

3.6 Greenhouse Gas Emissions

This section presents a summary of the current state of climate change science, a summary of greenhouse gas (GHG) emission sources in California, a summary of applicable regulations, quantification of Project-generated GHG emissions, a discussion about the potential contribution of Project-generated GHG emissions to global climate change, a qualitative analysis of the Proposed Project's consistency with plans to reduce GHG emissions, and mitigation for significant impacts where feasible. Supporting GHG calculations are presented in Appendix 3.4-2.

As stated in Section 4.6, *Greenhouse Gas Emissions*, of the General Plan and M-2 Area Zoning Update (ConnectMenlo) Environmental Impact Report (EIR), climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where they are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, consistent with the ConnectMenlo EIR, GHG impacts are inherently cumulative, and the analysis herein is inclusive of cumulative impacts.

No comments regarding GHG emissions were received in response to the Notice of Preparation (NOP).

Existing Conditions

Environmental Setting

Global Climate Change

The process known as the *greenhouse effect* keeps the atmosphere near Earth's surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thereby enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution.¹ Rising atmospheric concentrations of GHGs, in excess of natural levels, have resulted in increasing global surface temperatures—a process commonly referred to as *global warming*. Higher global surface temperatures have, in turn, resulted in changes to Earth's climate system, including increases in ocean temperature and acidity, reduced sea ice, variable precipitation, and increases in the frequency and intensity of extreme weather events.² Large-scale changes to Earth's system are collectively referred to as *climate change*.

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and

¹ Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Available: https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf. Accessed: March 17, 2022.

² Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5°C*. Contribution of Working Group I, II, and III (Summary for Policy Makers). Available: <https://www.ipcc.ch/sr15/>. Accessed: March 14, 2022.

options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1 degree Celsius (°C) above pre-industrial levels in 2017 and is increasing at a rate of 0.2°C per decade. Under the current nationally determined contributions of mitigation from each country until 2030, global warming is expected to rise to 3°C by 2100 and continue afterward.³ Large increases in global temperatures could have substantial adverse effects on the natural and human environments in California and worldwide.

Greenhouse Gases

The principle anthropogenic (human-made) GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds, including sulfur hexafluoride, hydrofluorocarbons (HFCs), and perfluorocarbons. The primary GHGs that would be emitted by Project-related construction and operations include CO₂, CH₄, and N₂O. The principal characteristics of these pollutants are discussed below.

Carbon dioxide enters the atmosphere through the combustion of fossil fuel (i.e., oil, natural gas, coal), solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., from manufacturing cement). CO₂ is also removed from the atmosphere, or *sequestered*, when it is absorbed by plants as part of the biological carbon cycle.

Methane is emitted during the production and transport of coal, natural gas, and oil. CH₄ emissions also result from livestock and agricultural practices as well as the anaerobic decay of organic waste in municipal solid waste landfills.

Nitrous oxide is emitted by agricultural and industrial activities as well as the combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method for comparing GHG emissions is the global warming potential (GWP) methodology defined in IPCC reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO₂e), which compares the gas in question to that of the same mass of CO₂. By definition, CO₂ has a GWP of 1.

Table 3.6-1 lists the global warming potential of CO₂, CH₄, and N₂O and their lifetimes in the atmosphere.

Table 3.6-1. Lifetimes and Global Warming Potentials of Key Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100 years)	Lifetime (years)
Carbon Dioxide (CO ₂)	1	— ^a
Methane (CH ₄)	25	12
Nitrous Oxide (N ₂ O)	298	114

Source: California Air Resources Board. 2020a. *GHG Global Warming Potentials*. Available: <https://ww2.arb.ca.gov/ghg-gwps>. Accessed: November 3, 2021.

^a. No lifetime (years) for carbon dioxide was presented by the California Air Resources Board.

³ Ibid.

The California Air Resources Board (CARB) recognizes the importance of reducing emissions of short-lived climate pollutants, as described in the *Regulatory Setting*, to achieve the state's overall climate change goals. Short-lived climate pollutants have atmospheric lifetimes on the order of a few days to a few decades, and their relative climate-forcing impacts, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO₂.⁴ Given their short-term lifespan and warming impact, short-lived climate pollutants are measured in terms of CO₂e using a 20-year time period. The use of GWPs with a time horizon of 20 years captures the importance of the short-lived climate pollutants and gives a better perspective as to the speed at which emission controls will affect the atmosphere relative to CO₂ emission controls. The Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy), as discussed in the *Regulatory Setting*, addresses CH₄, HFC gases, and anthropogenic black carbon. CH₄ has lifetime of 12 years and a 20-year GWP of 72. HFC gases have lifetimes of 1.4 to 52 years and a 20-year GWP of 437 to 6,350. Anthropogenic black carbon has a lifetime of a few days to weeks and a 20-year GWP of 3,200.⁵

Greenhouse Gas Reporting

A GHG inventory is a quantification of all GHG emissions and sinks⁶ within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a building or person). Several agencies have developed tools for quantifying emissions from certain sources.

Potential Climate Change Effects

Climate change is a complex process that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea-level rise, both globally and in San Francisco Bay, as well as changes in climate and rainfall, among other effects, there remains uncertainty about characterizing precise local climate characteristics and predicting precisely how various ecological and social systems will react to changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change has occurred and will continue to occur in the future, although the precise extent will take further research to define. Specifically, the effects from global climate change in California and worldwide include the following:

- Declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates, with a corresponding increase in atmospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures.⁷
- Rising average global sea levels, due primarily to thermal expansion in the oceans and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets.⁸

⁴ California Air Resources Board. 2017. *Short-Lived Climate Pollutant Reduction Strategy*. Available: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf. Accessed: March 17, 2022.

⁵ Ibid.

⁶ A GHG sink is a process, activity, or mechanism that removes a GHG from the atmosphere.

⁷ California Natural Resources Agency. 2018. *California's Fourth Climate Change Assessment Statewide Summary Report*. Available: https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed: March 17, 2022.

⁸ Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5°C*. Contribution of Working Group I, II, and III (Summary for Policy Makers). Available: <https://www.ipcc.ch/sr15/>. Accessed: March 14, 2022.

- Changing weather patterns, including changes in precipitation and wind patterns, and more energetic episodes of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and intense tropical cyclones.⁹
- Declining Sierra Nevada snowpack levels, which account for approximately half of the surface water storage in California. Snow levels could decline by 70 to as much as 90 percent over the next 100 years.¹⁰
- Increases in the number of days that could be conducive to ground-level ozone formation (e.g., clear days with intense sunlight) by the end of the 21st century in areas with high levels of ozone. The number of days could increase by 25 to 85 percent, depending on the future temperature scenario.¹¹
- Increases in the potential for erosion of California's coastlines as well as seawater intrusion into the Sacramento Delta and associated levee systems due to the rise in sea level.¹²
- The severity of drought conditions in California could be exacerbated (e.g., durations and intensities could be amplified, ultimately increasing the risk of wildfires and consequential damage).¹³
- Under changing climate conditions, agricultural operations are forecast to experience lower crop yields due to extreme heat waves, heat stress, increased water needs of crops and livestock (particularly during dry and warm years), and new and changing pest and disease threats.¹⁴

The impacts of climate change, such as increases in the number of heat-related events, droughts, and wildfires, pose direct and indirect risks to public health, with people experiencing worsening episodes of illness and an earlier death. Indirect impacts on public health include increases in incidents of vector-borne diseases, stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement.¹⁵

Regulatory Setting

Federal

There is currently no federal overarching law specifically related to climate change or reductions in GHG emissions. Under the Obama administration, the U.S. Environmental Protection Agency (EPA) had been developing regulations under the Clean Air Act (CAA). There have also been settlement agreements between EPA, several states, and nongovernmental organizations to address GHG emissions from electric generating plants and refineries. In addition, EPA issued an Endangerment Finding and a Cause or Contribute Finding. EPA also adopted a Mandatory Reporting Rule and Clean Power Plan. Under the Clean Power Plan, EPA issued regulations to control CO₂ emissions from new and existing coal-fired power plants. However, on February 9, 2016, the Supreme Court issued a stay regarding these regulations pending litigation. In addition, former EPA Administrator Scott Pruitt signed a measure to repeal the Clean Power Plan.

⁹ Ibid.

¹⁰ California Natural Resources Agency. 2018. *California's Fourth Climate Change Assessment Statewide Summary Report*. Available: https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed: March 17, 2022.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

Corporate Average Fuel Economy Standards

The National Highway Traffic Safety Administration's (NHTSA's) Corporate Average Fuel Economy (CAFE) standards require substantial improvements in fuel economy and reductions in GHG emissions generated by passenger cars and light-duty trucks sold in the United States. On August 2, 2018, NHTSA and EPA proposed amendments to the current fuel efficiency standards for passenger cars and light-duty trucks and new standards for model years 2021 through 2026. Under the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, current 2020 standards would be maintained through 2026. On September 19, 2019, EPA and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables EPA/NHTSA to provide nationwide uniform fuel economy and GHG vehicle standards by 1) clarifying that federal law preempts state and local tailpipe GHG standards, 2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and 3) withdrawing California's CAA preemption waiver to set state-specific standards.

EPA and NHTSA published their decision to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019 (84 *Federal Register* 51310). California, 22 other states, the District of Columbia, and two cities filed suit against Part One of the SAFE Vehicles Rule on September 20, 2019 (*California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia). On October 28, 2019, the Union of Concerned Scientists, Environmental Defense Fund, and other groups filed a protective petition for review after the federal government sought to transfer the suit to the D.C. Circuit (*Union of Concerned Scientists v. National Highway Traffic Safety Administration*). The lawsuit filed by California and others is stayed pending resolution of the petition.

EPA and NHTSA published final rules to amend and establish national CO₂ and fuel economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 *Federal Register* 24174). The revised rule changes the national fuel economy standards for light-duty vehicles from 46.7 to 40.4 miles per gallon in future years. California, 22 other states, the District of Columbia filed a petition for review of the final rule on May 27, 2020.¹⁶

On January 20, 2021, the president issued an executive order, directing EPA and NHTSA to review the SAFE Vehicles Rule, Part One, and propose a new rule for suspending, revising, or rescinding it by April 2021. The executive order also required EPA and NHTSA to propose a new rule for suspending, revising, or rescinding Part Two by July 2021. On April 22, 2021, NHTSA announced that it proposed to repeal the SAFE Vehicles Rule, Part One, allowing California the right to set its own standards.¹⁷ On December 21, 2021, NHTSA published its CAFE Preemption Rule, which repealed 2019's SAFE Vehicles Rule, Part One: One National Program. That rule had codified preemption of state and local laws related to fuel economy standards. NHTSA's 2021 rule thus reopens pathways for state and local fuel economy laws.

¹⁶ *California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia.

¹⁷ U.S. Department of Transportation, National Highway Traffic Safety Administration. 2021. *Corporate Average Fuel Economy Preemption*. Available: <https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption>. Accessed: March 17, 2022.

State

Statewide GHG Emission Targets and the Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and then reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2°C, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected.¹⁸ Executive Order B-55-18 further recognizes the climate stabilization goal adopted by 194 states and the European Union under the Paris Agreement. Based on the worldwide scientific agreement that carbon neutrality must be achieved by midcentury, Executive Order B-55-18 establishes a state goal to achieve carbon neutrality as soon as possible but no later than 2045 and achieve and maintain net negative emissions thereafter. Executive Order B-55-18 charges CARB with developing a framework for implementing and tracking progress toward these goals. This executive order extends Executive Order S-3-05 and acknowledges the role of increased carbon sequestration on natural and working lands for the state to achieve carbon neutrality and become net carbon negative.

California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emissions target for 2030 and "substantially advance toward our 2050 climate goals."¹⁹ It identifies the reductions needed by each GHG emission sector (e.g., industry, transportation, electricity generation). The state has also passed more detailed legislation to address GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption, as summarized below. CARB is currently preparing the 2022 Scoping Plan Update, which will assess progress toward achieving the SB 32 2030 target, identifying the need for potential adjustments to stay on track, and laying out a path to achieve carbon neutrality no later than 2045, consistent with Executive Order B-55-18.²⁰

Transportation-related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established more stringent GHG emissions standards and fuel efficiency standards for fossil fuel-powered on-road vehicles. These regulations are projected to reduce GHG emissions from new vehicles by approximately 40 percent in 2025 relative to 2012 model year vehicles.²¹ In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles to make up a growing percentage of California's new vehicle sales.

¹⁸ United Nations. 2015. *Historic Paris Agreement on Climate Change: 195 Nations Set Path to Keep Temperature Rise Well below 2 Degrees Celsius*. December 13. Available: <https://unfccc.int/news/finale-cop21>. Accessed: March 17, 2022.

¹⁹ California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. November. Pages 1, 3, 5, 20, 25, and 26. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: March 17, 2022.

²⁰ California Air Resources Board. 2021. *PATHWAYS Scenario Modeling – 2022 Scoping Plan Update*. Available: https://ww2.arb.ca.gov/sites/default/files/2021-12/Revised_2022SP_ScenarioAssumptions_15Dec.pdf. Accessed: March 17, 2022.

²¹ California Air Resources Board. 2021. *Advanced Clean Cars Program*. Available: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>. Accessed: March 17, 2022.

By 2025, when the rules are fully implemented, the statewide fleet of new cars and light-duty trucks will emit 75 percent less smog-forming pollution than the statewide fleet in 2012.²²

Executive Order B-48-18, signed into law in January 2018, requires all state entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, 200 hydrogen fueling stations available, and 250,000 electric-vehicle (EV) charging stations installed by 2025. Furthermore, it specifies that 10,000 of these charging stations must be direct-current fast chargers. Executive Order N-79-20 states that 100 percent of new passenger cars and trucks sold in the state are to be zero-emission vehicles by 2035, 100 percent of medium- and heavy-duty trucks and buses for all operations are to be zero-emission vehicles by 2045 (by 2035 for drayage trucks, where feasible), and 100 percent of off-road vehicles, as well as equipment, are to be zero-emission vehicles by 2035, where feasible. Executive Order N-79-20 directed CARB to partner with the Governor's Office of Business and Economic Development and other agencies to develop the Zero-Emissions Vehicle Market Development Strategy, which was released in February 2022.²³

In 2007, CARB adopted the Low-Carbon Fuel Standard to reduce the carbon intensity of California's transportation fuels. The Low-Carbon Fuel Standard applies to fuels used by on-road motor vehicles as well as off-road vehicles, including construction equipment. In addition to regulations to address issues related to tailpipe emissions and transportation fuels, the state legislature has passed regulations to address issues related to the number of miles driven in on-road vehicles.

Since passage of SB 375 in 2008, CARB has required metropolitan planning organizations to adopt plans that show reductions in GHG emissions from passenger cars and light-duty trucks in their respective regions for 2020 and 2035.²⁴ These plans link land use and housing allocations to transportation planning and related mobile-source emissions. The Metropolitan Transportation Commission (MTC) serves as the metropolitan planning organization for the nine counties in the Bay Area region, including San Mateo County, which is where the Project Site is located. In 2014, the MTC adopted Plan Bay Area, the area's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). MTC was asked by CARB to achieve a 10 percent per capita reduction in emissions compared to 2005 levels by 2020 and a 16 percent per capita reduction by 2035. CARB confirmed that the region would achieve the targets by implementing the SCS.²⁵ In March 2018, CARB revised the SB 375 targets for various metropolitan planning organizations across the state, including the MTC, which saw a revised 2035 target of 19 percent per capita reduction.²⁶ In 2021, the MTC and ABAG adopted Plan Bay Area 2050, which sets out a path toward

²² Ibid.

²³ Governor's Office of Business and Economic Development. 2022. *California Zero-Emission Vehicle Market Development Strategy*. Available: https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf. Accessed: March 17, 2022.

²⁴ California Air Resources Board. 2018a. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*. Approved by the California Air Resources Board on March 22, 2018. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: March 17, 2022.

²⁵ California Air Resources Board. 2018. *Technical Evaluation of the Greenhouse Gas Emissions Reduction Quantification for the Association of Bay Area Governments' and Metropolitan Transportation Commission's SB 375 Sustainable Communities Strategy*. June. Available: https://ww3.arb.ca.gov/cc/sb375/mtc_final_staff_report_0718.pdf. Accessed: March 17, 2022.

²⁶ California Air Resources Board. 2018a. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*. Approved by the California Air Resources Board on March 22, 2018. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: March 17, 2022.

achieving a 20 percent per capita reduction in GHG emissions from passenger cars and light-duty trucks by 2035. CARB provided comments on the SCS and technical modeling in summer 2021.²⁷

Under SB 743, in 2013, the Governor's Office of Planning and Research (OPR) implemented changes to the California Environmental Quality Act (CEQA) Guidelines, including the addition of Section 15064.3, which requires CEQA transportation analyses to move away from a focus on vehicle delay and level of service and instead evaluate a project based on vehicle miles traveled (VMT).²⁸ The intent behind SB 743 and the revisions to the CEQA Guidelines is to integrate and balance congestion management, infill development, active transportation, and GHG emissions reductions. In support of these changes, OPR published its Technical Advisory on Evaluating Transportation Impacts in CEQA, which recommends that the determination of the transportation impact of a project be based on whether project-related VMT per capita (or VMT per employee) would be 15 percent lower than that of existing development in the region.²⁹ OPR's technical advisory explains that this criterion is consistent with Section 21099 of the California Public Resources Code, which states that the criteria for determining significance must "promote the reduction in greenhouse gas emissions."³⁰ This metric is intended to replace the use of vehicle delay and level of service to measure transportation-related impacts. More detail about SB 743 is provided under Regulatory Setting in Section 3.1, Transportation. At the time when the EIR for ConnectMenlo was prepared, the California Natural Resources Agency had not yet adopted OPR's proposed addition of Section 15064.3 to the CEQA Guidelines.

Legislation Associated with Electricity Generation

The state passed legislation that requires increasing use of renewables to produce electricity for consumers. Specifically, California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011), 52 percent by 2027 (SB 100 of 2018), 60 percent by 2030 (also SB 100 of 2018), and 100 percent by 2045 (also SB 100 of 2018).

Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Code of Regulations (CCR), Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Commission (CEC) updates the California Energy Code every 3 years with more stringent design requirements to reduce energy consumption, resulting in lower GHG emissions. The 2019 California Energy Code, which took effect on January 1, 2020, requires builders to use more energy-efficient building technologies to comply with requirements regarding energy use. New residential construction (i.e., three stories or less) is required to include solar panels to offset the estimated electrical demands of each unit (CCR, Title 24, Part 6, Section 150.1[c]14). CEC estimates that the 2019 California Energy Code's combination of required energy-efficiency features and mandatory solar panels will result in new residential units that use 53 percent less energy than those that were designed to meet the 2016 California Energy Code. CEC also estimates that the 2019

²⁷ California Air Resources Board. 2022. *Association of Bay Area Governments (ABAG) & Metropolitan Transportation Commission (MTC)*. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plans-evaluations/association-bay-area>. Accessed: March 17, 2022.

²⁸ Governor's Office of Planning and Research. 2017a. *Proposed Updates to the CEQA Guidelines*. November. Available: http://opr.ca.gov/docs/20171127_Comprehensive_CEQA_Guidelines_Package_Nov_2017.pdf. Accessed: March 17, 2022.

²⁹ Governor's Office of Planning and Research. 2017b. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. November. Available: http://www.opr.ca.gov/docs/20171127_Transportation_Analysis_TA_Nov_2017.pdf. Accessed: March 17, 2022.

³⁰ Ibid.

California Energy Code will result in new commercial buildings that use 30 percent less energy than those that were designed to meet the 2016 California Energy Code, primarily through the transition to high-efficacy lighting.³¹ The standards of the 2022 California Energy Code build off the 2019 standards by encouraging efficient electric heat pumps, establishing electric-ready requirements for new homes, expanding solar photovoltaic and battery storage standards, strengthening ventilation standards, and more.³²

Clean Energy and Pollution Reduction Act of 2015

SB 350 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) of 50 percent and 2) a doubling of energy efficiency by 2030, including improvements to the efficiency of existing buildings. These provisions will be implemented by future actions of the California Public Utilities Commission and CEC.

Solid Waste Diversion Regulations

To minimize the amount of solid waste that must be disposed of in landfills, the state legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to state agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 1, 2012, the resulting mandatory commercial recycling required certain businesses that generate 4 cubic yards or more of commercial solid waste per week to arrange recycling services. To comply with this requirement, businesses could either separate recyclables and self-haul them or subscribe to a recycling service with mixed-waste processing. AB 341 also established a statewide recycling goal of 75 percent; under AB 939, the 50 percent disposal reduction mandate still applied to cities and counties.

Cap-and-Trade Program

CARB administers the state's cap-and-trade program, which covers GHG sources that emit more than 25,000 metric tons of carbon dioxide equivalent per year (MTCO_{2e}/year), such as refineries, power plants, and industrial facilities. This market-based approach to reducing GHG emissions provides economic incentives for achieving GHG emission reductions.

³¹ California Energy Commission. 2018. *2019 Building Energy Efficiency Standards: Frequently Asked Questions*. March. Available: https://www.energy.ca.gov/sites/default/files/2020-06/Title24_2019_Standards_detailed_faq_ada.pdf. Accessed: March 17, 2022.

³² California Energy Commission. 2021. *2022 Building Energy Efficiency Standards Summary*. August. Available: https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf. Accessed: March 17, 2022.

Short-Lived Climate Pollutant Reduction Strategy

In 2014, SB 605 directed CARB, in coordination with other state agencies and local air districts, to develop a comprehensive SLCP Reduction Strategy. In 2016, SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve the following reductions in SLCPs:

- 40 percent reduction in CH₄ relative to 2013 levels by 2030,
- 40 percent reduction in HFC gases relative to 2013 levels by 2030, and
- 50 percent reduction in anthropogenic black carbon relative to 2013 levels by 2030.

SB 1383 also establishes the following targets for reducing organic waste in landfills as well as CH₄ emissions from dairy and livestock operations, as follows:

- 50 percent reduction in organic waste disposal relative to 2014 levels by 2020,
- 75 percent reduction in organic waste disposal relative to 2014 levels by 2025, and
- 40 percent reduction in CH₄ emissions from livestock and dairy manure management operations relative to the livestock and dairy sectors' 2013 levels by 2030.

CARB and CalRecycle are currently developing regulations to achieve the organic waste reduction goals under SB 1383. In January 2019 and June 2019, CalRecycle proposed new and amended regulations to CCR Title 14 and Title 27. Among other things, the regulations set forth minimum standards for organic waste collection, hauling, and composting. The final regulations will take effect on or after January 1, 2022; the final regulations are not currently in effect.

CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the CH₄, HFC, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to reduce SLCPs, which fit within a wide range of ongoing planning efforts throughout the state, including CARB's and CalRecycle's proposed rulemaking on organic waste diversion (discussed above).

Water Conservation Act of 2009

The overall goal of SB X7-7, the Water Conservation Act of 2009, was to reduce per capita urban water use by 20 percent as of December 31, 2020. The state was required to make incremental progress toward this goal by reducing per capita water use by at least 10 percent by December 31, 2015. This act is an implementing measure of the 2017 Scoping Plan that will continue to be implemented beyond 2020. Reductions in water consumption reduce the amount of energy, as well as the emissions, associated with conveying, treating, and distributing the water; emissions from wastewater treatment are also reduced.

Regional

Metropolitan Transportation Commission

The MTC is the metropolitan planning organization for the nine counties that make up the San Francisco Bay Area and the San Francisco Bay Area Air Basin (SFBAAB), which includes Menlo Park. The first per capita GHG emissions reduction targets for the SFBAAB were 7 percent by 2020 and 15 percent by 2035 relative to 2005 levels. In 2013, MTC adopted an SCS as part of its RTP for the SFBAAB. This was known as Plan Bay Area. The plan goes beyond regional per capita targets and calls for 10 and 16 percent reductions in per capita GHG emissions by 2020 and 2035, respectively.³³ On July 26, 2017, the strategic

³³ Metropolitan Transportation Commission and Association of Bay Area Governments. 2013. *Plan Bay Area*. Adopted: July 18. Available: <http://files.mtc.ca.gov/library/pub/28536.pdf>. Accessed: March 17, 2022.

update to this plan, known as Plan Bay Area 2040, was adopted by the Association of Bay Area Governments and the MTC. As a limited and focused update, Plan Bay Area 2040 builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate the key economic, demographic, and financial trends since 2013.³⁴ As required by SB 375, CARB updated the per capita GHG emissions reduction targets in 2018. The new targets (i.e., reductions in per capita GHG emissions of 10 percent by 2020 and 19 percent by 2035 relative to 2005 levels) are addressed in the latest update to Plan Bay Area, Plan Bay Area 2050, which was approved by ABAG and the MTC in October 2021. Plan Bay Area 2050 carries forward many of the development and funding strategies of Plan Bay Area 2040.

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area, including San Mateo County. Its role is discussed further in Section 3.4, *Air Quality*. BAAQMD also recommends methods for analyzing project-related GHGs in CEQA analyses as well as multiple GHG reduction measures for land use development projects. BAAQMD developed thresholds of significance that align with the statewide GHG target mandated by AB 32 to provide a uniform scale for determining the CEQA significance of GHG emissions associated with land use and stationary-source projects. In developing GHG thresholds, BAAQMD's goals included ease of implementation, the use of standard analysis tools, and emissions mitigation that would be consistent with AB 32 of 2006. However, BAAQMD has not yet adopted thresholds of significance or guidance for determining whether a project's GHG emissions would be consistent with the statewide GHG target established by SB 32 in 2016 (i.e., 40 percent below 1990 levels by 2030). On February 16, 2022, BAAQMD released a draft justification report for the proposed thresholds that are intended to meet both the 2030 target of SB 32 and the long-term goal of carbon neutrality by 2045 (Executive Order B-55-18, discussed earlier). The draft thresholds underwent a 30-day public review and comment period, beginning February 16, 2022, and ending March 18, 2022.³⁵

Local

Menlo Park Climate Action Plan

The City of Menlo Park's (City's) 2030 Climate Action Plan (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). The City has identified GHG reduction measures related to the transportation, energy, and land use sectors that can be coupled with state and existing local actions to reduce GHG emissions. The CAP identifies the following strategies to reach carbon neutrality by 2030:

- Explore policy/program options to convert 95 percent of existing buildings to all-electric by 2030
- 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
- Expand access to electric vehicle (EV) charging for multifamily and commercial properties

³⁴ Metropolitan Transportation Commission and Association of Bay Area Governments. 2017. *Plan Bay Area 2040*. Adopted: July 26. Available: http://2040.planbayarea.org/files/2020-02/Final_Plan_Bay_Area_2040.pdf. Accessed: March 17, 2022.

³⁵ BAAQMD's draft guidance has been published but has not been adopted at this point.

- Reduce vehicle miles traveled (VMT) by 25 percent or an amount recommended by the Complete Streets Commission
- Eliminate the use of fossil fuels from municipal operations
- 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 2021.³⁶ The 2030 CAP updated emissions inventories and adopted a climate goal that calls for zero carbon by 2030. The CAP also aims for a 90 percent reduction in CO₂e emissions from 2005 levels by 2030. Table 3.6-2 highlights the City's GHG emissions inventory for 2005, 2017, and 2030.

Table 3.6-2. City of Menlo Park Community Greenhouse Gas Emissions Inventory (MTCO₂e)

Emissions Sources	2005	2017	2030
Vehicle Travel (mobile-source)	137,628	158,686	18,373
Natural Gas Combustion	102,295	95,742	13,656
Electricity Consumption	87,617	21,528	—
Solid Waste Generation	21,745	8,424	2,903
Total Greenhouse Gas Emissions (metric tons CO₂e)	349,285	284,380	34,933

Source: City of Menlo Park. 2020. *Climate Change Action Plan*. Available: <http://www.menlopark.org/305/Climate-Action-Plan>. Accessed: November 3, 2021.

Notes: MTCO₂e = metric tons of carbon dioxide equivalent

CEQA authorizes reliance on a previously approved GHG emissions reduction plan (e.g., a CAP) that was prepared as a “plan for the reduction of greenhouse gas emissions,” per Section 15183.5 of the CEQA Guidelines. This section of the CEQA Guidelines establishes opportunities for CEQA tiering when projects are consistent with adopted GHG emissions reduction plans and their impacts can be determined to be less than significant, provided the GHG emissions reduction plans meet specific criteria established under Section 15183.5, including adoption in a public process following environmental review.

The City adopted the CAP in April 2021; however, the CAP does not meet the requirements for tiering because the City determined that the draft 2030 CAP was intended to serve as a policy framework for future actions and, therefore, was exempt from environmental review.^{37,38}

Consequently, because the City's 2030 CAP does not satisfy the tiering requirements established in Section 15183.5 of the CEQA Guidelines, it cannot be used to determine the significance of an individual project's GHG emissions. However, the 2030 CAP is a relevant plan for the purpose of reducing GHG emissions within Menlo Park; therefore, consistency with applicable 2030 CAP policies is analyzed in Impact GHG-2.

³⁶ Ibid.

³⁷ City of Menlo Park. 2020. *Staff Report 20-152-CC: Receive and File the Environmental Quality Commission's 2030 Climate Action Plan and Adopt Resolution No. 6575 to Adopt the Climate Action Plan as Amended with the Staff's Implementation Strategy*. June. Available: <https://menlopark.org/DocumentCenter/View/25680/F1-20200714-CC-CAP>. Accessed: March 17, 2022.

³⁸ CEQA Guidelines Section 15262 specifically states the following: “A project involving only feasibility or planning studies for possible future actions that the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an EIR or negative declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.”

Menlo Park General Plan

The 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 policies from the Open Space and Conservation Element were adopted to avoid or minimize environmental impacts and pertain to the Proposed Project:

Goal OSC4: Promote Sustainability and Climate Action Planning.

Policy OSC4.1: 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 adjacent to commercial centers and transit corridors, and (3) retail and office areas within walking and biking distance of transit or existing and proposed residential developments.

Policy OSC4.2: 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 OSC4.3: Renewable Energy. Promote the installation of renewable energy technology, such as in residences and businesses, by supporting education, employing social marketing methods, establishing standards, and/or providing incentives.

Policy OSC4.4: Vehicles Using Alternative Fuel. Explore the potential for installing infrastructure for vehicles that use alternative fuel, such as electric plug-in recharging stations.

Policy OSC4.5: 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.

Policy OSC4.6: Waste Reduction Target. Strive to meet the California State Integrated Waste Management Board per-person target of waste generation per person per day through source reduction, reuse, and recycling programs.

Policy OSC4.8: Waste Diversion. Develop and implement a zero-waste policy or implement standards, incentives, or other programs that would lead the community toward a zero-waste goal.

The following policies from the Land Use Element were adopted to avoid or minimize environmental impacts and pertain to the Proposed Project:

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-7.5: Reclaimed Water Use. Implement use of adequately treated “reclaimed” water (i.e., recycled/nonpotable water sources, including graywater, blackwater, rainwater, stormwater, foundation drainage, etc.) through dual plumbing systems for outdoor and indoor uses, as feasible.

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 as well as operation-and-maintenance best practices, such as increasing energy efficiency, using renewable energy and reclaimed water, and installing 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 greenhouse gas (GHG) standard for development projects that would help reduce communitywide GHG emissions to meet City and statewide reduction goals.

The following policies from the Circulation Element were adopted to avoid or minimize environmental impacts and pertain to the Proposed Project:

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, such as 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.

The following policies from the Housing Element were adopted to avoid or minimize environmental impacts and pertain to 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 CAP.

Menlo Park Municipal Code

As discussed in Chapter 2, *Project Description*, the main Project Site is in the O-B (Office, Bonus) and R-MU-B (Residential, Mixed-Use Bonus) zoning districts. Hamilton Avenue Parcels North and South are

zoned C-2-S (Neighborhood Commercial, Special). Consistent with the goals identified in ConnectMenlo, the City passed Ordinance No. 1024 Office (O-B) and Ordinance No. 1026 for the Residential Mixed-Use (R-MU-B) zoning district under Title 16 of the Menlo Park Municipal Code. Ordinance No. 1024 and No. 1026 include the requirements discussed below, which would be applicable to GHG-emitting activities associated with the Proposed Project on the main Project Site.

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 of 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 gross square feet would be required to meet LEED Silver requirements; buildings of less than 10,000 gross square feet would not be required to meet LEED requirements. LEED credits include installing prewiring 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 prewired 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 Pacific Gas and Electric Company (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.

If a local amendment to the California Energy Code is approved by the CEC, 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 onsite solar based on square footage.
3. Exceptions include:
 - a. Life science buildings may use natural gas for space heating.
 - b. Public agency owned and operated emergency operations centers (such as fire stations and police stations) may use natural gas.
 - c. Nonresidential kitchens (such as for-profit restaurants and cafeterias) may appeal to use natural gas stoves.
 - d. For all exceptions that are granted, natural gas appliance locations must be electrically pre-wired for future electric appliance installation.
4. Solar requirements:
 - a. Less than 10,000 square feet requires a minimum of three kilowatt photovoltaic system
 - b. Greater than or equal to 10,000 square feet requires a minimum of five kilowatt photovoltaic system

Electric-Vehicle (EV) Charger Requirements

The City of Menlo Park adopted amendments to the California Green Building Standards Code (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;
- To provide for residents and employees with electric vehicles; and
- Lower barriers for those looking to shift from fossil fuel vehicles.

New multi-family residential developments and nonresidential developments 10,000 square feet and above are required to comply with the local amendments to the CALGreen code and install EV chargers and prepare for future installation.

Environmental Impacts

This section describes the impact analysis related to greenhouse gases 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

CEQA Guidelines Section 15064 and relevant portions of Appendix G of the CEQA Guidelines recommend that a lead agency consider a project's consistency with relevant adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. In Appendix G of the CEQA Guidelines, two questions are provided to help assess whether a project would result in a potentially significant impact related to climate change. These questions ask whether a project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.

CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider 1) the extent to which a project may increase or reduce GHG emissions compared with existing conditions, 2) whether a project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and 3) the extent to which a project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

At the time of preparation of this CEQA document, the most recent adopted version of BAAQMD's CEQA guidance was published in May 2017.³⁹ In February 2022, BAAQMD released a draft justification report for updating the CEQA GHG thresholds of significance. The 2022 draft guidelines and justification report underwent a 30-day public review and comment period, beginning February 16, 2022, and ending March 18, 2022, and will be considered for adoption by BAAQMD's Board of Directors at a future date. Until new guidelines are formally adopted, the May 2017 guidance is the most relevant for projects in the Bay Area.⁴⁰

³⁹ Bay Area Air Quality Management District. 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017 update. Available: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 17, 2022.

⁴⁰ Bay Area Air Quality Management District. 2022. *CEQA Thresholds and Guidelines Update*. Available: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed: March 17, 2022.

Construction-Generated Emissions of Greenhouse Gases

BAAQMD's adopted CEQA Guidelines (2017) do not identify a GHG threshold for construction-related emissions, nor do the 2022 draft thresholds. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed and a determination regarding the significance of the GHG emissions be made with respect to whether a project would be consistent with emission reduction goals in AB 32. AB 32 has been superseded by SB 32, whose targets will be met through implementing the programs in the CARB Scoping Plan. BAAQMD further recommends incorporation of best management practices (BMPs) to reduce GHG emissions during construction, as feasible and practical. This approach is used to evaluate construction-generated emissions.

Operational Emissions of Greenhouse Gases

In its 2017 guidance, BAAQMD recommended that land use development projects be evaluated using a GHG efficiency metric that can be expressed in MTCO₂e per service population per year (MTCO₂e/SP/year); the service population is the sum of the number of residents and full-time-equivalent employees supported by a project. More specifically, BAAQMD's 2017 guidance recommends a significance threshold of 4.6 MTCO₂e/SP/year. BAAQMD substantiated this efficiency threshold in the justification report it published in October 2009.⁴¹ BAAQMD determined that land use development projects with an operational GHG efficiency level that does not exceed 4.6 MTCO₂e/SP/year would be consistent with the statewide GHG target of achieving 1990 GHG emission levels by 2020, as mandated by AB 32. However, the GHG efficiency threshold of 4.6 MTCO₂e/SP/year is not an indicator as to whether a land use development project would be aligned with the statewide GHG target mandated by SB 32 (i.e., 40 percent below 1990 emissions levels by 2030).

In February 2022, BAAQMD released a draft justification report for updating the CEQA GHG thresholds of significance. These proposed updates considered new state reduction targets (e.g., SB 32) and carbon neutrality by 2045, along with evolving case law. Of particular note with the proposed update to the thresholds is BAAQMD's emphasis on (1) avoiding development of fossil fuel infrastructure in new buildings that will be in place for decades and therefore potentially conflicting with carbon neutrality by 2045 and (2) ensuring consistency with a qualified GHG reduction strategy (also known as a Climate Action Plan). Specifically, BAAQMD is proposing two options for evaluating the significance of land use projects.

Under BAAQMD's proposed thresholds, for projects' GHG contribution to be less than cumulatively considerable, projects would have to comply with either Option A or Option B:⁴²

- A. Projects must include, at a minimum, the following project design elements:
 1. Buildings
 - a. Projects will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
 - b. Projects will not result in wasteful, inefficient, or unnecessary electrical usage, as determined by the analysis required under CEQA Section 21100(b)(3) and CEQA Guidelines Section 15126.2(b).

⁴¹ Bay Area Air Quality Management District. 2009. Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance. October. Available: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en>. Accessed: March 17, 2022.

⁴² Bay Area Air Quality Management District. 2022. *Draft Justification Report. CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*. February. Available: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/~media/ffb719cfa04a438d9c7be10007a5abdf.ashx>. Accessed: March 17, 2022.

2. Transportation

- a. Achieve compliance with the electric-vehicle requirements in the most recently adopted version of the California Green Building Standards Code (CALGreen), Tier 2.
- b. Achieve a reduction in project-generated vehicle miles traveled (VMT), below the regional average, consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
 - i. Residential projects: 15 percent below existing VMT per capita,
 - ii. Office projects: 15 percent below existing VMT per employee, and
 - iii. Retail projects: no net increase in existing VMT.

- B. Be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b)

The February 2022 justification report, which contains evidence and the rationale for the proposed thresholds, noted that adoption of the thresholds is expected to occur in spring 2022, following a public review period of 30 days. As of the writing of this EIR, BAAQMD's adopted GHG thresholds remain the thresholds in the 2017 CEQA Guidelines, which have not been updated to address 2030 or recent case law regarding the analysis of GHG emissions under CEQA. Given the lack of finality of BAAQMD's draft GHG thresholds, the City developed its own GHG threshold for use in this EIR. Under the threshold, the Proposed Project would have a significant impact on climate change if it would not achieve the following:

- Building Sources (i.e., energy water, waste, area): Net zero operational GHG emissions
- Transportation Sources: Consistency with City's VMT threshold (adopted pursuant to SB 743) and consistency with the RTP/SCS

Similar to BAAQMD's proposed threshold, the City's threshold supports the state's goal of carbon neutrality by 2045 by setting the threshold for non-mobile sources at net zero. A net-zero threshold for non-mobile sources is more comprehensive than just the prohibition of natural gas in buildings because buildings can have other sources of GHG emissions (e.g., emergency generators, area sources, electricity for non-carbon-free sources). Under a net-zero threshold, emissions would need to be offset, which would occur primarily by increasing onsite solar capacity. Adding onsite solar capacity will be important as the state transitions away from natural gas from fossil fuel sources (as opposed to renewable natural gas), which will increase the strain on the state's electrical grid. Also similar to BAAQMD's proposed threshold, the threshold of significance employed in this EIR separates non-mobile sources from mobile sources and requires mobile sources to meet a VMT threshold consistent with state goals for reducing GHG emissions from mobile sources.

The City relied on the following state regulations and professional technical guidance to support the threshold used herein:

- *Governor's Office of Planning and Research (OPR), Discussion Draft: CEQA and Climate Change Advisory (December 2018)* ("OPR GHG Guidance"). The OPR GHG Guidance recommends a route to streamlining project-level CEQA analysis of GHGs by separately assessing the impacts of transportation and building energy emissions. Specifically, the OPR GHG Guidance states that "a land use development project that produces low vehicle miles traveled, achieves applicable building energy efficiency standards, uses no natural gas or other fossil fuels, and includes Energy Star appliances where available may be able to demonstrate a less-than-significant greenhouse gas impact associated with

project operation.” The OPR GHG Guidance also states that projects that generate a 15 percent reduction in per-capita residential and per-employee office VMT and no increase in per employee retail VMT compared to existing regional/citywide conditions “may have a less-than significant impact, both for transportation and the greenhouse gas emissions associated with transportation.” The City’s VMT threshold reflects OPR’s guidance.

- *OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018)* (“OPR VMT Guidance”). OPR suggests that VMT-based GHG thresholds for vehicle emissions support California’s GHG reduction goals, as stipulated in SB 32 and the 2017 Scoping Plan. The OPR VMT Guidance states that “[b]ased on OPR’s extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the state’s long-term climate goals, OPR recommends that a per capita or per employee VMT that is 15 percent below that of existing development may be a reasonable threshold Below these levels, a project could be considered low VMT and would, on that metric, be consistent with 2017 Scoping Plan Update assumptions that achieve climate state climate goals.” The City’s VMT threshold reflects OPR’s guidance.
- *Association of Environmental Professionals (“AEP”), Final Whitepaper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California (October 2016)*. The AEP whitepaper identifies two hybrid concepts that evaluate transportation GHG emissions and non-transportation GHG emissions separately. The first hybrid concept would use the SB 375 GHG reduction targets as the GHG threshold for vehicles. The second hybrid concept would use the VMT thresholds established pursuant to SB 743 as the GHG threshold for vehicles.
- *California Air Resources Board (“CARB”), 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals (January 2019)*. CARB identified per capita VMT reductions that would achieve state climate goals for 2030 and 2050. CARB wrote, “[c]ertain land use development projects located in areas that would produce rates of total VMT per capita that are approximately 14.3 percent lower than existing conditions, or rates of light-duty VMT per capita that are approximately 16.8 percent lower than existing conditions (either lower than the regional average or other appropriate planning context) could be, by virtue of their location and land use context, interpreted to be consistent with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 state climate goals.” Consistency with the scoping plan and state climate goals is a good way to measure whether impacts would be less than significant.

This analysis estimates the Proposed Project’s operational GHG emissions with respect to the above operational GHG emissions thresholds. Given the projected construction schedule, the earliest year the Proposed Project would become fully operational would be 2026. Details about how these values are estimated are provided under *Method of Analysis*, below.

The GHG analysis also includes a qualitative assessment of whether the Proposed Project would conflict with applicable plans, policies and regulations adopted for the purpose of reducing GHG emissions. The primary focus of this qualitative assessment is whether the Proposed Project would conflict with CARB’s 2017 Scoping Plan, which, as explained in the *Regulatory Setting*, above, outlines the main strategies California will implement to achieve the legislated GHG emissions target for 2030 and “substantially advance toward our 2050 climate goals.”⁴³ Where applicable, guidance from CARB, OPR, and other agencies related to long-term emissions reduction requirements is considered in the analysis.

⁴³ California Air Resources Board. 2017. *California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target*. November. Pages 1, 3, 5, 20, 25, and 26. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: March 17, 2022

Although statewide targets beyond 2030 have been proclaimed in Executive Orders S-3-05 and B-55-18, the subsequent targets have not been codified by the state legislature, and no plans have been formally adopted (or subject to CEQA review) that lay out how these targets will be achieved, which emissions sectors in California will be responsible for achieving substantial reductions, or the role carbon sequestration efforts will play in achieving the targets. As discussed above, consistency with the City's 2030 CAP is analyzed in Impact GHG-2.

Methods for Analysis

The level of GHG emissions associated with construction and operation of the Proposed Project was assessed and quantified using the California Emissions Estimator Model (CalEEMod), version 2020.4.0, and CARB's 2021 Emission FACTor (EMFAC) model, consistent with BAAQMD guidance. A summary of the methodology is provided below. A full list of assumptions regarding modeling input parameters is provided in Appendix 3.4-2.

Zoning Ordinance Consistency

Menlo Park Municipal Code requirements for the O and R-MU zoning districts applicable to the main Project Site require all new construction projects to meet 100 percent of project energy demand through a combination of the measures described below. The Proposed Project on the main Project Site would meet 100 percent of its energy demand through a combination of the measures, which would help reduce GHG emissions.

Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A)(i), 16.45.130(2)(A)(i), Green and Sustainable Building, Onsite Energy Generation. This measure concerns the provision of onsite energy generation. For the main Project Site, the Proposed Project would install solar photovoltaic systems, or other onsite solar technology, that produce renewable energy in an amount at least equal to the Project's non-renewable energy use. The electricity mix provided by Peninsula Clean Energy and PG&E will increase its reliance on renewable energy over the Project's life. However, current solar capacity would be enough to offset non-renewable energy use during the first year of Project operation. Over time, the Proposed Project would produce more renewable energy than required to offset its non-renewable electricity use.

Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A)(ii), 16.45.130(2)(A)(ii), Green and Sustainable Building, 100 Percent Renewable Electricity. This measure concerns the purchase of 100 percent renewable energy in an amount equal to the energy demand of the Proposed Project on the main Project Site. For the Campus District, each office building owner or building manager would purchase 100 percent renewable electricity through Peninsula Clean Energy or PG&E in an amount equal to the annual onsite demand for electricity. In addition, for the Town Square District, the Residential/Shopping District, and buildings on Main Street in the Campus District with retail tenants, each building owner or building manager would encourage tenants to purchase 100 percent renewable electricity through Peninsula Clean Energy or PG&E. The Proposed Project would be subject to the City's reach code and required to install onsite renewable energy generation facilities. The Project Sponsor intends to produce enough onsite renewable energy to offset any non-renewable energy use by tenants.

Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A)(iii), 16.45.130(2)(A)(iii), Green and Sustainable Building, Purchase and Install of Renewable Energy Generation in the City. This measure concerns the purchase and installation of renewable energy generation in the city in an amount equal to the energy demand of the Proposed Project on the main Project Site. The Proposed Project would offset all of its non-renewable electricity and any natural gas use through onsite solar and therefore would not need to install offsite solar elsewhere in the city.

Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A)(iv), 16.45.130(2)(A)(iv) Green and Sustainable Building, Purchase of Certified Renewable Energy Credits and/or Certified Renewable Energy Offsets. This measure concerns the purchase of certified renewable energy credits and/or certified renewable energy offsets in an amount equal to the energy demand of the Proposed Project on the main Project Site. The Proposed Project would offset all of its non-renewable electricity and any natural gas use through onsite solar and therefore would not need to purchase offsets.

Menlo Park Municipal Code Section 12.18.080 (Amending California Green Building Standards Code Chapter 5, Section 5.106.5.3), Electric-Vehicle Charging. The Project Sponsor shall ensure that at least 15 percent of the parking stalls for passenger vehicles meet CALGreen Tier 2 standards for EVs and that all EV-capable spaces are EV ready, as defined in California Building Energy Efficiency Standards Title 24, Part 11. Making parking stalls EV ready requires the installation of dedicated branch circuits, circuit breakers, and other electrical components, including receptacles or blank covers, to support the future installation of one or more charging stations.

Construction-related Emissions

Short-term construction-generated GHG emissions were calculated using methodologies consistent with CalEEMod, version 2020.4.0,⁴⁴ as recommended by BAAQMD and other air districts in California. Modeling was based on Project-specific information, such as information regarding demolition, building size, the area to be graded, expected duration of construction, and the area to be paved, where available; assumptions regarding typical construction activities; and default values from CalEEMod, which consider a project's location and land use type.

Detailed model assumptions and inputs for the calculations can be found in Appendix 3.4-2.

Operational Emissions

As noted above, for purposes of this EIR, the evaluation of the transportation-related GHG impacts of the Proposed Project is based on consistency with the City's VMT threshold. As discussed in Section 3.3, *Transportation*, the Project meets the City's VMT thresholds for office, hotel, and retail uses and, with mitigation, would meet the City's VMT threshold for residential uses. Various Project features promote transportation efficiency, including its Transportation Demand Management (TDM) plans, mix of uses, and location in an urban area rather than a remote rural area. Although GHG emissions from mobile sources are not used in significance determinations for this EIR, GHG emissions emitted by motor vehicles from Project-related VMT were estimated with use of the vehicle emission factors from CARB's EMFAC2021;⁴⁵ traffic data, including daily VMT and the number of daily trips, from a transportation analysis conducted by Hexagon; and CalEEMod emission calculation methodologies.

As noted above, for purposes of this EIR, the evaluation of the building-related GHG impacts of the Proposed Project is based on achieving net-zero operational emissions. GHG emissions associated with landscape maintenance and backup diesel generator operation were estimated using the applicable CalEEMod emission calculation methodologies. GHG emissions associated with the consumption of water as well as the generation of wastewater and solid waste were estimated using CalEEMod emission calculation methodologies. The consumption estimates are provided in Appendix 3.4-2. GHG emissions

⁴⁴ California Air Pollution Control Officers Association. 2020. *CalEEMod, Version 4.0*. Available: <http://www.caleemod.com/>. Accessed: March 17, 2022.

⁴⁵ California Air Resources Board. 2021. *California Emission FACTor Model*. Available: <https://arb.ca.gov/emfac/>. Accessed: March 17, 2022.

associated with the onsite consumption of electricity were assumed to be zero with implementation of Menlo Park Municipal Code Sections 16.43.140(2)(A) and 16.45.130(2)(A); GHG emissions associated with onsite consumption of natural gas conservatively were included in the estimates. All GHG calculations and modeling data are provided in Appendix 3.4-2.

Summary of Analysis in the ConnectMenlo EIR

- Impacts related to GHG emissions were analyzed in the ConnectMenlo EIR as Impact GHG-1 (pages 4.6-28 to 4.6-35). The EIR included an emissions inventory for ConnectMenlo scenarios in 2020 and 2040. Emissions were estimated for 2020 to evaluate consistency with AB 32, which established a statewide target for 2020. Emissions were also estimated for 2040, which is the planning horizon year for ConnectMenlo. For the near-term target year of 2020, the city's GHG emissions were projected to be less than emissions under existing conditions as a result of state and federal regulations. However, the ConnectMenlo Final EIR found that development of the area would result in a substantial increase in GHG emissions compared with existing conditions (pre-2020 target) by the horizon year (2040) and would not achieve the 2040 efficiency target (per service population), which is based on a trajectory that leads to the 2050 goal of 80 percent below 1990 levels. The policies identified in the Menlo Park General Plan, as well as the TDM program, other green building sustainability measures in the Menlo Park Zoning Ordinance, and ConnectMenlo EIR Mitigation Measure GHG-1 (which required the City to update the CAP), would reduce GHG emissions to the extent feasible. However, additional state and federal actions would be necessary to ensure that regulated state and federal sources (i.e., sources outside the City's jurisdiction) would achieve the deep reductions needed to meet the 2050 target. Therefore, the ConnectMenlo Final EIR considered GHG emissions to be significant and unavoidable.
- Impacts related to consistency with GHG plans, policies, or regulations were analyzed in the ConnectMenlo EIR as Impact GHG-2 (pages 4.6-35 to 4.6-45). The EIR evaluated ConnectMenlo's consistency with the state's GHG emissions reductions objectives, which are embodied in AB 32, Executive Order B-30-15, Executive Order S-03-05, and SB 375. The ConnectMenlo Final EIR determined that the applicable plans adopted for the purpose of reducing GHG emissions include the 2017 Scoping Plan, Plan Bay Area, and the City's 2030 CAP. The ConnectMenlo Final EIR found that ConnectMenlo would be consistent with the regional objectives of Plan Bay Area and the City's CAP, but it could not be shown to be consistent with CARB's most recent scoping plan for reducing statewide GHG emissions and/or the statewide GHG reduction target established by SB 32, which was signed in September 2016. However, the ConnectMenlo Final EIR pointed out that CARB had not yet drafted a plan to achieve the statewide GHG emissions targets stated in Executive Order S-03-05; therefore, although ConnectMenlo supports progress toward the long term-goals identified in Executive Order B-30-15 and Executive Order S-03-05, it cannot yet be demonstrated that Menlo Park would achieve GHG emissions reductions that would be consistent with a 40 percent reduction below 1990 levels by 2030 or be on the path to achieving further GHG reductions beyond 2030. Therefore, the ConnectMenlo Final EIR determined that the level of GHG emissions associated with implementation of ConnectMenlo would be significant and unavoidable.

Impacts and Mitigation Measures

Impact GHG-1a: Generation of GHG Emissions during Construction. Construction of the Proposed Project would not generate GHG emissions that may have a significant impact on the environment. (LTS)

Project-related construction activities, including parking lot and building demolition, building construction, and other onsite and offsite improvements, would generate GHG emissions. Specifically, heavy-duty off-road equipment operation, material transport, and workers' commutes during construction of the Proposed Project would result in GHG emissions from exhaust. Based on modeling conducted with CalEEMod methodologies, it is estimated that Project-related construction would generate approximately 23,050 MTCO_{2e} over the construction period (2021–2026) (see Appendix 3.4-2 for detailed input parameters and modeling results).⁴⁶

Demolition and construction activities for the Proposed Project would result in the temporary generation of GHG emissions. Emissions would originate from the exhaust of both mobile and stationary construction equipment as well as exhaust from construction workers' vehicles and haul trucks for demolition debris removal and vendors' trucks for deliveries. Site grading and excavation would be required for building foundations, utility infrastructure installation, and landscaping. Construction-related GHG emissions from each specific source would vary substantially, depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

As described above, BAAQMD has not established a threshold for assessing construction-related GHG emissions and has not proposed to establish one. Rather, BAAQMD recommends evaluating whether construction activities would conflict with statewide emission reduction goals in AB 32. AB 32 has been superseded by SB 32, whose targets will be met through implementing the programs in the Scoping Plan. The Scoping Plan does not contain any programs required to meet SB 32's targets that would be directly applicable to the Proposed Project's construction. As discussed in Table 3.6-7, below, the Proposed Project, including construction, would be consistent with the Scoping Plan's measures to reduce landfill waste through compliance with applicable waste diversion regulations and the fuel used in construction equipment would comply with statewide low-carbon fuel standards. Therefore, construction GHG emissions would not interfere with the attainment of the GHG reduction targets in SB 32 and impacts are less than significant without mitigation.

Even though no applicable regulatory authority (BAAQMD or the City) has an adopted threshold for construction GHG emissions, BAAQMD encourages the lead agency to incorporate BMPs to reduce GHG emissions during construction, as applicable. BAAQMD provides some examples of measures to reduce construction GHG emissions but does not have a list of BMPs necessary to meet a construction GHG threshold because BAAQMD does not provide such a threshold. Specifically, BAAQMD states that BMPs may include using alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet; using local building materials for at least 10 percent of a project; and recycling or reusing at least 50 percent of construction waste or demolition materials. CARB's 2017 Scoping Plan, Appendix B, also includes examples of potentially feasible measures that could be considered by local agencies to reduce GHG emissions during construction. As stated in Appendix B to the Scoping Plan, however, "[t]his appendix should be viewed as a general reference document. It should not be interpreted as official guidance or as dictating requirements for a city or county in addressing greenhouse gases (GHGs) in its General Plan or for local project CEQA mitigation."

⁴⁶ Construction was conservatively assumed to begin in 2021. This is a conservative assumption from a GHG standpoint because fleet turnover as it pertains to construction equipment results in older, more polluting equipment being gradually replaced by cleaner, more efficient equipment.

Pursuant to ConnectMenlo Mitigation Measure AQ-2b1, and as recommended by the Scoping Plan, the Proposed Project must minimize idling times during construction by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure). Clear signage must be provided for construction workers at all access points. In addition, consistent with BAAQMD's suggestion and Menlo Park Municipal Code requirements, the Proposed Project would divert (i.e., salvage, recycle, or compost rather than send to a landfill) at least 65 percent of both inert and non-inert nonhazardous demolition and construction waste, as required by Menlo Park Municipal Code Chapter 12, Sections 12.18 and 12.48.

To further reduce construction GHG emissions, the Project Sponsor would comply with feasible and practical construction-related measures suggested in Appendix B to the 2017 Scoping Plan and BMPs identified by BAAQMD.

The following Scoping Plan Appendix B measures and BAAQMD-recommended BMPs may be incorporated into the proposed project subject to review of feasibility and practicality based on the specifics of the Proposed Project, including but not limited to the architectural design, availability of technological advances in equipment, and general availability of construction equipment and/or materials. The following list of measures is not an exhaustive list; the City and the Project Sponsor would review the comprehensive list of potential measures in Appendix B of the Scoping Plan and the BAAQMD recommended BMPs and determine which measures are feasible and practical for each specific building permit, based on an analysis from the Project Sponsor team. Documentation of feasible and practical measures would be required as project conditions for each building permit through the conditional development permit:

- Instead of using fossil fuel-based generators for temporary jobsite power, grid-sourced electricity from PG&E or Peninsula Clean Energy shall be used to power tools (e.g., drills, saws, welders) as well as any temporary office buildings used by construction contractors. This measure shall be required during all construction phases, except demolition, site grubbing, site grading, and the installation of electric, water, and wastewater infrastructure. This measure shall be implemented during building framing and erection of new buildings, all interior work, and the application of architectural coatings. Electrical outlets shall be designed according to PG&E's Greenbook standards and placed in accessible locations throughout the construction site. The Project Sponsor, or its primary construction contractor, shall coordinate with the utility to activate a temporary service account prior to starting construction (with the exception of demolition) to the extent feasible and practical as determined by the City based on an analysis by the Project Sponsor.
- Require diesel equipment fleets to be lower emitting than any current emission standard (statewide average equipment fleet tier) to the extent feasible and practical as determined by the City based on an analysis by the Project Sponsor.⁴⁷
- Enforce idling time restrictions for construction vehicles.⁴⁸
- Minimize tree removal, and mitigate indirect GHG emissions increases that occur because of vegetation removal, loss of sequestration, and soil disturbance, to the extent feasible and practical as determined by the City based on an analysis by the Project Sponsor.⁴⁹

⁴⁷ Compliance with MM AQ-1.1 would satisfy this COA.

⁴⁸ Compliance with ConnectMenlo MM AQ-2b1 would satisfy this COA.

⁴⁹ The Proposed Project would necessitate tree removals but would comply with the City's tree replacement requirements.

- Use alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet, to the extent feasible and practical as determined by the City based on a feasibility analysis by the Project Sponsor.
- Use local building materials for at least 10 percent of all project construction, to the extent feasible and practical as determined by the City based on a feasibility analysis by the Project Sponsor
- Recycle or reuse at least 50 percent of construction waste or demolition materials.

Impact GHG-1b: Generation of GHG Emissions during Operation. Operation of the Proposed Project would generate GHG emissions that may have a significant impact on the environment. (LTS/M)

As described in the *Thresholds of Significance* section, the analysis separates operational non-mobile sources and operational mobile sources.

Operational GHG Emissions from Non-Mobile Sources

Operation of the Proposed Project would result in non-mobile-source GHG emissions. These would be associated with landscape maintenance, periodic testing and operation of backup diesel generators, offsite electricity consumption associated with supplying water as well as conveying and treating wastewater, and the generation of solid waste.

Building operational emissions, such as those related to energy use, water use, area sources, and solid waste, are evaluated against a net-zero threshold because a project that does not alter the existing environment has no impact on the environment.

GHG emissions associated with onsite consumption of electricity and natural gas would be netted out to zero, considering existing conditions and implementation of Menlo Park Municipal Code Sections 16.43.140(2)(A) and 16.45.130(2)(A), including the reduction in Project GHG emissions due to onsite renewable energy production. The amount of onsite renewable energy proposed is also anticipated to offset fossil fuel use associated with the routine testing of onsite diesel emergency generators. Emissions associated with existing conditions (2019), first year of Proposed Project full build-out operation (2026), and net conditions (2026 minus 2019) are summarized in Tables 3.6-3, 3.6-4, and 3.6-5, respectively. All GHG emissions for existing operations on the Project Site were calculated for 2019 because data from 2020 and 2021 might not be representative of future normal operations, given the reduced activity resulting from the COVID-19 pandemic. All detailed calculations are provided in Appendix 3.4-2.

As shown in Table 3.6-3, operation of the existing onsite buildings that are to be demolished generated approximately 2,511 MTCO_{2e} in 2019. As shown in Table 3.6-4, the Proposed Project's non-mobile operational GHG emissions during the first year of full buildout would be 1,453 MTCO_{2e} (in 2026). Net non-mobile operational GHG emissions (2026 minus 2019) would be -1,056 MTCO_{2e} per year, as shown in Table 3.6-5.

Because of the substantial reduction in natural gas use with the Proposed Project compared to existing conditions, non-mobile operational GHG emissions from the Proposed Project would be lower than the baseline condition. Furthermore, because the Proposed Project would not result in an increase in non-mobile operational GHG emissions, implementation of the Proposed Project would not contribute a significant amount of operational non-mobile-source GHG emissions to existing significant cumulative emissions. Accordingly, this impact would be *less than cumulatively considerable*.

Table 3.6-3. Non-Mobile-Source Operational Greenhouse Gas Emissions by Sector for Existing Conditions, 2019 (MTCO_{2e})

Emissions Source	Annual MTCO_{2e}
Landscape Maintenance (area source)	< 1
Electricity Consumption (onsite)	0
Natural Gas Consumption (onsite)	1,613
Backup Generators (stationary sources)	9
Solid Waste Disposal ^a	397
Water Consumption and Wastewater Treatment	492
Total Non-Mobile-Source Operational Emissions^b	(MTCO_{2e}/year) 2,511

Source: See Appendix 3.4-2 for detailed input parameters and modeling results.

Notes: MTCO_{2e} = metric tons of carbon dioxide equivalent

^a. The level of GHG emissions associated with solid waste disposal accounts for the waste diversion requirements mandated by state regulations (e.g., AB 341).

^b. Values may not add up because of rounding.

Table 3.6-4. Non-Mobile-Source Operational Greenhouse Gas Emissions by Sector for Full Buildout Conditions, 2026 (MTCO_{2e})

Emissions Source	Annual MTCO_{2e}
Landscape Maintenance (area source)	22
Electricity Consumption (onsite) ^b	[0]
Natural Gas Consumption (onsite)	118
Backup Generators (stationary sources)	399
Solid Waste Disposal ^a	698
Water Consumption and Wastewater Treatment	217
Total Non-Mobile-Source Operational Emissions^c	(MTCO_{2e}/year) 1,453

Source: See Appendix 3.4-2 for detailed input parameters and modeling results.

Notes: MTCO_{2e} = metric tons of carbon dioxide equivalent

^a. The level of GHG emissions associated with solid waste disposal accounts for the waste diversion requirements mandated by state regulations (e.g., AB 341).

^b. GHG emissions associated with onsite consumption of electricity would be offset with implementation of Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A) and 16.45.130(2)(A), which requires the Proposed Project to offset fully the GHG emissions associated with all onsite electricity on the main Project Site.

^c. Values may not add up because of rounding.

Table 3.6-5. Net Operational Non-Mobile-Source Greenhouse Gas Emissions (MTCO_{2e})

Total Emissions by Analysis Year	Annual MTCO_{2e}
Existing Conditions (2019)	2,511
Full Buildout (2026)	1,453
<i>Total Non-Mobile-Source Net (MTCO_{2e}/year) Operational Emissions^a</i>	-1,056

Source: See Appendix 3.4-2 for detailed input parameters and modeling results.
Notes: MTCO_{2e} = metric tons of carbon dioxide equivalent
a. Values may not add up because of rounding.

Operational GHG Emissions from Mobile Sources

Operation of the Proposed Project would result in mobile-source GHG emissions, which would be associated with vehicle trips to and from the Project Site (i.e., Project-generated VMT). GHG impacts from vehicles are evaluated using the City's VMT threshold. This threshold provides information on whether a project is consistent with applicable plans, including Plan Bay Area, and goals to reduce GHG emissions by reducing VMT. In addition, using the same VMT threshold for both transportation and mobile-source GHG impacts ensures consistency throughout the EIR.

The Proposed Project would develop and implement TDM programs with trip reduction measures that would reduce vehicle traffic in and around the Project Site. Together, the TDM measures and Mitigation Measure TRA-1 would meet the City's trip and VMT reduction targets. The Proposed Project would implement TDM programs for the Residential/Shopping District, the Town Square District, and the Campus District. These may include, but would not be limited to, the following measures:

- Improved biking/walking network
- Bicycle amenities
- Improved public transit service
- Car-share program
- Tram service
- Commuter shuttles
- Parking management
- Emergency ride-home program
- Carpool and vanpool programs
- Commute assistance center
- Onsite housing

In addition, the Proposed Project would offer an advanced EV charging program to Meta workers. EV charging in the Campus District is free, and valets move cars into chargers to maximize charging time. The Proposed Project would also install EV charging stations in the Residential/Shopping District and Town Square District.

The Proposed Project's mobile-source GHG emissions are anticipated to decrease in subsequent years (to buildout year 2026) as older vehicles are replaced with newer, more GHG-efficient vehicles. Ongoing

implementation of more stringent fuel efficiency standards and EV integration into the overall vehicle fleet will also decrease GHG emissions. Moreover, by following Menlo Park Municipal Code Section 12.18.080 (amending California Green Building Standards Code Chapter 5, Section 5.106.5.3), the Proposed Project would ensure that 15 percent of the parking stalls for passenger vehicles would be EV ready, thereby supporting the projected future vehicle fleet. Mobile-source operational GHG emissions under existing (2019), full buildout (2026), and net (Buildout 2026 minus Existing 2019) conditions are provided in Table 3.6-6.

Table 3.6-6. Net Operational Mobile Greenhouse Gas Emissions (MTCO_{2e})

Total Emissions by Analysis Year	Annual MTCO_{2e}
Existing (2019)	16,024
Full Buildout (2026)	32,790
<i>Total Net Operational Mobile- Source Emissions (MTCO_{2e}/year)^a</i>	16,766

Source: See Appendix 3.4-2 for detailed input parameters and modeling results.
Notes: MTCO_{2e} = metric tons of carbon dioxide equivalent
a. Values may not add up because of rounding.

As noted above, the Proposed Project would develop and implement TDM programs with trip reduction measures to reduce vehicle traffic in and around the Project Site. Because the Proposed Project would implement TDM measures and Mitigation Measure TRA-1 to meet the City's trip and VMT reduction targets, implementation of the Proposed Project would not contribute a significant amount of operational mobile-source GHG emissions to existing significant cumulative emissions. Accordingly, this impact would ***be less than cumulatively considerable with mitigation.***

A discussion of the Proposed Project's VMT relative to the City's VMT threshold is presented in Section 3.3, *Transportation*, of this EIR.

Conclusion

Mitigation Measure TRA-1, presented in Section 3.3, *Transportation*, would ensure that operation of the Proposed Project would achieve the City's VMT thresholds, thereby reducing associated operational mobile-source GHG emissions. In addition, because the Proposed Project would not result in an increase in operational non-mobile-source GHG emissions, the Proposed Project's operational GHG emissions would not constitute a cumulatively considerable contribution to significant cumulative climate change impacts. Therefore, this impact would be ***less than cumulatively considerable with mitigation.***

Impact GHG-2: Conflicts with Applicable Plans and Policies. The Proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs. (LTS/M)

Statewide Greenhouse Gas Reduction Targets and Plans

AB 32 and SB 32 outline the state's GHG emissions reduction targets for 2020 and 2030, respectively. Although not legislatively adopted, Executive Order S-03-05 establishes a long-term statewide goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. Executive Order B-55-18 sets a more ambitious state goal of net zero GHG emissions by 2045 while acknowledging the important role of carbon sequestration to meet this target.

Consistency with the CARB 2017 Scoping Plan

As explained in the *Regulatory Setting*, above, CARB’s 2017 Scoping Plan outlines the main strategies for California to achieve the legislated GHG emissions target for 2030 and “substantially advance toward our 2050 climate goals.”⁵⁰ It identifies the reductions needed by each GHG emissions sector (e.g., industry, transportation, electricity generation).

There are multiple ways to demonstrate that operation of the Proposed Project would be qualitatively consistent with CARB’s 2017 Scoping Plan. For example, Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A) and 16.45.130(2)(A), would require the Proposed Project on the main Project Site to use 100 percent renewable electricity or offset energy use from electricity from non-renewable sources, which the Proposed Project would do with onsite solar installations. This requirement would be consistent with the 2017 Scoping Plan’s call for the state to transition from fossil fuels to electricity from carbon-free sources. Furthermore, per the City’s reach code, natural gas usage would be limited to for-profit commercial kitchens serving uses open to the public, if an exception is granted by the Environmental Quality Commission. These zoning ordinance and reach code requirements recognize that the 2017 Scoping Plan calls for the state to be less reliant on natural gas (e.g., by designing buildings that are all electric or requiring all GHG emissions generated from onsite consumption of natural gas to be fully offset). In addition, the Proposed Project would follow Menlo Park Municipal Code Section 12.18.080 (amending California Green Building Standards Code, Chapter 5, Section 5.106.5.3), ensuring that a minimum of 15 percent of the parking spaces for passenger vehicles would be EV spaces, with another 10 percent designated as electric-vehicle supply equipment (EVSE), thereby supporting the projected future vehicle fleet. The 2017 Scoping Plan outlines the importance of converting the state’s vehicle fleet to EVs and other types of zero-emission technologies as well as building the infrastructure needed to support these vehicles. Furthermore, a consistency analysis that considers the primary objectives found in the 2017 Scoping Plan is provided in Table 3.6-7. As demonstrated in Table 3.6-7, the Proposed Project would be consistent with the objectives.

Table 3.6-7. Project Consistency with Policies from the 2017 Scoping Plan (Appendix B) and Other Applicable Statewide Measures

Policy	Primary Objective	Project Consistency Analysis
SB 350 (superseded by SB 100)	Reduce GHG emissions in the electricity sector by implementing the 50 percent RPS, doubling energy savings, and taking other actions as appropriate to achieve the planning targets regarding GHG emissions reductions in the Integrated Resource Plan process.	Consistent. This is a state program that requires no action at the local or project level. Benefits Project-related electricity and water consumption. The Proposed Project on the main Project Site would implement Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A) and 16.45.130(2)(A), which would require 100 percent renewable energy and/or offsets of energy use from non-carbon-free sources of energy and therefore help reduce GHG emissions from electrical sources.
Low-Carbon Fuel Standard	Transition to cleaner/less-polluting fuels that have a lower carbon footprint.	Consistent. This is a state program that requires no action at the local or project level. Benefits Project-related vehicle travel. The Proposed Project would follow Menlo Park Municipal Code Section 12.18.080 (amending California Green Building Standards Code Chapter 5, Section 5.106.5.3), which requires 15 percent of parking spaces to be EV spaces and 10 percent to be EVSE spaces.

⁵⁰ Ibid.

Policy	Primary Objective	Project Consistency Analysis
Mobile-Source Strategy (Cleaner Technologies and Fuels Scenario) SB 1383	Reduce GHGs and other pollutants from the transportation sector through a transition to zero- and low-emission vehicles, cleaner transit systems, and reductions in VMT. Approve and implement an SLCP strategy to reduce highly potent GHGs.	Consistent. This is a state program that requires no action at the local or project level. The Proposed Project would incorporate TDM measures and Mitigation Measure TRA-1 to reduce the number of vehicle trips. Consistent. This is a state program that requires no action at the local or project level. The Proposed Project would comply with the City’s construction waste diversion requirements, which meet or exceed the state requirement for a 65 percent construction waste diversion, as codified in CALGreen. The Proposed Project would also be consistent with AB 341, which requires 75 percent of the Proposed Project’s operational solid waste to be reduced, recycled, or composted.
California Sustainable Freight Action Plan	Improve freight efficiency, transition to zero-emission technologies, and increase the competitiveness of California’s freight system.	Not Applicable. This is a state program that requires no action at the local or project level. This program aims to improve freight efficiency by 25 percent, deploy more than 100,000 zero-emission freight vehicles, and increase the competitiveness of California’s freight system. The Proposed Project would not involve freight vehicles.
Post-2020 Cap-and-Trade Program	Reduce GHGs across the largest GHG emission sources.	Not Applicable. This a state program that requires no action at the local or project level. This program is not directly applicable to the Proposed Project because the Proposed Project is not a gross emitter of non-mobile-source GHG emissions and does not fall under the Cap-and-Trade Program.

Source: California Air Resources Board. 2017. *California’s 2017 Climate Change Scoping Plan*. November. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed: November 3, 2021.

As described under Impact GHG-1b, the Project Sponsor would ensure that the Proposed Project’s operational GHG emissions from non-mobile sources would be net zero, which would exceed the statewide target for 2030 mandated by SB 32. In addition, as shown in Table 3.6-7, the Proposed Project would be consistent with the primary objectives of the 2017 Scoping Plan. The analysis presented under Impact GHG-1b indicates that operation of the Proposed Project would not conflict with implementation of CARB’s 2017 Scoping Plan or attainment of the statewide GHG target for 2030 mandated by SB 32.

Consistency with Plan Bay Area 2040 and 2050

Plan Bay Area 2040, the RTP/SCS for the San Francisco Bay Area, was prepared by the MTC pursuant to the requirements of SB 375, as discussed in the *Regulatory Setting*, above. Plan Bay Area 2040 is a state-mandated, integrated long-range transportation and land use plan that demonstrates reductions in GHG

emissions from passenger cars and light-duty trucks.⁵¹ Plan Bay Area 2050 carries forward many of the development and funding strategies of Plan Bay Area 2040. As explained in Section 3.3, *Transportation*, the Proposed Project would be consistent with Plan Bay Area 2040 and 2050 goals and performance targets for transportation system effectiveness. Specifically, the Proposed Project would increase the mode share for non-auto forms of transportation.

The Proposed Project's buildings on the main Project Site would be entirely electrically powered, with the exception of for-profit commercial culinary uses. The Proposed Project would offer an advanced EV charging program to Meta workers. EV charging in the Campus District is free, and valets move cars into chargers to maximize charging time. The Proposed Project would also install EV charging stations in the Residential/Shopping District. The Proposed Project would implement TDM programs for the Campus District and the Town Square/Residential Districts that may include, but would not be limited to, the following measures:

- Improved biking/walking network
- bicycle amenities
- Improved public transit service
- Car-share program
- Tram service
- Commuter shuttles
- Parking management
- Emergency ride-home program
- Carpool and vanpool programs
- Commute assistance center
- Onsite housing

The Proposed Project would demolish existing office, industrial, and warehouse buildings on the main Project Site and develop a new mixed-use neighborhood with up to 1,730 residential units, neighborhood-serving retail uses, office space, a hotel, new bicycle and pedestrian connections, and open space (including a Publicly Accessible Park, Dog Park, Elevated Park, and Town Square District) near existing residential and commercial uses, thereby reducing the demand for travel by single-occupancy vehicles. Furthermore, the Proposed Project would develop and implement TDM programs with trip reduction measures that would reduce vehicle traffic in and around the Project Site. Together, the TDM measures and Mitigation Measure TRA-1 would meet the City's trip and VMT reduction targets. The Proposed Project's bicycle and pedestrian facilities would also help reduce the demand for travel in single-occupancy vehicles. Through consistency with Plan Bay Area 2040 and 2050, the Proposed Project would fulfill one of the strategies identified in the 2017 Scoping Plan related to reducing GHG emissions from passenger vehicles.

⁵¹ California Air Resources Board. 2018a. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*. Approved: March 22, 2018. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: November 3, 2021.

Consistency with the City of Menlo Park Climate Action Plan

The most recent update to the City’s CAP, the 2030 CAP, was adopted in April 2021.⁵² The 2030 CAP updated emissions inventories and adopted a climate goal that calls for net zero carbon by 2030. The CAP also aims for a 90 percent reduction in CO₂e emissions from 2005 levels by 2030. To achieve GHG reductions, the CAP promotes six different goals. Table 3.6-8 discusses the Proposed Project’s consistency with the six 2030 CAP goals. As discussed in Table 3.6-8, the Proposed Project would be consistent with the goals of the 2030 CAP.

Table 3.6-8. City of Menlo Park 2030 Climate Action Plan

2030 Climate Action Plan Goals	Project Consistency
1. Explore policy/program options to convert 95 percent of existing buildings to all-electric buildings by 2030.	Consistent/Not Applicable. The Proposed Project is new construction and would not convert any existing buildings. However, the Proposed Project on the main Project Site would be consistent with Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A) and 16.45.130(2)(A), which requires the Project Sponsor to meet 100 percent of energy demand (electricity and natural gas) through any combination of four measures, including purchasing 100 percent renewable electricity through Peninsula Clean Energy or PG&E and implementing onsite solar generation to offset energy use associated with non-carbon-free energy, as proposed by the Project.
2. Set citywide goals for increasing electric-vehicle sales to 100 percent of new vehicle sales by 2025 and decreasing gasoline sales 10 percent a year from a 2018 baseline.	Consistent. The Proposed Project would follow Menlo Park Municipal Code Section 12.18.080 (amending California Green Building Standards Code Chapter 5, Section 5.106.5.3), which requires 15 percent of all parking spaces to be EV spaces and 10 percent to be designated EVSE.
3. Expand access to electric-vehicle charging for multi-family and commercial properties.	Consistent. As discussed in Goal 2, 15 percent of the Proposed Project’s parking spots would be EV spaces, with 10 percent designated EVSE.
4. Reduce vehicle miles traveled by 25 percent or an amount recommended by the Complete Streets Commission	Consistent. As discussed in Section 3.3, Transportation, the Proposed Project would comply with the complete streets policy requirements of Caltrans and MTC. In addition, as discussed in Section 3.4, Air Quality, the Proposed Project would incorporate TDM measures and Mitigation Measure TRA-1 to reduce the number of trips and VMT. The Project’s TDM program may include, but are not limited to, the following measures: <ul style="list-style-type: none"> • Improved biking/walking network • Bicycle amenities • Improved public transit service • Car-share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program

⁵² Ibid.

2030 Climate Action Plan Goals	Project Consistency
	<ul style="list-style-type: none"> • Carpool and vanpool programs • Commute assistance center • Onsite housing <p>The TDM program would meet City of Menlo Park Municipal Code TDM requirements. The Project would also add new retail and a grocery store to an area that lacks these resources.</p>
<p>5. Eliminate the use of fossil fuels from municipal operations.</p>	<p>Consistent/Not Applicable. The Proposed Project has no control over municipal operations and therefore would not conflict with this measure.</p>
<p>6. Develop a climate adaptation plan to protect the community from sea-level rise and flooding.</p>	<p>Consistent/Not Applicable. The Proposed Project would not conflict with the City’s goal to develop a climate adaptation plan. However, the Proposed Project is incorporating resiliency with respect to sea-level rise and flooding into its civil plan for the main Project Site and Hamilton Avenue Parcel South. (Depending on the scope of any future construction for Hamilton Avenue Parcel North, sea-level rise and flooding resiliency may be incorporated.) As part of the design effort for these sites, building finished floor elevations will be proposed to meet City of Menlo Park codes and accommodate a future rise in sea levels:</p> <ul style="list-style-type: none"> • Proposed buildings will have a minimum finished floor elevation of at least 13 feet NAVD88, which is 2 feet above the base flood elevation, and be set high enough so that site adaptations will not be necessary for even the highest estimates of sea-level rise for the useful life of the Project. • The entire project storm drain system is designed to drain to the City storm drain main in Willow Road, which in turn drains to the Ravenswood Pump Station (operated by the California Department of Transportation) northeast of the main Project Site along Bayfront Expressway. The storm drain system is therefore not hydraulically connected to the Bay and will not be impacted by sea-level rise.
<p>Source: City of Menlo Park. 2020. <i>Climate Change Action Plan</i>. Available: http://www.menlopark.org/305/Climate-Action-Plan. Accessed: November 3, 2021.</p>	

Consistency with the City of Menlo Park General Plan and Reach Codes

As discussed above, the Proposed Project would be consistent with the ConnectMenlo EIR and City reach codes. Specifically, for GHG emissions, the Proposed Project on the main Project Site would follow Menlo Park Municipal Code Chapter 16, Sections 16.43.140(2)(A) and 16.45.130(2)(A), which requires new construction in the O and R-MU zoning districts to meet 100 percent of energy demand (electricity and natural gas) through any combination of four measures, including purchasing 100 percent renewable electricity through Peninsula Clean Energy or PG&E and providing onsite solar generation to offset energy

use associated with non-carbon-free energy, as proposed by the Project. The Proposed Project would comply with the City's reach code and limit the use of natural gas onsite to commercial kitchens, subject to the Environmental Quality Commission granting an exception. If an exception is granted, the amount of natural gas usage would need to be offset through the requirements presented above. In addition, the Proposed Project would follow Menlo Park Municipal Code Section 12.18.080 (amending California Green Building Standards Code Chapter 5, Section 5.106.5.3), which requires 15 percent of the parking spaces to be EV spaces and 10 percent to be designated EVSE. Therefore, the Proposed Project would be consistent with City General Plan goals and reach codes.

Conclusion

In summary, the quantitative efficiency of operations associated with the Proposed Project would be aligned with the statewide GHG target for 2030 mandated by SB 32 as well as Menlo Park Municipal Codes that require onsite or offsite renewable energy generation, the use of 100 percent renewable electricity, and/or renewable energy credits and/or certified renewable energy offsets. The City's reach code would significantly limit the onsite combustion of natural gas (an exception could be granted from the reach code by the Environmental Quality Commission for onsite commercial kitchens to use natural gas in their cooking facilities). If any natural gas is permitted to be used, the amount would be offset through the requirements presented above. The Menlo Park Municipal Code requires a minimum of 15 percent of the parking spaces for passenger vehicles to be EV spaces, with another 10 percent designated EVSE, thereby supporting the projected future vehicle fleet. Also, the Proposed Project would be consistent with Plan Bay Area 2040 and 2050, which are regional plans to reduce per-service-population VMT in the San Francisco Bay Area.

Mitigation Measures and Summary.

No mitigation measures are required to achieve net-zero non-mobile-source operational emissions. Implementation of Mitigation Measure TRA-1, which is presented in Section 3.3, *Transportation*, would ensure that operation of the Proposed Project would achieve the City's VMT thresholds, thereby reducing associated operational mobile-source GHG emissions.

Construction and operation of the buildings associated with Proposed Project would be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The buildings would meet a net-zero operational GHG threshold. Implementation of Mitigation Measure TRA-1 would ensure that operation of the Proposed Project would result in a level of VMT that would meet the City's VMT thresholds. For these reasons, implementation of Mitigation Measure TRA-1 would result in the Proposed Project being consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions, thereby reducing this impact to ***less than cumulatively considerable with mitigation.***

Cumulative Impacts

As stated in Section 4.6, *Greenhouse Gas Emissions* of the ConnectMenlo EIR, climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where they are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, consistent with the ConnectMenlo EIR, GHG impacts are inherently cumulative, and the analysis above is inclusive of cumulative impacts.