs, or 19 percent) sectors.¹⁰ Natural gas accounted for the majority of energy consumption (2,217.2 trillion BTUs, or 28 percent), followed by gasoline (1,688.1 trillion BTUs, or 22 percent); renewable energy, including nuclear electric power, hydroelectric power, biomass, and other renewables (1,445.6 trillion BTUs, or 19 percent); distillates and jet fuel (1,168.9 trillion BTUs, or 15 percent); and interstate electricity (692.7 trillion BTUs, or 9 percent), with the remaining 7 percent coming from a variety of other sources.¹¹ Of the natural gas consumed, industrial uses consumed approximately 37 percent, followed by residential uses (22 percent) and commercial uses (12 percent), among many other uses.¹²

Per capita energy consumption, in general, is declining because of improvements in energy efficiency and designs. However, despite this reduction in per capita energy use, the state's total overall energy consumption (i.e., non-per capita energy consumption) is expected to grow over the next several decades as a result of increases in population, jobs, and vehicle miles traveled (VMT).

Regional Energy Resources and Use

Electricity

On January 26, 2016, the Menlo Park City Council joined Peninsula Clean Energy (PCE) to procure greenhouse gas- (GHG-) free power for the community.¹³ PCE's power comes from a mix of clean energy sources, including solar, wind, geothermal, biomass and biowaste, and hydroelectric generation resources. PCE

⁷ One BTU is the amount of energy required to heat 1 pound of water by 1°F at sea level. BTU is the standard unit of energy used in the United States and based on the English system of units (foot-pound-second system).

⁸ U.S. Energy Information Administration. 2021a. *Table C11—Energy Consumption Estimates by End-Use Sector, Ranked by State, 2019*. Available: https://www.eia.gov/state/seds/sep_sum/html/rank_use.html. Accessed: March 14, 2022

⁹ U.S. Energy Information Administration. 2021b. *Table C14—Energy Consumption Estimates per Capita by End-Use Sector, Ranked by State, 2019*. Available: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/rank_use_capita.html&sid=US. Accessed: March 14, 2022.

¹⁰ U.S. Energy Information Administration. 2021a. *Table C11—Energy Consumption Estimates by End-Use Sector, Ranked by State, 2019*.

¹¹ U.S. Energy Information Administration. 2021c. *California State Energy Profile*. Available: <https://www.eia.gov/state/?sid=CA#tabs-1>. Accessed: March 14, 2022.

¹² U.S. Energy Information Administration. 2021d. *Natural Gas Consumption by End Use—California*. Available: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm. Accessed: March 14, 2022.

¹³ On January 26, 2016, the Menlo Park City Council approved a motion to join Peninsula Clean Energy and receive additional renewable power. Peninsula Clean Energy is part of a Community Choice Energy program, a locally controlled community organization that enables local residents and businesses to have a choice as to where their energy comes from. Community Choice Energy programs allow local governments to pool the electricity demands of their communities, purchase power with higher renewable content, and reinvest in local infrastructure.

delivers power to its customers through existing Pacific Gas and Electric Company (PG&E) utility infrastructure.¹⁴

PCE offers its customers 100 percent GHG-free electricity with a higher percentage of energy from renewable sources. Although PG&E customers in Menlo Park are automatically enrolled in PCE, customers may opt out and continue to purchase electricity from PG&E. However, more than 95 percent of residents and businesses remain enrolled with PCE. Furthermore, PCE allows customers to choose between two different electricity product operations: ECOplus (approximately 50 percent renewable electricity sources and 100 percent carbon-free sources) and ECO100 (100 percent renewable electricity).^{15,16}

Although PCE provides electricity to most residents and businesses in Menlo Park, it uses PG&E's distribution system to serve Menlo Park customers. Historically PG&E has provided natural gas and electricity services to the vast majority of Northern California, including Menlo Park and the Project Site. PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.

PG&E's electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." "The grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has two plan options, known as Solar Choice options, which give customers the option of purchasing energy from solar resources. The first Solar Choice option provides up to 50 percent of a customer's energy from solar resources, while the other option provides up to 100 percent of a customer's energy from solar resources.

In 2019, San Mateo County consumed approximately 4,325.2 million kilowatts of electricity. In San Mateo County, electricity was consumed primarily by the non-residential sector (64 percent), followed by the residential sector (36 percent). Electricity usage for different land uses varies substantially by the types of uses in a building, the types of construction materials used, and the efficiency of the electricity-consuming devices.

¹⁴ PCE charges each of its customers a delivery charge for maintenance of PG&E's wires and infrastructure and the delivery of electricity to customers.

¹⁵ Peninsula Clean Energy. 2021. *What Are My Rates?* Available: <https://www.peninsulacleanenergy.com/for-businesses/>. Accessed: March 14, 2022.

¹⁶ Renewable energy is produced from resources that are naturally replenished as they are used, while carbon-free energy is produced from resources that do not emit GHGs into the atmosphere. Many resources are both renewable and carbon free (such as wind and solar), some resources are renewable but not carbon free (such as biomass), and others are carbon free but not renewable (such as nuclear).

Table 3.5-1 outlines PG&E's and PCE's power mix in 2019, compared to the power mix for the state, and Table 3.5-2 outlines Menlo Park's electricity and natural gas consumption from 2010 to 2015 (the most recent year for which data are available). The table identifies the renewable and non-renewable energy sources for PCE and PG&E. It should be noted that some GHG free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

Table 3.5-1. PG&E, PCE, and the State of California Power Mix in 2019

Energy Resources	PG&E Option: Base	PG&E Option: 50% Solar Choice	PG&E Option: 100% Solar	PCE Option: ECOplus	PCE Option: ECO100	California Power Mix 2019
Eligible Renewable	29%	64%	100%	52%	100%	32%
<i>Biomass and waste</i>	3%	2%	0%	8%	0%	2%
<i>Geothermal</i>	2%	1%	0%	9%	0%	5%
<i>Small hydroelectric</i>	2%	1%	0%	5%	0%	2%
<i>Solar</i>	12%	56%	100%	12%	50%	12%
<i>Wind</i>	9%	5%	0%	18%	50%	10%
Non-Renewable	71%	36%	0%	48%	0%	68%
<i>Coal</i>	0%	0%	0%	0%	0%	3%
<i>Large hydroelectric</i>	27%	14%	0%	37%	0%	15%
<i>Natural gas</i>	0%	0%	0%	0%	0%	34%
<i>Nuclear</i>	44%	22%	0%	1%	0%	9%
<i>Other</i>	0%	0%	0%	0%	0%	0%
<i>Unspecified^a</i>	0%	0%	0%	10%	0%	7%
Total	100%	100%	100%	100%	100%	100%

Source: PG&E. 2019. *Where Your Electricity Comes From*. Available: https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2019/1019-Power-Content-Label.pdf. Accessed: July 9, 2021.
California Energy Commission. 2019. *2019 Power Content Label—Peninsula Clean Energy*. Available: <https://www.energy.ca.gov/filebrowser/download/3244>. Accessed: July 9, 2021.

^a. Electricity from transactions that are not traceable to specific generation sources are classified as unspecified sources of power.

Table 3.5-2. Existing Energy Consumption at the Main Project Site

Energy	Existing Usage
Electricity	13,484 MWh/year
Natural Gas	30,274 MMBtu/year
Gasoline	1,201,685 gallons/year
Diesel	543,432 gallons/year

Source: See Appendix 3.5-1 of this Draft EIR for the *Assessment of Energy Use and Impact, Willow Village Project* prepared by Ramboll.

MWh = megawatt hour; MMBtu= million British thermal units

Natural Gas

PG&E's natural gas (i.e., methane) delivery system includes 42,000 miles of natural gas distribution pipelines and 6,700 miles of transmission pipelines. PG&E's gas transmission system serves approximately 15 million energy customers in California. The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.¹⁷

In San Mateo County, approximately 214.4 million therms of natural gas were consumed in 2019 (the most recent year for which data are available). In 2019, natural gas in San Mateo County was consumed primarily by the residential sector (56 percent), followed by the non-residential sector (44 percent).¹⁸

Project Site Resources and Use

The 59-acre main Project Site contains 20 buildings with a mix of office, research-and-development (R&D), and warehousing uses, totaling approximately 1 million square feet (sf). The Proposed Project also includes the parcels west of Willow Road on the north and south sides of Hamilton Avenue (i.e., Hamilton Avenue Parcels North and South). The 1.8-acre Hamilton Avenue Parcel North (consisting of two legal parcels) is currently developed with approximately 16,000 sf of retail uses. The 1.3-acre Hamilton Avenue South Parcel is currently developed with approximately 4,500 sf of retail uses and a Chevron service station. Table 3.5-2 provides the existing energy usage at the main Project Site.¹⁹

As stated previously, although PG&E delivers power, maintains the electrical grid and other infrastructure, and handles customer billing, electricity in Menlo Park is purchased through PCE for customers who remain enrolled in the program (more than 95 percent of customers in Menlo Park). Natural gas is purchased through PG&E. The Project Site is served by existing natural gas and electric infrastructure provided by PG&E. Natural gas and electricity is delivered to the Project Site through rights-of-way for electric and natural gas lines. A PG&E transmission tower is located in the northeast corner of the main Project Site, and overhead power lines are located throughout the site. Natural gas pipelines are located below ground in adjacent public rights-of-way along US 101.²⁰

Regulatory Setting

Federal

As discussed in Sections 3.4, *Air Quality*, and 3.6, *Greenhouse Gas Emissions*, of this Draft EIR, the National Highway Traffic Safety Administration (NHTSA) sets Corporate Average Fuel Economy (CAFE) standards to improve average fuel economy (i.e., reduce fuel consumption) and reduce GHG emissions generated by cars and light-duty trucks. On March 31, 2020 NHTSA and the U.S. Environmental Protection Agency (EPA)

¹⁷ Pacific Gas and Electric Company. 2021. *Learn About the PG&E Natural Gas System*. Available: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/natural-gas-system-overview.page. Accessed: March 14, 2022.

¹⁸ California Energy Commission. n.d. *Gas Consumption by County—San Mateo County 2019*. Available: <https://ecdms.energy.ca.gov/gasbycounty.aspx>. Accessed: March 14, 2022.

¹⁹ The energy assessment (Appendix 3.5-1) prepared by Ramboll includes net new energy use and therefore does not include existing development and energy consumption at Hamilton Avenue Parcels North and South where existing uses would remain.

²⁰ U.S. Department of Transportation. n.d. *NPHMS Public Viewer – Gas Transmission Pipelines, San Mateo County*. Available: <https://pvpnphms.phmsa.dot.gov/PublicViewer/>. Accessed: March 14, 2022.

finalized the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which set fuel economy and carbon dioxide standards that would increase 1.5 percent in stringency each year from model years 2021 through 2026. These standards applied to both passenger cars and light trucks. On December 21, 2021, NHTSA published its CAFE Preemption rule, which repeals 2019's SAFE Vehicles Rule Part One: One National Program. That rule had codified the preemption of state and local laws related to fuel economy standards. Specifically, the 2019 rule had targeted California's preemption waiver as applied to the greenhouse gas emissions standards and zero-emission vehicle mandate. NHTSA's 2021 rule thus reopens pathways for state and local fuel economy laws.

State

California has adopted statewide legislation to address various aspects of climate change and GHGs, which often pertain directly or indirectly to energy resources and uses. This section focuses on state legislation that specifically mentions energy use or energy resources. For other state legislation that focuses mainly on GHG reductions and climate change, refer to Section 3.6, *Greenhouse Gas Emissions*, of this Draft EIR.

Assembly Bill 1493, Pavley Rules (2002, amendments 2009)/Advanced Clean Cars (2011)

Known as Pavley I, Assembly Bill (AB) 1493 provided the nation's first GHG standards for automobiles. AB 1493 required the California Air Resources Board (CARB) to adopt vehicle standards to lower GHG emissions from automobiles and light-duty trucks to the maximum extent feasible beginning in 2009. In 2012, strengthening of the Pavley standards (referred to previously as Pavley II but now referred to as the Advanced Clean Cars measures) was adopted for vehicle model years 2017 through 2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025. The increase in fuel economy will help lower the demand for fossil fuels.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—California Green Building Standards Code (2011), Title 24 Updates

The California Green Building Standards Code (Part 11, Title 24), or CALGreen, was adopted as part of the California Building Standards Code (24 California Code of Regulations). CALGreen, which applies to the planning, design, operation, construction, use, and occupancy of newly constructed buildings, required energy- and water-efficient indoor infrastructure to be installed in all new projects, beginning January 1, 2011. CALGreen also required newly constructed buildings to develop a waste management plan and divert at least 50 percent of the materials generated during construction.

The current Building Energy Efficiency Standards were adopted in 2019 and took effect on January 1, 2020. Under the 2019 standards, low-rise residential construction uses about 53 percent less energy than homes constructed under the 2016 standards, while nonresidential buildings will use about 30 percent less energy. Later standards are expected to require zero net energy for new commercial buildings. Updated CALGreen and the Building Energy Efficiency Standards were recently approved and will take effect on January 1, 2023. The updates will result in increased building energy efficiency compared to the current standards.

Executive Order B-16-12 (2012)

Executive Order (EO) B-16-12 orders state entities, under the direction of the governor, including CARB, the California Energy Commission, and the CPUC, to support rapid commercialization of zero-emission vehicles. It also directs these entities to achieve various benchmarks related to zero-emission vehicles.

Senate Bill 350, Chapter 547, Clean Energy and Pollution Reduction Act of 2015

Senate Bill (SB) 350 (DeLeon), also known as the Clean Energy and Pollution Reduction Act of 2015, was approved by the California Legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions require the following by 2030: (1) a Renewables Portfolio Standard (RPS)²¹ of 50 percent and (2) doubling of the statewide energy efficiency savings related to natural gas and electricity end uses. In order to meet these provisions, the bill requires large utilities to develop and submit integrated resource plans that detail how the utilities will reduce GHG emissions and increase the use of clean energy resources while meeting customers' needs.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018 (2018)

SB 100 builds on SB 350, the Clean Energy and Pollution Reduction Act of 2015. SB 100 increases the 2030 RPS target set in SB 350 to 60 percent and requires 100 percent of retail sales of electricity to California end-user customers and 100 percent of electricity procured to serve state agencies to be from renewable and other zero-carbon resources by 2045.

Regional**PCE 2020 Integrated Resource Plan**

PCE is a Community Choice Aggregation energy program that serves the entirety of San Mateo County, including Menlo Park. PCE adopted the 2020 IRP on July 23, 2020, to provide guidance for serving the electricity needs of the residents and businesses in the county while fulfilling regulatory requirements, and achieving PCE's overall goal of providing 100 percent GHG-free electricity on a 24/7 basis by 2025.²² The plan contains the following strategic goals that are relevant to the Proposed Project:

- Secure sufficient, low-cost clean sources of electricity that achieve PCE's priorities while ensuring reliability and meeting regulatory mandates;
- Strongly advocate for public policies that support PCE's organizational priorities; and
- Implement robust energy programs that reduce GHG emissions, align energy supply and demand, and provide benefits to community stakeholders.

PG&E Integrated Resource Plan

PG&E adopted the 2020 Integrated Resource Plan (IRP) on September 1, 2020, to provide guidance for serving the electricity and natural gas needs of residents and businesses within its service area while fulfilling regulatory requirements. As mentioned previously, since electric customers in Menlo Park mostly purchase their electricity through PCE, this plan is more applicable to natural gas customers in Menlo Park. The summary is contained here for reference since some electric customers continue to purchase energy from PG&E. The IRP contains the following objectives that are relevant to the Proposed Project:

²¹ The RPS is one of California's key programs for promoting renewable energy use within the state. The program sets forth continuous procurement of renewable energy for load-serving entities within California (California Energy Commission 2021).

²² Peninsula Clean Energy. 2021. Our Path to 24/7 Renewable Energy by 2025. Available: <https://www.peninsulacleanenergy.com/wp-content/uploads/2021/11/Whitepaper-OUR-PATH-TO-247-RENEWABLE-ENERGY-BY-2025.pdf>. Accessed: March 14, 2022.

- **Clean Energy:** In 2019, PG&E delivered nearly 30 percent of its electricity from RPS-eligible renewable resources, such as solar, wind, geothermal, biomass, and small hydropower. In addition, PG&E's GHG-free energy production, which encompasses renewable resources, large hydropower, and nuclear, satisfied all of PG&E's bundled retail sales in 2019.
- **Reliability:** PG&E's IRP analysis includes PG&E's contribution to system and local reliability, in compliance with the CPUC's resource adequacy requirements, especially as California transitions toward higher shares of GHG-free generation resources.
- **Affordability:** PG&E's IRP analysis selects resources to meet the state's clean energy and reliability goals and provides a system average rate forecast in compliance with the CPUC's requirements for investor-owned utilities.

Local

City of Menlo Park General Plan

The City of Menlo Park (City) General Plan consists of the Open Space/Conservation, Noise, and Safety Elements, adopted May 21, 2013; the 2015–2023 Housing Element, adopted by the City on April 1, 2014; and the Circulation and Land Use Elements, adopted November 29, 2016. The following goals and policies from the Land Use Element adopted to avoid or minimize environmental impacts are relevant to the consumption of energy resources and the Proposed Project:

Goal LU-4: Promote and encourage existing and new businesses to be successful and attract entrepreneurship and emerging technologies for providing goods, services, amenities, local job opportunities, and tax revenue for the community while avoiding or minimizing potential environmental and traffic impacts.

Policy LU-4.5, Business Uses and Environmental Impact: Allow modifications to business operations and structures that promote revenue generating uses for which potential environmental impacts can be mitigated.

Goal LU-7: Promote the implementation and maintenance of sustainable development, facilities and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

Policy LU-7.1, Sustainability: Promote sustainable site planning, development, landscaping, and operational practices that conserve resources and minimize waste.

Policy LU-7.9, Green Building: Support sustainability and green building best practices through the orientation, design, and placement of buildings and facilities to optimize their energy efficiency in preparation of state zero-net energy requirements for residential construction in 2020 and commercial construction in 2030.

Program LU-7.A, Green Building Operation and Maintenance: Employ green building and operation and maintenance best practices, including increased energy efficiency, use of renewable energy and reclaimed water, and drought-tolerant landscaping for all projects.

Program LU-7.C, Sustainability Criteria: Establish sustainability criteria and metrics for resource use and conservation and monitor performance of projects of a certain minimum size.

Program LU-7.D, Performance Standards: Establish performance standards in the zoning ordinance that require new development to employ environmentally friendly technology and design to conserve energy and water and minimize the generation of indoor and outdoor pollutants.

Program LU-7.E, Greenhouse Gas Emissions: Develop a GHG standard for development projects that would help reduce communitywide GHG emissions to meet City and statewide reduction goals.

The following goals and policies from the Open Space/Conservation Element adopted to avoid or minimize environmental impacts are relevant to the consumption of energy resources and the Proposed Project:

Goal OSC-4: Promote sustainability and climate action planning.

Policy OSC-4.1, Sustainable Approach to Land Use Planning to Reduce Resource

Consumption: Encourage, to the extent feasible, (1) a balance and match between jobs and housing, (2) higher-density residential and mixed-use development to be located adjacent to commercial centers and transit corridors, and (3) retail and office areas to be located within walking and biking distance of transit or existing and proposed residential development.

Policy OSC-4.2, Sustainable Building: Promote and/or establish environmentally sustainable building practices or standards in new development that would conserve water and energy, prevent stormwater pollution, reduce landfilled waste, and reduce fossil fuel consumption from transportation and energy activities.

Policy OSC-4.3, Renewable Energy: Promote the installation of renewable energy technology at residences and businesses by encouraging education, employing social marketing methods, establishing standards, and/or providing incentives.

Policy OSC-4.4, Vehicles Using Alternative Fuel: Explore the potential for installing infrastructure, such as electric plug-in recharging stations, for vehicles that use alternative fuel.

Policy OSC-4.5, Energy Standards in Residential and Commercial Construction: Encourage projects to achieve a high level of energy conservation, exceeding standards set forth in the California Energy Code for residential and commercial development.

The following goals and policies from the Circulation Element adopted to avoid or minimize environmental impacts are relevant to the consumption of energy resources and the Proposed Project:

Goal CIRC-1: Provide and maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe, and active community and quality of life throughout Menlo Park.

Goal CIRC-2: Increase accessibility for and use of streets by pedestrians, bicyclists, and transit riders.

Policy CIRC-2.11, Design of New Development: Require new development to incorporate designs that prioritize safe pedestrian and bicycle travel and accommodate senior citizens, people with mobility challenges, and children.

Goal CIRC-3: Increase mobility options to reduce traffic congestion, greenhouse gas emissions, and commute travel time.

Policy CIRC-3.1, Vehicle Miles Traveled: Support development and transportation improvements that help reduce per service population (or other efficiency metric) vehicle miles traveled.

Policy CIRC-3.2, Greenhouse Gas Emissions: Support development, transportation improvements, and emerging vehicle technology that help reduce per capita (or other efficiency metric) greenhouse gas emissions.

Goal CIRC-4: Improve Menlo Park’s overall health, wellness, and quality of life through transportation enhancements.

Policy CIRC-4.1, Global Greenhouse Gas Emissions: Encourage the safer and more widespread use of nearly zero-emission modes, such as walking and biking, and lower emission modes like transit, to reduce greenhouse gas emissions.

Goal CIRC-5: Support local and regional transit that is efficient, frequent, convenient, and safe.

Policy CIRC-5.1, Transit Service and Ridership: Promote improved public transit service and increased transit ridership, especially to employment centers, commercial destinations, schools, and public facilities.

Goal CIRC-6: Provide a range of transportation choices for the Menlo Park community.

Policy CIRC-6.3, Shuttle Service: Encourage increased shuttle service between employment centers and the downtown Menlo Park Caltrain station.

The following goals and policies from the Housing Element adopted to avoid or minimize environmental impacts are relevant to the consumption of energy resources and the Proposed Project:

Goal H-2: Maintain, protect, and enhance existing housing and neighborhoods.

Policy H-2.6, Renewable Energy/Energy Conservation in Housing: Encourage energy efficiency and/or renewable energy in both new and existing housing and promote energy conservation and/or renewable energy in the design of all new residential structures and promote incorporation of energy conservation and/or renewable energy and weatherization features in existing homes. In addition, the City will support the actions contained in the City’s Climate Action Plan (CAP).

Menlo Park Municipal Code

As discussed in Chapter 2, *Project Description*, the main Project Site is located in the Residential Mixed-Use, Bonus (R-MU-B) and Office, Bonus (O-B) zoning districts. The Hamilton Avenue Parcels North and South are located in the Neighborhood Commercial District, Special (C-2-S). Consistent with the goals identified in ConnectMenlo, the City passed Ordinance No. 1024 for the Office (O) zoning district and Ordinance No. 1026 for the Residential Mixed-use (R-MU) zoning district under Title 16 of the Menlo Park Municipal Code. Ordinance Nos. 1024 and 1026 include the following requirements that would be applicable to the Proposed Project:

Sections 16.43.140 and 16.45.130, Green and Sustainable Building

In addition to meeting all applicable regulations specified in Title 12 (Buildings and Construction), the following provisions shall apply to projects (implementation of these provisions may be subject to separate discretionary review and environmental review pursuant to CEQA):

(1) Green Building.

- (A) Any new construction, addition, or alteration of a building shall be required to comply with Table 16.43.140(1)(B) (O District) or Tables 16.45.130(1)(B) and 16.45.130(1)(C) (R-MU District). (These tables summarize green building requirements for new construction or alterations to non-residential and residential buildings. The requirements vary, based on the size of the building. Buildings more than 100,000 gross square feet, would be required to meet Leadership in Energy and Environmental Design (LEED) Gold requirements for Building

Design and Construction. Buildings of 10,000 to 100,000 square feet would be required to meet LEED Silver requirements; buildings of less than 10,000 square feet would not require LEED certification. LEED credits include installing rewiring for electric-vehicle (EV) charging stations at a minimum of 5 percent of the total number of parking stalls, installing EV charging stations at a minimum of six parking stalls plus 1 percent of the total number of parking stalls in the rewired locations, enrolling in EPA's Energy Star Portfolio Manager, and submitting documentation of compliance, as required by the City)

(2) Energy.

(A) For all new construction, the project will meet 100 percent of energy demand (electricity and natural gas) through any combination of the following measures:

- (i) Onsite energy generation,
- (ii) Purchase of 100 percent renewable electricity through Peninsula Clean Energy or PG&E in an amount equal to the annual energy demand of the project,
- (iii) Purchase and installation of local renewable energy generation in Menlo Park in an amount equal to the annual energy demand of the project,
- (iv) Purchase of certified renewable energy credits and/or certified renewable energy offsets annually in an amount equal to the annual energy demand of the project. (For the GHG impact analysis in this CEQA document, it is assumed that this measure refers to carbon offsets from a CARB-approved registry or the California Air Pollution Control Officers Association's GHG Reduction Exchange and that the carbon offsets would be real, additional, permanent, verifiable, and enforceable, as defined in 17 California Code of Regulations Section 95802.)

If a local amendment to the California Energy Code is approved by the California Energy Commission, the following provision becomes mandatory:

The project will meet 100 percent of energy demand (electricity and natural gas) through a minimum of 30 percent of the maximum feasible onsite energy generation, as determined by an onsite renewable energy feasibility study and any combination of the measures in Subsections (2)(A)(ii) to (iv). The onsite renewable energy feasibility study shall demonstrate the following cases, at a minimum:

- a. Maximum onsite generation potential;
- b. Solar feasibility for roof and parking areas, excluding roof-mounted heating, ventilation, and air-conditioning equipment; and
- c. Maximum solar generation potential solely on the roof area.

As of publication of this Draft EIR the above described local amendment to the California Energy Code has not been approved by the California Energy Commission.

Reach Code

The 2019 California Building Standards Code and the California Code of Regulation took effect on January 1, 2020. The City of Menlo Park adopted local amendments to the State Building Code that would require electricity as the only fuel source for new buildings (not natural gas). This ordinance only applies to newly constructed buildings from the ground up, and does not include additions or remodels. Specifically, it would require:

1. New low rise residential buildings (three stories or less) to have electric fuel source for space heating, water heating and clothes dryers. Stoves may still use natural gas if desired. Pre-wiring for electric appliances is required where natural gas appliances are used.
2. New nonresidential and high-rise residential buildings to be all-electric with some exceptions and produce a minimum amount of on-site solar based on square footage.
 - Exceptions include:
 - Life science buildings may use natural gas for space heating.
 - Public agency owned and operated emergency operations centers (such as fire stations and police stations) may use natural gas.
 - Nonresidential kitchens (such as for-profit restaurants and cafeterias) may appeal to use natural gas stoves.
 - For all exceptions that are granted, natural gas appliance locations must be electrically pre-wired for future electric appliance installation.
 - Solar requirements:
 - Less than 10,000 square feet requires a minimum of three kilowatt photovoltaic system
 - Greater than or equal to 10,000 square feet requires a minimum of five kilowatt photovoltaic system

Electric Vehicle Charger Requirements

The City of Menlo Park adopted amendments to the CALGreen EV Charging requirements within the California Building Standards Code on October 23, 2018. The EV requirements are intended to:

- Increase the availability of EV charging infrastructure within the City;
- Provide for residents and employees with electric vehicles; and
- Lower barriers for those looking to shift from fossil fuel vehicles to electric vehicles.

In addition, new multi-family residential developments and non-residential developments that are approximately 10,000 square feet or larger, are required to comply with the local amendments to the CALGreen code and install EV chargers and prepare for future installation.

Climate Action Plan

The City's 2030 CAP, includes actions to reduce Menlo Park's GHG emissions. The City's CAP was adopted with the purpose of reducing GHGs community-wide and meeting the reduction target (i.e., carbon neutral by 2030).²³ The City has identified GHG reduction measures related to transportation, energy, and land use sectors, which can be coupled with state and existing local actions to reduce GHG emissions. GHG emissions largely involve energy consumption (i.e., fossil-fuel usage). The CAP identifies the following strategies to reach carbon neutrality by 2030.

1. Explore policy/program options to convert 95 percent of existing buildings to all-electric by 2030
2. Set citywide goals for increasing electric vehicles to 100 percent of new vehicles by 2025 and decreasing gasoline sales 10 percent a year from a 2018 baseline

²³ Through its adoption of the City's 2030 CAP, the City Council adopted a climate goal that calls for zero carbon by 2030. This will be achieved through a 90 percent reduction in carbon dioxide equivalent (CO₂e) emissions from 2005 levels and elimination of the remaining 10 percent of CO₂e through direct carbon-removal measures.

3. Expand access to electric vehicle (EV) charging for multifamily and commercial properties
4. Reduce vehicle miles traveled (VMT) by 25 percent or an amount recommended by the Complete Streets Commission
5. Eliminate the use of fossil fuels from municipal operations
6. Develop a climate adaption plan to protect the community from sea level rise and flooding

The most recent update to the City's CAP, the 2030 CAP, was adopted in April 2021.²⁴ The 2030 CAP updated emissions inventories and adopted a climate goal that calls for net zero carbon by 2030.

Environmental Impacts

This section describes the impact analysis related to energy use for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the Project would have a significant effect if it would result in any of the conditions listed below.

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

Methods for Analysis

Energy impacts associated with construction and operation of the Proposed Project were assessed and quantified, using standard and accepted software tools and techniques. The analysis also considered the list of energy impact possibilities and potential conservation measures included in Appendix F of the CEQA Guidelines for determining whether a project would result in the wasteful, inefficient, or unnecessary consumption of energy resources. For a more detailed discussion of the Proposed Project's consistency with Appendix F, refer to Appendix 3.5-1 of this Draft EIR.

Project Construction

Construction of the Proposed Project would use energy, such as electricity for mobile offices and fuel for off-road equipment, haul trucks, vendor trips, and workers' trips. The construction schedule, equipment operating details, trip numbers and lengths, and material quantities were provided by the Project Sponsor. The calculation of energy consumption from vehicles, in the form of fuel use, was based on the number of trips and VMT, along with fuel efficiency data from EMFAC2021. Trip counts were provided by the Project Sponsor for hauling and trips by workers and vendors. California Emissions Estimator Model (CalEEMod) defaults were used for worker trip lengths and Project-specific information was provided for vendor and hauling trips. The estimate of fuel use from off-road construction equipment was consistent with EPA's AP-42, diesel fuel, using Project-specific information provided by the Project Sponsor.

²⁴ Ibid.

Project Operation

Fuel use was estimated using EMFAC2021 for on-road VMT by residents, employees, and visitors. Trip generation rates and total VMT for each land use were provided by Hexagon. The data were used to estimate energy consumption for motor vehicles traveling to and from the Project Site.

Energy consumption associated with the Project Site includes the combustion of natural gas and electricity usage, including the electricity used to convey water to the Project Site. However, in an effort to reduce GHG emissions, the Proposed Project would be entirely electrically powered, with the exception of natural gas usage for commercial culinary uses. Therefore, energy use totals for the Project Site are based on Project-specific electricity and natural gas studies, as provided by the Project Sponsor. Energy consumption associated with the Proposed Project was estimated and presented under existing (2019)²⁵ and future (2026) conditions. Energy associated with water conveyance was estimated using CalEEMod and added to the energy usage of the respective components.

For ease of comparison across all energy consumption amounts, gallons of diesel and gasoline was converted to BTUs, assuming an energy intensity of 120,286 BTUs per gallon of gasoline and 137,381 BTU per gallon of diesel.²⁶ In addition, electricity was converted to BTUs assuming an intensity of 3.412 million BTU per megawatt of electricity. Detailed model assumptions and inputs for the calculations can be found in Appendix 3.5-2.

Summary of Analysis in the ConnectMenlo EIR

Impacts on energy supply facilities, transmission infrastructure, and capacity—specifically, those related to natural gas and electrical service—were analyzed in the ConnectMenlo EIR under Impact UTIL-13 (pages 4.14-76 to 4.14-81). The ConnectMenlo EIR determined that future development, as part of the City's project approval process, would be required to comply with existing regulations, including General Plan policies and zoning regulations that have been prepared to promote energy conservation and efficiency by implementing sustainable building practices and reducing automobile dependency and determined impacts to be less than significant. No mitigation measures were recommended. In addition, energy conservation was evaluated in Section 4.14.5 of the ConnectMenlo EIR, consistent with CEQA Guidelines Appendix F. The ConnectMenlo EIR did not quantify energy demand associated with buildout of ConnectMenlo; however, a discussion of the regulatory setting concerning energy use and conservation, including the City's Climate Action Plan, was included.

Impacts and Mitigation Measures

Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources. The Proposed Project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)

Construction

Construction activities would include the demolition of all buildings and structures on the main Project Site and the construction of new buildings, establishment of various open spaces, and the installation of

²⁵ Energy use for existing conditions was based on 2019 historical data provide by Peninsula Innovation Partners, LLC.

²⁶ U.S. Energy Information Administration. 2022. *Units and Calculators Explained*. Available: <https://www.eia.gov/energyexplained/units-and-calculators/>. Accessed: March 14, 2022.

infrastructure. The Proposed Project would alter Hamilton Avenue Parcels North and South (totaling 3.1 acres) to accommodate realignment of Hamilton Avenue at Willow Road for Project Site access. In addition, the Proposed Project would include construction of the Willow Road Tunnel northwest of the main Project Site, under the existing Dumbarton Cutoff at Willow Road. Other offsite transportation and utility improvements would include the roundabout at the Hetch Hetchy right-of-way; underground utility lines along Hamilton Avenue, Chilco Street, Willow Road, and University Avenue; PG&E substation upgrades and associated utilities lines; and various intersection improvements, which may be required in compliance with the City's transportation impact analysis guidelines. The Proposed Project would consist of two primary phases, within which building construction could overlap. Construction activities would include demolition, grading, utility work, tunnel construction, roadway improvements, and landscaping improvements. Building construction would consist of excavation, foundation, and core and shell phases; tenant improvements; and interior improvements.

Construction-related energy usage would include the electricity needed to power electric construction equipment or deliver water to the construction site, the gasoline and diesel fuel used for transporting workers and materials to and from the construction site, and the fuel used for the operation of off-road equipment. Construction-related energy usage and consumption would vary throughout the course of Project buildout and depend on the level of activity, the length of the construction period, the specific construction operations, the types of equipment, and the number of workers. However, construction equipment would use higher-tier engines (Tiers 3 and 4), include limitations on idling, comply with waste reduction requirements, and use grid power rather than generators once available at the construction site; therefore, construction would result in a ***less-than-significant*** energy impact. The estimated construction-related energy consumption for the Proposed Project is provided in Table 3.5-3. As shown, Project construction would consume approximately 491,993 million BTUs over the approximately five-year construction period.

Table 3.5-3. Estimated Construction Energy Consumption from the Proposed Project

Source		Usage (units vary)	Usage (Million BTU)
Electricity	Water Consumption	26,689	91
	Off-Road Construction Equipment	56,309	192
	Electricity Total (kWh)	82,998 kWh	283
Diesel	On-Road Construction Trips (gallons)	480,639	66,030
	Off-Road Construction Equipment (gallons)	2,389,804	328,314
	Diesel Total (gallons)	2,870,443	394,344
Gasoline	On-Road Construction Trips (gallons)	809,457	97,366
	Gasoline Total (gallons)	809,457	97,366
<i>Project Construction Total Energy Consumption 491,993</i>			
Source: See Appendix 3.5-1 of this Draft EIR for the <i>Assessment of Energy Use and Impact, Willow Village Project</i> prepared by Ramboll.			
million BTU = million British thermal units			

Operation

Operation of the Proposed Project would result in the consumption of electricity, natural gas, diesel, and gasoline (e.g., for emergency generator testing, heating, cooling, landscape maintenance). Operational

energy consumption was evaluated under existing-year (2019) and buildout-year (2026) conditions. The Project would implement a number of programs to reduce energy consumption (e.g., meeting LEED Gold status, except buildings of less than 10,000 square feet; complying with increasingly stringent Title 24 Building Energy Efficiency and Green Building standards, and complying with the Menlo Park Municipal Code and reach codes. Mobile fuel use would be reduced through an extensive TDM program. Mobile fuel also would be displaced through use of EV charging stations. Solid waste energy use would be reduced through diversion, recycling, and composting programs. The Proposed Project also would incorporate on-site solar generation, and water and waste reduction measures, including low-water landscaping, low-flow toilets, and low-flow faucets. The analysis does not quantify all of the Project's energy saving measures. Therefore, the analysis is a conservative analysis. Table 3.5-4 includes the operational energy analysis (expressed in terms of million BTU) for the Proposed Project. The Proposed Project's net energy consumption is the difference in operational energy consumption between 2026 with-Project conditions and existing (2019) conditions at the Project Site.

Table 3.5-4. Estimated Operational Energy Consumption of the Proposed Project

Condition/Source	Million BTU/Year
Existing (2019)	
Electricity	46,009
Natural Gas	30,274
Mobile – gasoline	144,546
Mobile – diesel	74,657
Total ^a	295,486
Proposed Project (2026)	
Electricity	277,518
Natural Gas	3,806
Mobile – gasoline	351,661
Mobile – diesel	102,815
Total ^b	735,800
Net Increase with Proposed Project	
2026 v. Existing	440,316
Energy per Square Foot (Million BTU/sf)	
Existing (2019)	0.29
2026 with Proposed Project	0.20
Source: See Appendix 3.5-1 of this Draft EIR for the <i>Assessment of Energy Use and Impact, Willow Village Project</i> prepared by Ramboll.	
^a . Natural gas usage will be limited to commercial culinary facilities. This estimate includes a small fraction of natural gas vehicle use.	
^b . Totals may not add up because of rounding.	
Million BTU/sf = million BTUs per square foot	

As shown in Table 3.5-4, buildout of the Proposed Project would increase operational energy consumption on the Project Site by approximately 440,316 million BTUs compared with existing conditions. However, energy use per square foot would decrease to 0.20 million BTU per square foot compared with the existing condition, which is 0.29 million BTU per square foot, despite the increase in building area (i.e., more than double). This decrease in energy usage per square foot is attributable to the energy efficiency measures incorporated into the Proposed Project, which are described below.

All individual buildings greater than 10,000 sf within the main Project Site would qualify for United States Green Building Council LEED Gold certification. The Proposed Project would also comply with the City's reach code²⁷ and EV charging requirements for all new buildings. In addition, for new buildings in the Proposed Project, building orientation would be refined to enable effective solar control and façade design measures, such as exterior shading and glazing treatments, which would provide daylight and mitigate heat gain. Glazing designs and envelope construction assemblies in the new buildings would consider thermal performance appropriate for the building type. For all new buildings on the main Project Site, 100 percent of the respective energy demands would be supplied through a combination of any of the following measures: (i) generate energy onsite, (ii) purchase 100 percent renewable electricity through PCE or PG&E in an amount equal to annual energy demand, (iii) purchase and install local renewable energy generation within Menlo Park in an amount equal to annual energy demand, and/or (iv) purchase certified renewable energy credits and/or certified renewable energy offsets annually in an amount equal to annual energy demand. Furthermore, the Proposed Project would enroll in and use the Energy Star Portfolio Manager for all buildings of 10,000 sf or more and incorporate dual plumbing to use recycled water in all buildings on the main Project Site. Recycled water would be provided by the West Bay Sanitary District through a regional system or onsite treatment plants for recycled water. The Proposed Project would also implement low-impact development and green infrastructure strategies to manage rainwater onsite. The Campus District would install photovoltaic panels on the rooftops of the garages, office buildings, and the event building to generate solar energy. The Residential/Shopping District and Town Square District also would install photovoltaic panels on rooftops where feasible. Furthermore, the Proposed Project would implement robust Transportation Demand Management (TDM) programs for the main Project Site that would encourage alternative modes of transportation to reduce single-occupant vehicle use as well as fuel consumption. The Proposed Project's TDM programs would include, as appropriate for the applicable use, programs such as carpool ride-matching and car-share services, transit shuttle services, short- and long-term bicycle parking, dedicated parking for vanpools, a guaranteed ride home for emergency situations, showers and lockers, a commute assistance center/website, passenger loading zones, pedestrian connections, Transportation Management Association participation, and promotional programs, such as transit pass subsidies and a Clipper Card program for new tenants and employees regarding transportation alternatives, which would reduce VMT and, consequently, the amount of energy (i.e., gasoline and diesel) consumed.

Based on the above analysis, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and this impact would be ***less than significant***. No mitigation is required. Although not required to support a less-than-significant determination or quantified for the purposes of this analysis, implementation of Mitigation Measure TRANS-6a from the certified

²⁷ In 2019, the City of Menlo Park adopted local amendments to the California Building Standards Code that would require electricity as the only fuel source for new buildings (not natural gas). This ordinance (Menlo Park Municipal Code Chapter 12.16) applies only to newly constructed buildings and does not include additions or remodeled buildings.

ConnectMenlo EIR, as discussed in Section 3.3, *Transportation*, of this Draft EIR, updated the City's Transportation Impact Fee (TIF) program to secure a funding mechanism for future pedestrian and bicycle improvements and mitigate impacts from future projects (based on current standards at the time the ConnectMenlo Final EIR was certified) to reduce the number of vehicle trips, which would reduce the Proposed Project's annual gasoline and diesel usage. The Proposed Project would be required to pay the TIF, as applicable. Should the improvements funded by Mitigation Measure TRANS-6a be implemented, the Proposed Project's energy usage is anticipated to be less than the amount presented in Table 3.5-4, above.

Impact EN-2: Conflict with Energy Plan. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (LTS)

State and local renewable energy and energy efficiency plans applicable to the Proposed Project are discussed above under *Regulatory Framework*. State plans include the AB 1493 Pavley Rules, California Title 24 energy efficiency standards, EO B-16-12, SB 350, and SB 100. Each contains required standards related to energy efficiency and renewable energy development. Local plans that address energy efficiency to achieve the state's RPS mandates include PG&E's and PCE's 2020 IRPs and the City's CAP. The City's General Plan and Municipal Code also include goals, policies, and requirements related to energy use and energy reductions.

As discussed above under Impact EN-1, the Proposed Project would incorporate sustainability and transportation demand management features. Under the Proposed Project, energy use by square foot on the main Project Site would decrease compared to existing conditions, despite the increase in building area that would occur. The Proposed Project on the main Project Site would meet United States Green Building Council LEED Gold certification, with the exception of buildings of less than 10,000 square feet. The Proposed Project would meet the City's reach code and EV charging requirements. In addition, all new buildings on the main Project Site would meet 100 percent of energy demand through a combination of onsite energy generation, the purchase of 100 percent renewable electricity, purchase and installation of local renewable energy generation within the city, or purchase of certified renewable energy credits and/or offsets. Under the City's reach code, natural gas usage would be limited to commercial cooking facilities in for-profit business that would be open to the public and would require approval by the Environmental Quality Commission, the current City Council-appointed body for reviewing exception requests. Furthermore, the Proposed Project would incorporate TDM programs for the main Project Site to reduce energy consumption (e.g., gasoline or diesel usage), install photovoltaic panels, and enroll in the Energy Star Portfolio Manager for all new buildings of 10,000 sf or more on the main Project Site.

The Proposed Project would be required to comply with state and local renewable energy and energy efficiency plans. As a result, it would benefit from renewable energy development and increases in energy efficiency. Energy usage from increases in VMT and the number of average daily trips in the area is expected to become more efficient under regulations included in Pavley and EO B-16-12, which address average fuel economy and commercialization of zero-emission vehicles, respectively. Building energy efficiency is also expected to increase as a result of compliance with Title 24 building codes, which are expected to move toward zero net energy for new construction and 100 percent renewable energy under SB 350 and SB 100 regulations. With implementation of the Proposed Project, PG&E and PCE would continue to pursue the procurement of renewable energy sources to meet their RPS portfolio goals and comply with state regulations. Therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and the impact would be ***less than significant***. No mitigation is required.

Cumulative Impacts

Impact C-EN-1: Cumulative Energy Impacts. Cumulative development would result in a less-than-significant cumulative impact on energy resources; thus, the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on energy resources. (LTS)

Summary of Analysis in the ConnectMenlo EIR

As discussed in Section 4.14, *Utilities and Service Systems*, of the ConnectMenlo EIR, the geographic context for cumulative impacts related to natural gas and electrical service demands considered PG&E's service area. Development of past, current, and future projects within PG&E's service area had or have the potential to increase demand for electricity and natural gas. However, the City and surrounding areas are required to comply with state and local regulations related to renewable energy, fuel efficiency, and energy-efficient building materials and construction practices.

The ConnectMenlo EIR determined that cumulative impacts related to natural gas and electrical service demands would be less than significant and that implementation of ConnectMenlo would not significantly contribute to such impacts. Therefore, the ConnectMenlo EIR determined that cumulative impacts related to natural gas and electric service demands under ConnectMenlo would be ***less than significant***.

Cumulative Impacts with the Proposed Project

Consistent with the ConnectMenlo EIR, the geographic context for cumulative energy impacts with the Proposed Project includes PG&E's service area. As noted in Chapter 3, *Environmental Impact Analysis*, of this EIR, in addition to the buildout projections considered in the ConnectMenlo EIR, the cumulative scenario for this EIR also includes the additional unrestricted units at the 123 Independence Drive project and East Palo Alto projects. As with the Proposed Project, the 123 Independence Drive project and East Palo Alto projects, as well as other projects in the area, would be required to comply with existing local and regional plans adopted to minimize potential cumulative energy impacts. Therefore, these additional projects would not alter the cumulative impact determination stated in the ConnectMenlo EIR, and the cumulative impact with respect to energy would remain less than significant.

The Proposed Project would not result in a substantial change in the ConnectMenlo project and would not cause new or substantially more severe significant energy impacts than those analyzed in the ConnectMenlo EIR. Therefore, consistent with the conclusion in the ConnectMenlo EIR, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects would result in a ***less-than-significant cumulative impact*** with respect to energy resources. No additional mitigation measures would be required.