

4.7 Greenhouse Gas Emissions

This section evaluates the potential for impacts on greenhouse gas (GHG) emissions resulting from implementation of The Cubes at Placentia Industrial Project (Proposed Project). Information presented in this section is primarily based on the Placentia Avenue Industrial Air Quality, Global Climate Change, Health Risk Assessment, and Energy Impact Analysis (Air Quality Impact Analysis) prepared by Ganddini Group (2024) and included in Appendix B of this Environmental Impact Report (EIR). References used in preparation of this section are listed in Chapter 8, References.

No comments were received in response to the Notice of Preparation regarding greenhouse gas emissions. However, at the December 19, 2023, Draft EIR public scoping meeting, general comments regarding air pollution and greenhouse gas emissions were made.

4.7.1 Environmental Setting

The following sections describe the environmental setting for the Proposed Project as it relates to GHG emissions.

4.7.1.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address GHG emissions.

Federal

Safer Affordable Fuel-Efficient Vehicles Part One: National Program

The Safer Affordable Fuel-Efficient (SAFE) Rule, adopted by the U.S. Environmental Protection Agency (EPA) in September 2019, revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California. The SAFE Rule affects California's federally approved on-road mobile source emissions inventory model (Emission Factor (EMFAC), which reflects California-specific driving and environmental conditions, fleet mix, and the impact of California's unique mobile source regulations, such as the Low-Emission Vehicle (LEV) program, including the LEV II and LEV III standards; California inspection and maintenance programs; and California's in-use diesel fleet rules.

Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the U.S. Supreme Court held in April of 2007 that the EPA has statutory authority under Section 202 of the federal Clean Air Act to regulate GHGs. The court did not hold that the EPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or

contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. The EPA adopted a Final Endangerment Finding for the six defined GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) on December 7, 2009. The Endangerment Finding is required before the EPA can regulate GHG emissions under Section 202(a)(1) of the Clean Air Act consistently with the Supreme Court decision. The EPA also adopted a Cause or Contribute Finding in which the EPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President George W. Bush signed Executive Order 13432 on May 14, 2007, directing the EPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards.

U.S. Environmental Protection Agency

The EPA is responsible for implementing federal policy to address global climate change. In 2009, the EPA issued a Final Rule for mandatory reporting of GHG emissions, which applies to fossil fuel and industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and requires annual emissions reporting. This rule does not regulate the emission of GHGs; it only requires the monitoring and reporting of GHG emissions for those sources above certain thresholds.

State

Assembly Bill 32 and Senate Bill 32: California Global Warming Solutions Act

Assembly Bill (AB) 32 requires the California Air Resources Board (CARB) to reduce statewide GHG emissions to 1990 levels by 2020. As part of this legislation, CARB was required to prepare a "Scoping Plan" that demonstrates how the state will achieve this goal. The first Scoping Plan was adopted in 2011 and describes local governments as "essential partners" in meeting the statewide goal, recommending a GHG reduction level 15 percent below 2005–2008 levels (depending on when a full emissions inventory is available) by 2020.

CARB released the 2017 Scoping Plan Update on January 20, 2017. The 2017 Scoping Plan Update provides strategies for achieving the 2030 target established by Executive Order (EO) B-30-15 and codified in Senate Bill (SB) 32 (40 percent below 1990 levels by 2030). The 2017 Scoping Plan Update recommends local plan-level GHG emissions reduction goals. CARB recommends that local governments aim to achieve emissions of no more than 6 metric tons of carbon dioxide equivalents (MTCO_{2e}) per capita by 2030 and no more than 2 MTCO_{2e} per capita by 2050.

Assembly Bill 341: Commercial Recycling

AB 341 sets a statewide goal of 75 percent recycling, composting, or source reduction of solid waste by the year 2020. As required by AB 341, the California Department of Resources Recycling and Recovery (CalRecycle) adopted the Mandatory Commercial Recycling Regulation on January 17, 2012. The regulation was approved by the Office of Administrative Law on May 7, 2012. It became effective immediately and clarified the responsibilities in implementing mandatory commercial recycling. The Mandatory Commercial Recycling Regulation focuses on increased commercial waste diversion as a method to reduce GHG emissions. The regulation is designed to achieve a 5 million MTCO₂ reduction in GHG emissions, which equates to roughly an additional 2–3 MTCO₂ of currently disposed commercial solid waste being recycled by 2020 and thereafter.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the California Energy Commission (CEC) to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other state, federal, and local agencies. The State Alternative Fuels Plan presents strategies and actions that California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The State Alternative Fuels Plan assesses various alternative fuels and develops fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 1493: Clean Car Standards

Also known as “Pavley I,” AB 1493 standards were the nation's first GHG standards for automobiles. AB 1493 requires CARB to adopt vehicle standards that lower GHG emissions from new light-duty automobiles to the maximum extent feasible. In January 2012, CARB adopted the Advanced Clean Cars Program to achieve additional GHG emissions reductions for passenger vehicles for model years 2017–2025. The program includes LEV regulations and zero-emission vehicle regulations. Together, the two standards increased average fuel economy to roughly 43 miles per gallon in 2020 (and more for years beyond 2020). However, the SAFE Rule, adopted by

the EPA in September 2019 and detailed above, affects California's federally approved on-road mobile source emissions standards. CARB prepared off-model adjustment factors for both on-road mobile source emissions inventory model (EMFAC) 2014 and EMFAC 2017 to account for the impacts of the SAFE Rule (CARB 2024).

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

California Code of Regulations Title 24, Part 6

California Code of Regulations, Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings), was established in 1978 to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although the standards were not originally intended to reduce GHG emissions, electricity production by fossil fuels and natural gas use result in GHG emissions, and energy-efficient buildings require less electricity and natural gas. Therefore, increased energy efficiency results in decreased GHG emissions.

The CEC adopted its 2008 Standards on April 23, 2008, in response to AB 32. The 2008 Standards were adopted to (1) provide California with an adequate, reasonably priced, and environmentally sound supply of energy; (2) pursue California energy policy, which states that energy efficiency is the resource of first choice for meeting California's energy needs; (3) meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes every 3 years; and (4) meet the requirements of EO B-18-12 and those in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards. The latest update of the California Code of Regulations, Title 24, Part 6, which went into effect on January 1, 2023, significantly increases the energy efficiency of new residential and non-residential buildings.

California Green Building Standards Code (California Code of Regulations, Title 24, Part 11)

The California Green Building Standards Code (CALGreen) was adopted in 2010 and went into effect on January 1, 2011. Further updates to CALGreen went into effect on January 1, 2017, and January 1, 2020. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen reduce the use of volatile organic compound-emitting materials, strengthen water conservation, and require construction waste recycling. The latest 2022 update of the CALGreen Code went into effect on January 1, 2023. The 2022 CALGreen Code

mandatory measures for nonresidential uses that reduce GHG emissions and are applicable to the Proposed Project include, but are not limited to, the following:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106.5.3.1 (5.106.5.3). Additionally, Table 5.106.5.5.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, office buildings, manufacturing facilities, and retail stores.
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).

- Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELo), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is projected to consume more than 1,000 gallons per day (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 square feet. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit (5.304.3).

The 2022 CALGreen Building Standards Code has been adopted in Perris Municipal Code Section 16.08.050. The 2025 CALGreen Code takes effect on January 1, 2026 and the Project would be required to comply with the CALGreen Code standards that are in effect at the time that the building permits are approved.

Executive Order B-30-15: 2030 Greenhouse Gas Emissions Reduction Target

On April 29, 2015, Governor Jerry Brown announced through EO B-30-15 the following GHG emissions target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels.

The emissions reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by

2050. The EO directs CARB to provide a plan with specific regulations to reduce statewide sources of GHG emissions. EO B-30-15 does not include a specific guideline for local governments.

Executive Order N-79-20: Zero-Emission Vehicles

EO N-79-20, signed by Governor Gavin Newsom on September 23, 2020, directs the state to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles to reduce transportation GHG emissions, the primary source of emissions in the state. Following the EO, CARB will develop regulations to mandate that 100 percent of in-state sales of new passenger cars and trucks are zero emission by 2035 and that all operations of medium- and heavy-duty vehicles shall be 100 percent zero emission by 2045 where feasible.

Executive Order S-01-07: Low Carbon Fuel Standard

In 2007, Governor Arnold Schwarzenegger signed EO S-01-07, which mandates (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and (2) that a low carbon fuel standard (LCFS) for transportation fuels be established in California. CARB developed the LCFS regulation pursuant to the state's authority under AB 32 and the federal Clean Air Act and adopted it in 2009.

Executive Order S-06-06: Biofuel and Biopower Production Targets

EO S-06-06, signed on April 25, 2006, by Governor Schwarzenegger, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 plan and provides a more detailed action plan to achieve the following goals (BIWG 2012):

- Increase environmentally and economically sustainable energy production from organic waste;
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- Create jobs and stimulate economic development, especially in rural regions of the state; and
- Reduce fire danger, improve air and water quality, and reduce waste.

As of 2016, 2.7 percent of the total electricity system power in California was derived from biomass.

Executive Order S-3-05: Greenhouse Gas Emissions Reduction Targets

On June 1, 2005, Governor Schwarzenegger announced, through EO S-3-05, the following GHG emissions targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also laid out state agencies' responsibilities for implementation and reporting on progress toward these targets.

Senate Bill 32 and Assembly Bill 197

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and includes provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

Senate Bill 97: California Environmental Quality Act Greenhouse Gas Emissions

SB 97, enacted in 2007, amended the California Environmental Quality Act (CEQA) statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. The legislation directed the California Governor's Office of Planning and Research to develop Draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the resources agency to certify and adopt the State CEQA Guidelines. State CEQA Guidelines, Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the State CEQA Guidelines amendments that became effective in 2010 and describes the criteria needed in a GHG reduction plan that would allow for tiering and streamlining of CEQA analysis for development projects.

Senate Bill 350: California Renewables Portfolio Standards Program

The California Renewables Portfolio Standards program was established in 2002 under SB 1078 and accelerated in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by renewable energy sources by 2010. Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020, and on November 17, 2008, Governor Schwarzenegger signed EO S-14-08, requiring electricity retailers to serve 33 percent of their load with renewable energy by 2020. In April 2011, SB X1-2 codified EO S-14-08, setting the new Renewables Portfolio Standards targets at 20 percent by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020 for electricity retailers. Most recently, Governor Brown signed SB 350 in October 2015, which extended the Renewables Portfolio Standards target by

requiring retail sellers to procure 50 percent of their electricity from renewable energy resources by 2030.

Senate Bill 375: Sustainable Communities Strategy

SB 375 was adopted in 2008 and provides a new planning process that coordinates land use planning, Regional Transportation Plans, and funding priorities to help California meet the GHG reduction goals established in AB 32. SB 375 requires Regional Transportation Plans, developed by Metropolitan Planning Organizations, to incorporate a Sustainable Communities Strategy in their Regional Transportation Plans. The goal of the Sustainable Communities Strategy is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development.

Senate Bill 1368

SB 1368 is the companion Bill of AB 32 and was adopted September 2006. SB 1368 requires the California Public Utilities Commission to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007, and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by California Public Utilities Commission and CEC.

Regional

South Coast Air Quality Management District

The Project Site is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (AQMD).

South Coast AQMD Regulation XXVII, Climate Change

Rules 2700 and 2701

The South Coast AQMD adopted Rules 2700 and 2701 on December 5, 2008, which establishes the administrative structure for a voluntary program designed to quantify GHG emission reductions. Rule 2700 establishes definitions for the various terms used in Regulation XXVII – Global Climate Change. Rule 2701 provides specific protocols for private parties to follow to generate certified GHG emission reductions for projects within the South Coast Air Basin. Approved protocols include forest projects, urban tree planting, and manure management. The South Coast AQMD is currently developing additional protocols for other reduction measures. For a GHG emission reduction project to qualify, it must be verified and certified by the South Coast AQMD Executive Officer, who has 60 days to approve or deny the Plan to reduce GHG emissions.

Upon approval of the Plan, the Executive Officer issues required to issue a certified receipt of the GHG emission reductions within 90 days.

Rule 2702

The South Coast AQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which South Coast AQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the South Coast AQMD Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a federal cap and trade program.

Rule 3002

The South Coast AQMD amended Rule 3002 on November 5, 2010 to include facilities that emit greater than 100,000 tons per year of CO₂e are required to apply for a Title V permit by July 1, 2011. A Title V permit is for facilities that are considered major sources of emissions.

SCAQMD Threshold Development

For GHG emissions and global warming, there is currently no established, universally agreed-upon "threshold of significance" by which to measure an impact. A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects within the jurisdiction of the South Coast AQMD remain in flux. The California Air Pollution Control Officers Association explored a variety of threshold approaches but did not recommend one approach (CAPCOA 2008). CARB recommended approaches for setting interim significance thresholds (CARB 2008), in which a draft industrial project threshold suggests that non-transportation related emissions under 7,000 MTCO₂e per year would be less than significant; however, CARB has not approved those thresholds and has not published anything since then. The South Coast AQMD has explored the development of significance thresholds, as discussed below.

The South Coast AQMD has been evaluating GHG significance thresholds since April 2008. On December 5, 2008, the South Coast AQMD Governing Board adopted an interim greenhouse gas significance threshold of 10,000 MTCO₂e for stationary sources, rules, and plans where the SCAQMD is lead agency (South Coast AQMD permit threshold).

The South Coast AQMD has continued to consider the development and adoption of significance thresholds for residential and general development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses (South Coast AQMD draft local agency threshold):

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a locally adopted GHG reduction plan. If a project is consistent with a qualifying locally adopted GHG reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening thresholds, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
 - Option 1
 - All industrial projects: 10,000 MTCO₂e per year. Based on non-industrial land use type: residential: 3,500 MTCO₂e per year; commercial: 1,400 MTCO₂e per year; or mixed-use: 3,000 MTCO₂e per year.
 - Option 2
 - All non-industrial land use types: 3,000 MTCO₂e per year.

The thresholds identified above have not been adopted by the South Coast AQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain. If CARB adopts statewide significance thresholds, South Coast AQMD staff plan to report back to the South Coast AQMD Governing Board regarding any recommended changes or additions to the South Coast AQMD's interim threshold. The only update to the South Coast AQMD's GHG thresholds since 2010 is that the 10,000 MTCO₂e per year threshold for industrial projects is now included in the South Coast AQMD's March 2023 South Coast AQMD Air Quality Significance Thresholds document that is published for use by local agencies.

In the absence of other thresholds of significance promulgated by the South Coast AQMD, the City of Perris has been using the South Coast AQMD's 10,000 MTCO₂e per year threshold for industrial projects and the draft thresholds for nonindustrial projects the purpose of evaluating the GHG impacts associated with proposed general development projects. This approach is consistent with State CEQA Guidelines. Section 15064.7(b), which states that “a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” The South Coast AQMD is the regional authority on air emissions and has published documentation for threshold development (South Coast AQMD 2008). Although the AB 32 target of reducing statewide emissions to 1990 levels by 2020 was the primary state goal at the time of the South Coast AQMD threshold development, the South Coast AQMD also determined that the interim thresholds would contribute to achieving the Executive Order S-3-

05 goal of reducing emissions to 80 percent below 1990 levels by 2050. SB 32 adopted an interim threshold of 40 percent reduction from 1990 levels by 2030 to put the state on track to achieve the S-3-05 2050 target. The S-3-05 target has been superseded by the AB 1279 goal of an 85 percent reduction in anthropogenic emissions from 1990 levels by 2045. However, the 2020 Scoping Plan states that the SB 32 2030 reduction target remains a critical step to achieving the AB 1279 target. Additionally, the Scoping Plan acknowledges that new technologies and statewide policies would be required to achieve the AB 1279 target beyond 2030, such as increased emissions reduction standards and increased use of zero-emissions vehicles. As such, a goal of 85 percent reduction from 1990 levels or net-zero GHG emissions is not prescribed as a local target or threshold. The 2030 interim target remains an appropriate threshold for local agencies to achieve a fair share reduction toward statewide emissions reduction goals. As such, the City of Perris and other lead agencies throughout the basin continue to apply the South Coast AQMD adopted and draft thresholds. The City's evaluation of impacts under the 10,000 MTCO₂e per year threshold is also considered to be conservative since it is being applied to all of the GHG emissions generated by the Proposed Project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the South Coast AQMD's adopted 10,000 MTCO₂e per year threshold applies only to the new stationary sources generated at industrial facilities.

Local

City of Perris CAP

The City of Perris Climate Action Plan (CAP) was completed in February 2016. The Perris CAP was developed to address global climate change through the reduction of harmful greenhouse gas emissions at the community level and as part of California's mandated statewide GHG reduction goal (AB 32). Through the Perris CAP, the city has developed multiple sustainable strategies to directly benefit the community by decreasing carbon emissions while adapting to a changing climate. The programs and actions provided in the Perris CAP were developed to help the city grow healthily, resourcefully, and sustainably.

4.7.1.2 Existing Conditions

Global Climate Change Overview

Climate change refers to any substantial change in measures of climate (such as temperature, precipitation, or wind) lasting for decades or longer. Earth's climate has changed many times during the planet's history, including events ranging from ice ages to long periods of warmth. Historically, natural factors, such as volcanic eruptions, changes in Earth's orbit, and the amount of energy released from the sun, have affected Earth's climate. Some GHGs, such as water vapor, occur naturally and are emitted to the atmosphere through natural processes, while others are emitted through human activities. Beginning in the late 18th century, human activities associated

with the Industrial Revolution changed the composition of the atmosphere and, therefore, very likely influenced Earth's climate.

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat-trapping effects of GHGs, Earth's temperature would be approximately 86 degrees Fahrenheit (°F) cooler (Riebeek 2010). However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of GHGs in the atmosphere beyond the level of naturally occurring concentrations.

The Global Carbon Project (2020) released an update of the global carbon budget for the year 2019. The atmospheric carbon dioxide (CO₂) concentration in 2019 was 410 parts per million (ppm), 48 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). Global GHG emissions experienced an unprecedented drop in 2020 but are likely to rebound in 2021. It is projected that global fossil fuel CO₂e emissions in 2021 will rebound 4.9 percent compared to 2020 to 36.4 billion MTCO₂e, returning to nearly 2019 emission levels of 36.7 billion MTCO₂e. The annual mean growth rate of atmospheric CO₂ has shown a steady increase. The highest growth rates since 1960 occurred in 1987, 1998, and 2015–2016, even reflecting a strong El Niño, which weakens the land sink effect (Jackson et al. 2021).

Greenhouse Gases

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. The following gases are widely seen as the principal contributors to human-induced global climate change:¹

- CO₂
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions increase GHG concentrations in the atmosphere and enhance the natural greenhouse effect, which scientists believe can cause global warming. While GHGs produced by human activities include naturally occurring GHGs (e.g., CO₂, methane, and nitrous oxide), some gases (e.g., hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) are completely new to the atmosphere. Certain other gases (e.g., water vapor) are short lived in the atmosphere compared to these GHGs, which remain in the atmosphere for significant periods of

¹ The GHGs listed are consistent with the definition in Assembly Bill (AB) 32 (California Government Code, Section 38505), as discussed in this section.

time and contribute to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For the purposes of this EIR, the term “GHGs” will refer collectively to the six gases identified in the bulleted list provided above. The following discussion summarizes the characteristics of the six primary GHGs.

Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; decomposition of organic matter; and evaporation from the oceans. Human-caused sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Earth maintains a natural carbon balance, and when concentrations of CO₂ are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO₂ to the atmosphere. Natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of human-made CO₂, and consequently, the gas is building up in the atmosphere. The concentration of CO₂ in the atmosphere has risen approximately 30 percent since the late 1800s.

Methane

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of methane include fires, geologic processes, and bacteria that produce methane in a variety of settings (most notably wetlands). Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (e.g., the burning of coal, oil, and natural gas). As with CO₂, the major removal process of atmospheric methane (a chemical breakdown in the atmosphere) cannot keep pace with source emissions, and methane concentrations in the atmosphere are increasing.

Nitrous Oxide

Nitrous oxide is produced naturally by a variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is also a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion sources emit nitrous oxide. The quantity of nitrous oxide emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated nitrous oxide emissions in the state.

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

Hydrofluorocarbons are primarily used as substitutes for ozone (O₃)-depleting substances regulated under the Montreal Protocol.² Perfluorocarbons and sulfur hexafluoride are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. No aluminum or magnesium production occurs in the State of California; however, rapid growth in the semiconductor industry, which is active in the state, has led to greater use of perfluorocarbons.

Global Warming Potential

The GHGs described previously vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another GHG. GWP is based on several factors, including the relative effectiveness of a GHG in absorbing infrared radiation and the length of time that the GHG remains in the atmosphere (referred to as “atmospheric lifetime”). The GWP of each GHG is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of metric tons³ (MT) of CO₂e. For example, nitrous oxide is 25 times more potent at contributing to global warming than CO₂. Table 4.7-1, Global Warming Potential for Selected Greenhouse Gases, identifies the GWP for each relevant GHG.

Table 4.7-1. Global Warming Potential for Selected Greenhouse Gases

Pollutant	Atmospheric Lifetime (Years)	GWP (100-Year)²
Carbon Dioxide (CO ₂)	~100 ¹	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	121	298

Source: CAPCOA 2022. Consistent with CalEEMod, Version 2022.1.1.24.

Notes: CH₄ = methane; CO₂ = carbon dioxide; GWP = global warming potential; N₂O = nitrous oxide

¹ CO₂ has a variable atmospheric lifetime and cannot be readily approximated as a single number.

² The warming effects over a 100-year period relative to other GHGs.

Emissions and Inventories

Global Emissions

Worldwide anthropogenic GHG emissions in 2010 were approximately 49,000 million MTCO₂e, including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation, biomass decay). CO₂ emissions from fossil fuel use and industrial

² The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the O₃ layer by phasing out the production of several groups of halogenated hydrocarbons that are believed to be responsible for O₃ depletion and are also potent GHGs.

³ A metric ton is equivalent to approximately 1.1 tons.

processes account for 65 percent of the total emissions of 49,000 million MTCO₂e (which include land use changes), and CO₂ emissions account for 77 percent of total GHG emissions. Methane emissions account for 16 percent of total GHG emissions, and nitrous oxide emissions account for 6 percent of total GHG emissions (IPCC 2014).

United States Emissions

In 2019, the United States emitted approximately 6.6 billion MTCO₂e. Total U.S. emissions increased by 1.8 percent from 1990 to 2019, and emissions decreased from 2018 to 2019 by 1.7 percent. A contributor to the decrease in total GHG emissions between 2018 and 2019 was a reduction in total energy use. The decrease in CO₂ emissions over time was a result of multiple factors, including substitution from coal to natural gas and other non-fossil energy sources in the electric power sector.

State of California Emissions

CARB is responsible for developing the state GHG Emission Inventory. This inventory estimates the amount of GHGs emitted to and removed from the atmosphere by human activities in the state and supports the AB 32 Climate Change Program. CARB's current GHG emission inventory covers the years 1990–2018 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural lands).

According to CARB emission inventory estimates, the state emitted approximately 425 million MTCO₂e emissions in 2017. This is a decrease of 5 million MTCO₂e from 2016 and a 14 percent decrease since 2004. Since the peak level in 2004, California's GHG emissions have generally followed a decreasing trend. CARB estimates that transportation was the source of approximately 40 percent of the state's GHG emissions in 2017, followed by industrial sources at 21 percent and electricity generation at 15 percent. The largest emissions category in the transportation sector is On-Road Transportation, which consists of passenger vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty vehicles. The remaining sources of GHG emissions were residential and commercial activities at 10 percent, agriculture at 8 percent, high-GWP gases at 5 percent, and recycling and waste at 2 percent.

City of Perris

The Perris CAP included a baseline inventory of community-wide GHG emissions. Total aggregated community emissions for Perris were approximately 378,099 MT CO₂e in 2010. Transportation accounted for the largest share of emissions (60 percent), followed by residential energy use (20 percent) and commercial and industrial energy use (15 percent). Waste generation and wastewater and sewer systems accounted for the remaining 5 percent (City of Perris 2016).

4.7.2 Thresholds of Significance

According to Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines), the Proposed Project would have a significant impact on GHG emissions if it would:

- **Threshold GHG-1:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Threshold GHG-2:** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Applicable Regional Thresholds

South Coast AQMD CEQA Air Quality Handbook

Additionally, State CEQA Guidelines, Section 15064.7, provides the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. To determine whether the Proposed Project's GHG emissions are significant, this analysis uses the South Coast AQMD screening threshold of 10,000 MTCO₂e per year for industrial uses.

4.7.3 Regulatory Requirements

State and local regulatory requirements applicable to the Proposed Project are described below. The Proposed Project would be required to comply with the following during construction and operation.

- RR GHG-1** The Proposed Project will be consistent with the City of Perris Climate Action Plan (CAP), which outlines several sustainable strategies aimed at decreasing carbon emissions while adapting to a changing climate. The CAP was developed to address global climate change through the reduction of harmful greenhouse gas emissions at the community level and as part of California's mandated statewide GHG reduction goal (AB 32). Programs and actions provided in the CAP were developed to help the city grow healthily, resourcefully, and sustainably.

4.7.4 Environmental Impacts

The following sections address various potential impacts relating to GHG emissions that could result from implementation of the Proposed Project.

Methodology

The Proposed Project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste, water, and construction equipment. The following provides the methodology used to calculate the project-related GHG emissions and the Proposed Project impacts.

CalEEMod Version 2022.1.1.22 was used to calculate the GHG emissions from the Proposed Project. The CalEEMod Output for year 2026 is available in Appendix B of the Air Quality Impact Analysis (Appendix B of this EIR). Sources of GHG emissions included in modeling are described below.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the Proposed Project. The vehicle trips associated with the Proposed Project have been analyzed by inputting the Proposed Project-generated vehicular trips from the Traffic Impact Analysis into CalEEMod. See the Proposed Project-specific Air Quality Impact Analysis (Section 2 of Appendix B) for further details.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the South Coast AQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod and in the manner detailed in the Air Quality Impact Analysis (Section 2 of Appendix B).

Default assumptions were utilized for all other inputs.

Applicable PVCCSP Standards and Guidelines and Mitigation Measures

There are no Standards or Guidelines specifically related to GHG emissions included in the PVCCSP. The PVCCSP EIR includes the following mitigation measures to address air pollutant emissions, which would also reduce GHG emissions.

MM Air 2 Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.

MM Air 4 Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.

- MM Air 5** Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits
- MM Air 6** The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the California Air Resources Board (CARB) in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or Environmental Protection Agency (EPA) certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOX unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.
- MM Air 7** During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division
- MM Air-11** Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.
- MM Air-13** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to South Coast AQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for Nitrogen

Oxides (NOX)] funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants would be required to use those funds, if awarded.

- MM Air-14** Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- MM Air-18** Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the Project sites shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area should aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.
- MM Air-19** In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.
- MM Air-20** Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

4.7.4.1 Threshold GHG-1: Generation of Greenhouse Gas Emissions

Impact Analysis

The GHG emissions have been calculated based on the parameters described above. A summary of the results is shown below in Table 4.7-2, Proposed Project-Related Greenhouse Gas Emissions, and the CalEEMod results for the Proposed Project are provided in Appendix B of the Air Quality

Impact Analysis (Appendix B of this EIR). Table 4.7-2 shows that the total for the Proposed Project's emissions (without credit for any reductions from sustainable design and/or regulatory requirements) would be 6,219.83 MTCO₂e per year. According to the thresholds of significance established above, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations of the Proposed Project would exceed the South Coast AQMD threshold of 10,000 MTCO₂e per year for industrial uses. Therefore, operation of the Proposed Project would not create a significant cumulative impact to global climate change.

Table 4.7-2. Proposed Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO ₂	NonBio-CO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Maximum Annual Operations	90.9	5,733.00	5,824.00	9.42	0.41	6,188.00
Construction ¹	0.00	31.3	31.3	0.00	0.00	31.83
Total Emissions	90.9	5764.3	5855.3	9.42	0.41	6,219.83
South Coast AQMD draft screening threshold for industrial uses						10,000
Exceeds Threshold?						No

Source: CAPCOA 2022. Refer to Appendix B.

Notes: CO₂ = carbon dioxide; Bio-CO₂ = biogenic carbon dioxide; NonBio CO₂ = non-biogenic carbon dioxide; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; ¹ = Construction GHG emissions CO₂e based on 30-year amortization rate

Significance of Impact

Less Than Significant Impact.

4.7.4.2 Threshold GHG-2: Conflict with Applicable Plan

Impact Analysis

The Proposed Project would have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. As stated previously, the City of Perris has a Climate Action Plan; therefore, the Proposed Project and its GHG emissions have been compared to the goals of the Perris CAP, which is based on the AB 32 target, and Executive Order S-3-05, as codified in SB-32.

As stated previously, the South Coast AQMD's tier 3 thresholds used Executive Order S-3-05 goal as the basis for deriving the screening level. The California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following reduction targets:

- **2010:** Reduce greenhouse gas emissions to 2000 levels
- **2020:** Reduce greenhouse gas emissions to 1990 levels
- **2050:** Reduce greenhouse gas emissions to 80 percent below 1990 levels

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide

emission cap which was phased in starting in 2012. Therefore, as the Proposed Project's emissions meet the South Coast AQMD threshold of 10,000 MTCO_{2e} per year for all land use types (in compliance with Executive Order S-3-05), the Proposed Project's emissions also comply with the goals of AB 32. Additionally, as the Proposed Project meets the current interim emissions targets/thresholds established by the South Coast AQMD, the Proposed Project would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030 mandated by SB-32. Furthermore, the majority of the post 2020 reductions in GHG emissions are addressed via regulatory requirements at the State level and the Proposed Project will be required to comply with these regulations as they come into effect.

The Perris CAP is a plan to reduce City-wide GHG emissions consistent with the AB 32 target of reducing GHG emissions to 1990 levels by 2020. As described above, the Proposed Project would be consistent with plans to achieve more aggressive targets and would therefore be consistent with CAP emissions targets. Additionally, applicable GHG reduction measures in the Perris CAP include transitioning of truck fleets to low emissions technologies (Measure SR-11), energy efficiency (Measure SR-2), construction waste diversion (Measure SR-13), and water efficiency (Measure SR-14). These measures would be implemented consistent with State regulations, including the Advanced Clean Trucks and Advanced Clean Fleets regulations, and the CALGreen Code. The Proposed Project and future truck fleets that access the site would be required to comply with State standards. As such, Project emissions would be reduced consistent with the Perris CAP. Impacts would be less than significant.

Significance of Impact

Less Than Significant Impact.

4.7.5 Cumulative Impacts

The following sections address various potential cumulative impacts relating to GHG emissions that could result from implementation of the Proposed Project.

4.7.5.1 Cumulative Threshold GHG-1: Generation of Greenhouse Gas Emissions and Cumulative Threshold GHG-2: Conflict with Applicable Plan

Although the Proposed Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. Therefore, in the case of global climate change, the proximity of the Proposed Project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition (Appendix B). According to the California Air Pollution Control Officers Association, "GHG impacts are

exclusively cumulative impacts; there are no noncumulative GHG emission impacts from a climate change perspective” (CAPCOA 2008). The resultant consequences of that climate change can cause adverse environmental effects. A project’s GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

In 2006, under Assembly Bill 32, the state mandated a goal of reducing statewide emissions to 1990 levels by 2020. In November of 2022, the CARB released the 2022 Scoping Plan. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. In order to achieve these goals, CARB is in the process of establishing and implementing regulations to reduce statewide GHG emissions. Consistent with State CEQA Guidelines Section 15064h(3), the City, as lead agency, has determined that the Proposed Project’s contribution to cumulative GHG emissions and global climate change would be less than significant if the Proposed Project would generate less than 10,000 MTCO_{2e} per year of GHG emissions and if the Proposed Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions.

As discussed in Threshold GHG-1 above, the Proposed Project would generate less than 10,000 MTCO_{2e} per year of GHG emissions. Therefore, it would not create a significant cumulative impact to global climate change

As discussed in Threshold GHG-2 above, the Proposed Project would be consistent with the goals and objectives of the Perris CAP. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Given this consistency, it is concluded that the Proposed Project’s incremental contribution to greenhouse gas emissions and their effects on climate change would not be cumulatively considerable.

4.7.6 Level of Significance Before Mitigation

4.7.6.1 Threshold GHG-1: Generation of Greenhouse Gas Emissions

The Proposed Project would not generate greenhouse gas emissions that may have a significant impact on the environment.

4.7.6.2 Threshold GHG-2: Conflict with Applicable Plan

The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.7.7 Mitigation Measures

The following PVCCSP EIR mitigation measures have been incorporated into the Proposed Project. Implementation of these measures would limit potential impacts to less-than-significant levels, and no project-specific mitigation measures are required.

- | | |
|-----------------|---|
| MM Air 2 | Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow. |
| MM Air 4 | Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes. |
| MM Air 5 | Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits |
| MM Air 6 | The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the California Air Resources Board (CARB) in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or Environmental Protection Agency (EPA) certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOX unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit. |

- MM Air 7** During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division
- MM Air 11** Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.
- MM Air 13** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to South Coast AQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP, HVIP, and SOON funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants would be required to use those funds, if awarded.
- MM Air 14** Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- MM Air 18** Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project sites shall be designed to accommodate future bus turnouts at locations established through

consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area should aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.

MM Air 19 In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris’ Building Division) prior to conveyance of applicable streets.

MM Air 20 Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building’s energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

4.7.8 Level of Significance After Mitigation

Because no mitigation measures are required, impacts are the same as described in Section 4.7.6, Level of Significance Before Mitigation.

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