

#### 4.8 GREENHOUSE GAS EMISSIONS

This section summarizes existing greenhouse gas (GHG) emissions and discusses global climate change, its causes, and the contribution of human activities. This section also estimates the likely GHG emissions that would result from construction and operational activities associated with the Development Project, including vehicular and truck engine traffic, energy consumption, and other emission sources. This section is based on the *Greenhouse Gas Analysis Sunset Crossroads Project* technical report prepared by Michael Hendrix Consulting.<sup>1</sup>

While development of the Mt. San Jacinto College (MSJC) Site is not anticipated at this time, a programmatic discussion of potential impacts to greenhouse gas emissions that may result from future development of that site is provided in **Chapter 5.0** of this Environmental Impact Report (EIR).

# 4.8.1 Background on Global Climate Change and Greenhouse Gas Emissions

# 4.8.1.1 Global Climate Change

Global climate change (GCC) is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (e.g., precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

Climate change refers to any change in measures of weather (e.g., temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors (e.g., changes in the sun's intensity), natural processes within the climate system (e.g., changes in ocean circulation), or human activities (e.g., the burning of fossil fuels, land clearing, or agriculture). The primary observed effect of GCC has been a rise in the average global tropospheric² temperature of 0.36 degrees Fahrenheit (°F) per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming may occur, which may induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of the State could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns, or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones. Specific effects in the State might include a decline in the Sierra Nevada snowpack, erosion of the State's coastline, and seawater intrusion in the Sacramento-San Joaquin River Delta.

Global surface temperatures have risen by 1.33°F ± 0.32°F over the last 100 years. The rate of warming over the last 50 years is almost double that over the last 100 years.<sup>3</sup> The latest projections, based on state-of-the-art climate models, indicate that temperatures in the State are expected to rise 3–10.5°F

Michael Hendrix Consulting. 2023. Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California. October 20.

The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

<sup>&</sup>lt;sup>3</sup> Intergovernmental Panel on Climate Change (IPCC). 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the IPCC.



by the end of the century. The prevailing scientific opinion on climate change is that "most of the warming observed over the last 60 years is attributable to human activities." Increased amounts of carbon dioxide and other GHGs are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as the greenhouse effect.<sup>5</sup>

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are the principal contributors to human-induced GCC are:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Chlorofluorocarbons (CFCs)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Nitrogen trifluoride (NF<sub>3</sub>)
- Sulfur hexafluoride (SF<sub>6</sub>)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which can cause global warming. Although GHGs produced by human activities include naturally occurring GHGs (e.g.,  $CO_2$ ,  $CH_4$ , and  $N_2O$ ), some gases (e.g., HFCs, PFCs, and  $SF_6$ ) are completely new to the atmosphere. Certain other gases (e.g., water vapor) are short-lived in the atmosphere compared to these GHGs that remain in the atmosphere for significant periods of time, contributing 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 air quality study, the term "GHGs" will refer collectively to the eight types of gases identified in the bulleted list provided above.

These gases 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 gas. GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to  $CO_2$ , 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  $CO_2$  over a specified time period. GHG emissions are typically measured in terms

<sup>&</sup>lt;sup>4</sup> Intergovernmental Panel on Climate Change (IPCC). 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the IPCC.

The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the amount of heat that escapes, GHGs like CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, the *naturally occurring* greenhouse effect is necessary to keep the planet at a comfortable temperature.



of metric tons<sup>6</sup> of " $CO_2$  equivalents" (MT  $CO_2$ e). For example,  $N_2O$  is 265 times more potent at contributing to global warming than  $CO_2$ . **Table 4.8.A: Global Warming Potential of Select Greenhouse Gases** identifies the GWP for each type of GHG analyzed in this report.

**Table 4.8.A: Global Warming Potential of Select Greenhouse Gases** 

Greenhouse Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO <sub>2</sub> )	~100	1
Methane (CH <sub>4</sub> )	12	28
Nitrous Oxide (N <sub>2</sub> O)	121	265
Chlorofluorocarbons (CFCs)	100	10,200
Hydrofluorocarbons (HFCs)	222	12,400
Perfluorocarbons (PFCs)	10,000	11,100
Nitrogen Trifluoride (NF <sub>3</sub> )	550	16,100
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	23,500

Source: Table B, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

# 4.8.1.2 Greenhouse Gases

The following summarizes the characteristics of the eight GHGs.

**Carbon Dioxide.** In the atmosphere, carbon generally exists in its oxidized form, as  $CO_2$ . Natural sources of  $CO_2$  include the respiration (breathing) of humans, animals, and plants, volcanic out gassing, decomposition of organic matter, and evaporation from the oceans. Human-caused sources of  $CO_2$  include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation.

The Earth maintains a natural carbon balance, and when concentrations of  $CO_2$  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  $CO_2$  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  $CO_2$ ; consequently, the gas is building up in the atmosphere. The concentration of  $CO_2$  in the atmosphere has risen from about 280 parts per million (ppm) prior to the Industrial Revolution to more than 400 ppm currently.<sup>7</sup>

The transportation sector remained the largest source of GHG emissions in 2020, representing 38 percent of the State's GHG emission inventory. The largest emissions category within the transportation sector is on-road, which consists of passenger vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty trucks and buses. Emissions from on-road sources constitute more than

<sup>&</sup>lt;sup>6</sup> A metric ton is equivalent to approximately 1.1 tons.

National Oceanic and Atmospheric Administration (NOAA). 2016. Climate Change: Atmospheric Carbon Dioxide. Website: <a href="https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide">https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide</a> (accessed September 2023).

California Air Resources Board (CARB). 2022. Current California GHG Emission Inventory Data. Website: <a href="https://ww2.arb.ca.gov/ghg-inventory-data">https://ww2.arb.ca.gov/ghg-inventory-data</a> (accessed September 2023).



92 percent of the transportation sector total. Industrial and electricity were the State's second- and third-largest categories of GHG emissions, respectively.<sup>9</sup>

**Methane.** CH<sub>4</sub> is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH<sub>4</sub> emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation in dairy cows, manure management, and rice cultivation are also significant sources of CH<sub>4</sub> in California. Total annual emissions of CH<sub>4</sub> accounted for approximately 9 percent of GHG emissions in California in 2019.<sup>10</sup>

*Nitrous Oxide*.  $N_2O$  is produced naturally by a wide 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 a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit  $N_2O$ , and the quantity 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  $N_2O$  emissions in California. Nitrous oxide emissions accounted for approximately 3 percent of GHG emissions in California in 2019.<sup>11</sup>

Chlorofluorocarbons, Hydrofluorocarbons, Perfluorocarbons, Nitrogen Trifluoride, and Sulfur Hexafluoride. CFCs and HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.<sup>12</sup> PFCs, NF<sub>3</sub>, and SF<sub>6</sub> are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry has resulted in greater use of PFCs. HFCs, PFCs, and SF<sub>6</sub> accounted for about 5 percent of GHG emissions in California in 2019.<sup>13</sup> Because there are no known project-related emissions of these five GHGs, they are not discussed further in this analysis.

## 4.8.1.3 Greenhouse Gas Emissions Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emission inventories.

<sup>&</sup>lt;sup>9</sup> California Air Resources Board (CARB). 2021b. GHGs Descriptions & Sources in California. Website: <u>ww2.arb.ca.gov/ghg-descriptions-sources</u> (accessed September 2023).

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

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

California Air Resources Board (CARB). 2021b. GHGs Descriptions & Sources in California. Website: <a href="www2.arb.ca.gov/ghg-descriptions-sources">www2.arb.ca.gov/ghg-descriptions-sources</a> (accessed September 2023).



**Global Emissions.** Worldwide emissions of GHGs in 2018 totaled 25.6 billion metric tons (MT) of CO<sub>2</sub>e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change.<sup>14</sup>

**United States Emissions.** An emissions inventory that identifies and quantifies the primary humangenerated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. However, because GHGs persist for a long time in the atmosphere (**Table 4.8.A**), accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

In 2020, total United States emissions were 5,981 million metric tons (MMT) of CO2e. Historically, emissions in the United States had been increasing with population and economic growth. Total GHG emissions in the United States increased 15.6 percent between 1990 and 2007 when GHG emissions peaked. However, after 2012, GHG emissions began decreasing. The decrease in total GHG emissions was driven in large part by a decrease in CO2 emissions from fossil fuel combustion. The decrease in CO2 emissions from fossil fuel combustion was a result of multiple factors, including substitution from coal to natural gas and other non-fossil energy sources in the electric power sector. The longer-term trend between 1990 and 2020 shows that United States emissions had a net decrease of 7.1 percent.<sup>15</sup>

State of California Emissions. The State emitted approximately 404.5 MMT  $CO_2e$  emissions in 2019, 7.2 MMT  $CO_2e$  lower than 2018 levels and almost 13 MMT  $CO_2e$  below the 2020 GHG Limit of 431 MMT  $CO_2e$ . The California Air Resources Board (CARB) estimates that transportation was the source of approximately 36.8 percent of the State's GHG emissions in 2019, followed by industrial sources at approximately 19.9 percent and electricity generation at 16.1 percent. The remaining sources of GHG emissions were agriculture at 10.5 percent, residential and commercial activities at 9 percent, high GWP at 4 percent, and recycling and waste at 5.8 percent. The remaining sources of GWP at 4 percent, and recycling and waste at 5.8 percent.

# 4.8.2 NOP/Scoping Meeting Comments

The City of Banning (City) received nine comment letters during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to **Appendix A** of this Environmental Impact Report (EIR). One comment letter included comments related to GHG emissions.

United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed September 2023).

United States Environmental Protection Agency (USEPA). 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. Website: <a href="https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020">https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020</a> (accessed September 2023).

California Air Resources Board (CARB). 2021a. California Greenhouse Gas Emissions for 2000 to 2019, Trends of Emissions and Other Indicators Report. Website: <a href="https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\_2019/ghg\_inventory\_trends\_00-19.pdf">https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\_2019/ghg\_inventory\_trends\_00-19.pdf</a> (accessed September 2023).

<sup>17</sup> Ibid.



# 4.8.3 Regulatory Setting

# 4.8.3.1 Federal Regulations

Clean Air Act. The federal Clean Air Act (CAA) of 1970 is the primary federal air quality law intended to reduce and control air pollution nationwide, by regulating all sources of air emissions that affect public health and the environment. In 2007, the United States Supreme Court ruled that the United States Environmental Protection Agency (USEPA) has the authority to regulate CO<sub>2</sub> emissions under the CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that six GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change. However, in June 2022, the Supreme Court in *West Virginia v. EPA* limits the approach the USEPA may use to regulate GHG emissions from stationary power sources such as coal plants to those expressly authorized by Congress in the CAA.

**SmartWay Program.** The SmartWay Program is a public-private initiative between the USEPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components.<sup>18</sup>

- 1. **SmartWay Transport Partnership:** A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
- 2. **SmartWay Technology Program:** A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
- 3. **SmartWay Vehicles:** A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
- 4. **SmartWay International Interests:** Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared toward reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks (HDTs) will have to comply with CARB GHG regulations that are designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a

United States Environmental Protection Agency (USEPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: <a href="https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019">https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019</a> (accessed September 2023).



combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the USEPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects, and technical literature review. As a result, the USEPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

## 4.8.3.2 State Statutes and Regulations

Assembly Bill 1493 (2002). In a response to the transportation sector's significant contribution to California CO<sub>2</sub> emissions, Assembly Bill (AB) 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set feasible and cost effective GHG emission reduction standards for passenger vehicles and light-duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) for 2009 models and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of Clean Air Act Preemption was not granted by the USEPA until June 30, 2009. The CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025.

**Executive Order S-3-05 (2005).** Executive Order (EO) S-3-05 was signed by the Governor on June 1, 2005, which established California GHG emissions reduction targets and set the following goals:

- Reduce GHG emissions to 2000 levels by 2010;
- Reduce GHG emissions to 1990 levels by 2020; and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.



Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This bill codified a multiyear program to reduce GHG emissions in California. The bill established the goal of reducing GHG emissions to 1990 levels by 2020. AB 32 required the CARB to develop a Scoping Plan that would create an approach to meet this goal. The Scoping Plan included CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The CARB established the level of GHG emissions in 1990 at 427 MMT CO<sub>2</sub>e, which was met in 2016.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB approved the cap-and-trade program authorized in AB 32 in 2012. The cap-and-trade program took effect in 2013.

The CARB approved the First Update to the Climate Change Scoping Plan in 2014. The First Update described California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan and updated the 2020 GHG emissions limit goal. The CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.<sup>19</sup> The 2030 target is reducing GHG emissions to 40 percent below 1990 levels by 2030.

The 2022 Scoping Plan Update, adopted in December 2022, provides approaches and proposed regulations to achieve the Statewide carbon neutrality target no later than 2045 through an 85 percent reduction of anthropogenic GHG emissions compared to 1990 levels of emissions, and identifies policies and strategies to reduce carbon emissions through direct emission reduction measures, building code updates, market-based compliance mechanisms such as the Cap-and-Trade Program, potential monetary and nonmonetary incentives, and also carbon dioxide removal from the atmosphere that includes carbon capture, utilization and storage technologies, and carbon sequestration through natural and working lands. Appendix D of the 2022 Scoping Plan includes a table of Priority GHG Emission Reduction Strategies for local governments.

Senate Bill 97 (2007). SB 97, codified in 2008 at Public Resources Code Sections 21083.05 and 21097, required the Governor's Office of Planning and Research (OPR) to develop guidelines for the feasible mitigation of GHG emissions under the California Environmental Quality Act (CEQA). These criteria were developed in 2009 and went into effect in 2010. The amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

**Senate Bill 375 (2008) Sustainable Communities Strategy.** In addition to vehicle emissions regulations and the Low Carbon Fuel Standard, the third effort to reduce GHG emissions from transportation is

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: <a href="https://www.arb.ca.gov/cc/scopingplan/scoping-plan-2017.pdf">https://www.arb.ca.gov/cc/scopingplan/scoping-plan-2017.pdf</a> (accessed September 2023).



the reduction in the demand for personal vehicle travel (i.e., vehicle miles traveled). This approach was addressed in September 2008 through the Sustainable Communities and climate Protection Act of 2008, or SB 375. The enactment of SB 375 initiated a new regional land use planning process to mitigate GHG emissions by integrating and aligning planning for housing, land use, and transportation for California's 18 Metropolitan Planning Organizations (MPOs). The bill directed the CARB to set regional GHG emission reduction targets for most areas of the State. SB 375 also contained important elements related to federally mandated regional transportation plans and the alignment of State transportation and housing planning processes.

**Executive Order B-30-15 (2015).** EO B-30-15 required GHG emissions be reduced to 40 percent below 1990 levels by 2030. It applied only to State agencies with jurisdiction over sources of GHG emissions.

**Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act.** SB 350 updated AB 32 by increasing California's renewable portfolio standard from 33 percent to 50 percent by 2030 and requires increasing energy efficiency in buildings by 50 percent by the year 2030.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In 2016 the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 codified the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in the April 2015 EO B-30-15. Companion bill to SB 32, AB 197 provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions and requires easier public access to air emissions data that are collected by the CARB.

Senate Bill 100 (SB 100). Signed by the Governor in 2018, SB 100 raised California's Renewable Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also established a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed in 2018, sets a goal to achieve net carbon neutrality no later than 2045, and achieve and maintain net negative emissions thereafter. EO B-55-18 directs the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of  $CO_2e$  from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

**Title 24, Building Standards Code and CALGreen Code.** In November 2008, the California Building Standards Commission established the California Green Building Standards (CALGreen) Code, which sets performance standards for residential and nonresidential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental



quality. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023.

Cap and Trade. The development of a cap-and-trade program was included as a key reduction measure of the CARB AB 32 Climate Change Scoping Plan for certain sectors to help California meet its goal of reducing GHG emissions to 1990 levels by 2020 and ultimately to achieve an 80 percent reduction from 1990 levels by 2050. The sectors targeted by the cap-and-trade program are electricity generation, petroleum refining, natural gas production and distribution, cement production, and any large industrial facility that emits 25,000 MT CO<sub>2</sub>e or more annually. The program went into effect in 2013 and helped California meet its 2020 GHG emissions reduction mandate. However, the percentage reductions called for under the program would decline over time to help reach the State's 2030 emissions target. Land use projects such as the Development Project are not directly subject to the cap-and-trade program; however, sectors associated with land use development such as energy and fuel usage are deemed covered entities that would indirectly be subject to cap-and-trade. CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities may buy allowances at auction, purchase allowances from others, or purchase offset credits. The cap-and-trade program does not guarantee GHG emissions reductions in any discrete location or by any particular source, but GHG emissions reductions are only guaranteed on an accumulative basis. The cap-and-trade program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the capand-trade program.

The cap-and-trade program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels, and the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle miles traveled (VMT) are covered in some respect by the cap-and-trade program.

**Executive Order N-79-20.** EO N-79-20, signed in 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and it will be the goal that 100 percent of off-road vehicles and equipment in the State be zero-emission by 2035, where feasible.

**Assembly Bill 1279 California Climate Crisis Act of 2022.** In 2022, the State Legislature passed AB 1279, which codifies the statewide goal of net carbon neutrality on or before 2045 and the policy of achieving an 85 percent reduction in GHG emissions compared to 1990 levels of emissions. Remaining GHG emissions would be removed either by natural sequestration or mechanical removal and deposition in order to achieve net zero GHG emissions.

*CARB Phase 1 and 2 Heavy-Duty Vehicle GHG Standards.* In 2013, the CARB adopted a regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck



and engine manufacturers and harmonizes with the USEPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer GHG Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In 2011, the USEPA adopted its rule for HDTs and engines, which has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year 2014 with stringency levels increasing through model year 2018. The rule organizes truck compliance into three groupings, which include a) heavy-duty pickups and vans; b) vocational vehicles; and c) combination tractors. The USEPA rule does not regulate trailers.

CARB staff has worked jointly with the USEPA and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year HDT vehicles, including trailers.

In February 2019, the Office of Administrative Law approved the Phase 2 Heavy-Duty Vehicle GHG Standards, which became effective April 1, 2019. The Phase 2 GHG standards are needed to offset projected VMT growth and keep heavy-duty truck CO<sub>2</sub> emissions declining. The federal Phase 2 standards establish for the first time federal emissions requirements for trailers hauled by heavy-duty tractors. The federal Phase 2 standards are more technology-forcing than the federal Phase 1 standards, requiring manufacturers to improve existing technologies or develop new technologies to meet the standards. The federal Phase 2 standards for new tractors, vocational vehicles, and heavy-duty pickup trucks and vans (PUVs) will be phased-in from 2021 to 2027; additionally for trailers, the standards are phased-in from 2018 (2020 in California) through 2027.

The initiatives, EOs, programs, standards, and statutes outlined above comprise the major milestones in California's efforts to address climate change through coordinated action on climate research, GHG mitigation, and climate change adaptation. Numerous other related efforts have been undertaken by State agencies and departments to address specific questions and programmatic needs. The Climate Action Team coordinates these efforts and others, which comprise the California Climate Adaptation Strategy.

## 4.8.3.3 Regional and Local Regulations

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAG and the South Coast Air Quality Management District (SCAQMD). SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), adopted September 3, 2020, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals.

**Southern California Association of Governments.** SCAG is a regional council consisting of the following six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In total, the SCAG region encompasses 191 cities and over 38,000 square miles within Southern California.



SCAG serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the RTP/SCS and the 2008 Regional Comprehensive Plan (RCP).

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).<sup>20</sup> In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, the CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035.<sup>21</sup> The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include the goal of planning for new growth around high-quality transit areas and livable corridors, and promoting improvement of the jobs-housing balance in the Inland Empire area.<sup>22</sup> However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

**South Coast Air Quality Management District.** SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and 20-year horizon.

The latest plan is the 2022 AQMP, which was adopted on December 2, 2022 and incorporates the latest scientific and technological information and planning assumptions, including the 2020 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories which also result in the reduction of GHG emissions.<sup>23</sup> Key elements of the 2022 AQMP pertaining to GHG emissions include:

• Specifically addresses decarbonization and climate policy development and its role in achieving the 2015 ozone standard.

Southern California Association of Governments (SCAG). 2020b. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan\_0.pdf?1606001176">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan\_0.pdf?1606001176</a> (accessed September 2023).

California Air Resources Board (CARB). 2020. SCAG 2020 SCS CARB Acceptance of GHG Quantification Determination. Website: <a href="https://ww2.arb.ca.gov/sites/default/files/2021-02/SCAG%202020%20SCS%20CARB%20Acceptance%20">https://ww2.arb.ca.gov/sites/default/files/2021-02/SCAG%202020%20SCS%20CARB%20Acceptance%20</a> of%20GHG%20Quantification%20Determination%20Executive%20Order.pdf (accessed September 2023).

Southern California Association of Governments (SCAG). 2020b. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan 0.pdf?1606001176">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan 0.pdf?1606001176</a> (accessed September 2023).

South Coast Air Quality Management District (SCAQMD). 2022. 2022 Air Quality Management Plan. Website: <a href="http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plans/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=10">http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plans/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=10</a> (accessed September 2023).



- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation).
- A strategy with fair-share emission reductions at the federal, State, and local levels.
- Investment in strategies and technologies meeting multiple air quality and climate objectives.
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies.
- Attainment of the 1-hour ozone standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures). While not directly correlated to GHG emissions, the measures rely heavily on zero emission technologies that will also significantly reduce GHG emissions.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operations impacting reduction of GHG emissions.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate new development projects within the Basin, such as the Development Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential GHG and air quality impacts of projects proposed in the Basin.<sup>24</sup> The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures that can be used in conducting GHG analyses in environmental impact reports and were used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.<sup>25</sup>

While the replacement *Air Quality Analysis Guidance Handbook* is being updated, supplemental guidance/information on the SCAQMD website includes: (1) Emission FACtors (EMFAC) on-road vehicle air pollutant and GHG emission factors, (2) GHG analysis guidance, (3) mitigation measures and control efficiencies, (4) off-road mobile source air pollutant and GHG emission factors, and (5) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

**SCAQMD Warehouse Indirect Source Rule 2035.** On May 8, 2021, SCAQMD adopted Warehouse Indirect Source Rule 2305, which includes the Warehouse Actions and Investments to Reduce Emissions Program (WAIRE), and Rule 316. Rule 2305 establishes for the first time a regulatory program designed to reduce air pollution (and indirectly GHG emissions) caused by warehouse-related activities and is focused on emissions from vehicles that service large warehouses. Rule 316 establishes a fee system to support the Rule 2305 program on an ongoing basis. Rules 2305 and 316

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<sup>&</sup>lt;sup>24</sup> South Coast Air Quality Management District (SCAQMD). n.d. Air Quality Analysis Handbook. Website: <a href="http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook">http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook</a> (accessed September 2023).

<sup>25</sup> Ibid.



apply to operators and owners of existing and new warehouses with floor space greater than or equal to 100,000 square feet within a single building (i.e., large warehouses). Rules 2305 and 316 require such operators and owners to annually take actions with respect to their warehouses that either reduce emissions regionally and locally or facilitate emission reductions. Specifically, owners and operators must "earn" a specific number of WAIRE Points. However, warehouse owners are only required to earn WAIRE Points if they are also a warehouse operator. If a warehouse owner is not an operator, they are not required to earn WAIRE Points even if the operator in their warehouse does not earn the required number of WAIRE Points. Warehouse owners are only required to submit a Warehouse Operations Notification to the SCAQMD.

The number of WAIRE Points required for a specific operator is based on the intensity of operations (i.e., number of truck trips and type of trucks) at each of their warehouses every year. The required points are known as the WAIRE Points Compliance Obligation (WPCO). The WPCO is calculated based on a 12-month survey of truck trips entering or exiting the site; the truck data are weighted based on the types of trucks, and activity is projected for the next year. Thus, the WAIRE Points pay for the prior year's emissions based on points earned in subsequent years.

WAIRE Points are earned by implementing a menu of items including purchasing/renting/leasing near-zero emission (NZE) and zero emission (ZE) yard equipment and/or trucks, installing on-site ZE fueling stations, and proving on-site solar PV systems that are intended to offset or reduce warehouse emissions. Owners and operators may also implement custom WAIRE plans for individual facilities, subject to SCAQMD approval, or pay mitigation fees to have the SCAQMD implement measures within the Basin. Owners and operators that over-comply may transfer excess WAIRE Points earned in 1 year to a subsequent year or may transfer WAIRE points to another site within their control. WAIRE Points cannot be transferred to other operators and expire after 3 years. Rule 2305 also requires reporting information about facility operations and recordkeeping. Rule 316 is the companion rule to Rule 2305 and establishes the administrative fees that Rule 2305 warehouse owners and operators must pay to support SCAQMD compliance activities.

While a project proponent may be defined as a warehouse owner and would submit a Warehouse Operation Notice(s), as required, the Project proponent does not intend to be the warehouse operator and has no knowledge of the future operations. Thus, the specific information required by Rule 2305 for calculating the WPCO is unavailable, and the necessary number of points is unknown. Finally, the WAIRE points expire after 3 years and are based on actions of future operators and are thus temporary and could not be calculated. Therefore, even though the WAIRE program will reduce GHG emissions for the Development Project, no emission reductions from the WAIRE program can be calculated for this analysis, which is therefore conservative.

County of Riverside Climate Action Plan. The County of Riverside Climate Action Plan (CAP) (December 8, 2015) was developed to comply with CEQA Guidelines Sections 15064.4 and 15064.7 to address cumulative GHG emissions in the County and produce reduction targets that reduce cumulative GHG impacts to less than significant. It includes reduction measures that achieve the reduction targets, and a plan to implement the reduction measures. It provides guidance as to how to address GHG emissions in CEQA analysis and determine the significance of project related GHG emissions based on Riverside County emissions targets and providing GHG reductions locally. It addresses GHG emissions reductions in connection with AB 32 and SB 32 and regulations developed



based on those statutes to address climate change. The CAP determined a baseline GHG emissions inventory, and calculated percentage reductions needed to meet 2020, 2030, and 2050 reduction goals. The CAP focused on and quantified source emissions categories of: (1) on road transportation, (2) agriculture, (3) electricity, (4) natural gas, (5) solid waste, (6) water and wastewater, (7) aviation, and (8) off-road sources. After identifying the sources of emissions, the CAP details reduction strategies to meet the reduction targets. For new development, a series of mitigation measures were generated and placed into screening tables which assigned points, specific design and construction measures, and operations strategies to be incorporated into development projects to reduce GHG emissions.

Conducting a project analysis under the CAP and satisfying its requirements thus complies with the Supreme Court's decision in *Center for Biological Diversity v. CDFW* (2015) 62 Cal.4<sup>th</sup> 204 and *CEQA Guidelines* Section 15183.5. The CAP was prepared to address emissions associated with sources under Riverside County's jurisdiction (which includes a portion of the Development Project site), based on the premise that Riverside County's emission reduction efforts can best be accomplished locally by coordinating with and implementing the State strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner.

In 2016, Petitioners the Sierra Club, Center for Biological Diversity, and San Bernardino Audubon Society challenged particular aspects of the 2015 CAP related to commitments to solar, electric vehicles (EV), energy efficient traffic signals, and future updates of the CAP. In 2017, the County and the Petitioners entered into a Settlement Agreement with commitments to solar, EV chargers, LED traffic signals, and periodic updates that enhance the CAP goals and maintain the County's Land Use authority. In accordance with the Settlement Agreement, the County amended the 2015 CAP in July 2018 to include provisions for on-site renewable energy in the reduction measures and updated CAP Appendix F screening tables.

The County of Riverside CAP Update, November 2019 (CAP Update) establishes updated GHG emission reduction programs and regulations to implement the SB 32 reduction goals for 2030 and that correlate with and support evolving State GHG emissions reduction goals and strategies beyond that year. The CAP Update includes reduction targets for year 2030 and anticipated targets for year 2050. These reduction targets require the County to reduce emissions by at least 525,511 MT CO2e below the Adjusted Business As Usual (ABAU)<sup>26</sup> scenario by 2030 and at least 2,982,948 MT CO2e below the ABAU scenario by 2050 (CAP Update, p.7-1).

To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to assess whether a proposed project would reduce GHG emissions attributable to certain design and construction measures incorporated in development projects to less than significant. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively "features") are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. By calculating the total emissions reduction needed and the emissions reduction obtained through the measures identified in the point system, the CAP

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ABAU Scenario reflects GHG emissions reductions achieved through anticipated future State actions (CAP Update, p. 2-1).



determined that each point is the equivalent of 0.0322 MT CO<sub>2</sub>e in reductions per 1,000 square feet of gross commercial/industrial building area. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate direct or indirect GHG emissions that would result in a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, would be considered less than significant.

Additionally, as part of the CAP, prior to issuance of each building permit, the Project Applicant must provide documentation to the County of Riverside Building Department demonstrating on-site renewable energy production for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet (sf) of commercial, office, industrial, or manufacturing development. Renewable on-site energy production must provide at least 20 percent of energy demand for commercial, office, industrial, or manufacturing development, meet or exceed 20 percent of energy demand for multi-family residential development, and meet or exceed 30 percent of energy demand for single-family residential development.<sup>27</sup>

The CAP Update also specifies that if a project yields 100 points on the screening tables, it has met emissions reductions equal to or greater than the GHG efficiency identified in the CAP (25 percent from a 2020 scenario<sup>28</sup>), and the proposed project is determined to be consistent with the GHG reductions planned for in the County's GHG Technical Report. Using this approach, a project also would be consistent with the CAP Update and considered to have a less than significant cumulative impact on GHG emissions.

City of Banning General Plan. The Air Quality Element of the City of Banning General Plan identifies goals, policies, and programs meant to balance the City's actions regarding land use, circulation, and other regulatory actions and their associated potential effects on local and regional air quality.<sup>29</sup> This element includes air quality policies intended to limit sources of air pollution and sensitive receptor exposure. Many of the policies are to assist the City directly and indirectly through good practice measures to ensure continued improved air quality into the future. The following policies are applicable to reducing GHG emissions associated with the Development Project. While these polices do not specifically discuss GHG emissions, reduction in sources of air pollution in order to ensure compliance with air quality standards would also reduce GHG emissions.

**Goal:** To preserve and enhance local air quality for the protection of the health and welfare of the community.

**AQ Policy 1:** The City shall be proactive in regulating local pollutant emitters and shall cooperate with the Southern California Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.

<sup>&</sup>lt;sup>27</sup> County of Riverside. 2019. Climate Action Plan. Website: <a href="https://planning.rctlma.org/CAP">https://planning.rctlma.org/CAP</a> (accessed September 2023).

<sup>28</sup> See Flowchart on p. A-1 of Appendix D from the Riverside County CAP, which identifies a 25 percent reduction target for 2030 from 2019 conditions.

<sup>&</sup>lt;sup>29</sup> City of Banning, 2006. City of Banning General Plan. Website <a href="http://banning.ca.us/468/General-Plan-Amendments">http://banning.ca.us/468/General-Plan-Amendments</a> (accessed September 2023).



**AQ Policy 2:** The City shall continue to coordinate and cooperate with local, regional, and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM10 and ozone emissions, as well as other emissions associated with diesel-fueled equipment and motor vehicles.

**AQ Policy 4:** Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.

**AQ Policy 5:** The City shall promote the use of clean and/or renewable alternative energy sources for transportation, heating, and cooling.

**AQ Policy 6:** The City shall support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle paths and lanes, and community-wide multi-use trails.

# 4.8.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. Therefore, significance determinations utilized in this section are from Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, the Development Project would result in a significant impact related to greenhouse gas emissions if the Development Project or any Development Project-related component would:

- Threshold 4.8.1: Generate GHG emissions either directly or indirectly that may have a significant impact on the environment.
- Threshold 4.8.2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

CEQA Guidelines Section 15064.4 (a) provides that the "determination of the significance of greenhouse gas emissions calls for careful judgment on the part of the lead agency consistent with the provisions in section 15064." Section 15064(b) provides that such determinations be" based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." The effects of GHG emissions are cumulative and are analyzed in the context of CEQA's requirements for cumulative impact analysis.

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in the State. Therefore, as described below, the City elected to utilize a numeric threshold of significance it selected for the Development Project based on substantial evidence.

The significance of the Development Project's GHG emissions may be evaluated consistent with *CEQA Guidelines* Section 15064.4(b) by considering whether the Project is consistent with applicable regulations or requirements adopted to implement a statewide, regional, or local plan for the



reduction or mitigation of GHG emissions. For this Development Project, as a land use development project partially located in the County of Riverside currently, the most directly applicable adopted regulatory plan to reduce GHG emissions is the County of Riverside 2019 CAP, which is designed to achieve regional GHG reductions from the land use and transportation sectors as required by the State's long-term climate goals. Although the 2019 CAP does not apply to the entire Project, this analysis considers the Development Project's compliance with the CAP. This analysis also considers consistency with the 2020–2045 RTP/SCS, and applicable provisions of the Riverside County General Plan, and the City of Banning General Plan.

The analysis also calculates the amount of GHG emissions that would be attributable to the Development Project using recommended modeling as previously described. The additional purpose of quantifying the Development Project's GHG emissions is to satisfy *CEQA Guidelines* Section 15064.4(a), which requires a good-faith effort to describe and calculate emissions and to show under *CEQA Guidelines* Section 15064.4(h)(3) whether the project's incremental contribution to the cumulative effect is cumulatively considerable.

Consistent with the foregoing, the City of Banning has selected the interim 3,000 MT CO₂e per year threshold based on the research and analysis underlying the recommendations by SCAQMD staff for residential and commercial sector projects against which to compare project-related GHG emissions.

The 3,000 MT CO₂e per year threshold is based on a 90 percent emission "capture" rate methodology. The 90 percent emissions capture approach was one of the options suggested by the California Air Pollution Control Officers Association (CAPCOA) in its CEQA & Climate Change white paper (2008). A 90 percent emission capture rate means that unmitigated GHG emissions from the top 90 percent of all GHG-producing projects within a geographic area – the Basin in this instance – would be subject to a detailed analysis of potential environmental impacts from GHG emissions, while the bottom 10 percent of all GHG-producing projects would be excluded from detailed analysis. A GHG significance threshold based on a 90 percent emission capture rate is appropriate to address the long-term adverse impacts associated with global climate change because medium and large projects will be required to implement measures to reduce GHG emissions, while small projects, which are generally infill development projects that are not the focus of the State's GHG reduction targets, are allowed to proceed. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial proportion of future development projects and demonstrate that cumulative emissions reductions are being achieved while setting the emission threshold high enough to exclude small projects that will, in aggregate, contribute approximately 1 percent of projected Statewide GHG emissions in the Year 2050.

SCAQMD's selection of the threshold at 3,000 MT CO<sub>2</sub>e per year was based on OPR's database of projects containing 798 projects and information about their GHG emissions. Eighty-seven very large projects were eliminated from calculation because they would skew emissions values too high, leaving 711 as the sample population to use in determining the 90<sup>th</sup> percentile capture rate. The 711 projects analyzed by SCAQMD consisted of commercial, residential, and mixed-use projects and included warehouses and other light industrial land uses but did not include industrial processes (oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). SCAQMD calculated emissions from each project to provide a consistent method of emissions calculations



across the sample population and from projects within the sample population. In calculating the emissions, the SCAQMD determined that the 90<sup>th</sup> percentile ranged between 2,983 to 3,143 MT CO<sub>2</sub>e per year. The SCAQMD set the significance threshold at 3,000 MT CO<sub>2</sub>e per year to exclude small projects that are considered less than significant and do not need to provide further analysis.

While SCAQMD's threshold of 3,000 MT CO<sub>2</sub>e per year for residential/commercial uses was proposed by SCAQMD a decade ago and was adopted as an interim policy, it is based on substantial evidence as provided in the *Draft Guidance Document* – *Interim CEQA Greenhouse Gas Significance Threshold* (2008) document and subsequent Working Group meetings (latest of which occurred in 2010). SCAQMD has not withdrawn its support of the interim threshold, and all documentation supporting the interim threshold remains on the SCAQMD website. SCAQMD has stated this threshold "uses the executive Order S-3-05 goal [80 percent below 1990 levels by 2050] as the basis for deriving the screening level." Therefore, this threshold is valid for use in 2023.

# 4.8.5 Impact Analysis

#### 4.8.5.1 Greenhouse Gas Emissions

Threshold 4.8.1: Would the Development Project generate GHG emissions either directly or indirectly that may have a significant impact on the environment?

This section describes the Development Project's construction- and operational-related GHG emissions and contribution to global climate change. SCAQMD recommends that construction emissions be calculated, then amortized over 30 years, and then added to the annual project GHG emissions. Thus, this section discusses construction emissions.

**Construction.** Construction activities produce combustion emissions from various sources (construction equipment, utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change.

LSA analyzed construction-related emissions and estimated the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and the number of on-road vehicle trips (worker, soil hauling, and vendor trips). The Air Quality Impact Analysis for the Sunset Crossroads Specific Plan provides detailed information related to construction activities.<sup>30</sup>

The Development Project would be constructed in four phases beginning in 2024 with anticipated completion in 2027, a duration of approximately 51 months. Mass grading of the southern portion of the site is planned to be undertaken at the start of Phase 1. Mass grading of the northern portion of the site is planned to be undertaken at the start of Phase 2. Thus, the construction emissions during Phases 1 and 2 will be more intense than either of the later phases. Buildings 1 through 4 comprise Phase 1 construction. Phase 2 would include the extension of Lincoln Avenue through the site and the commercial center and gas station, as well as Buildings 5 and 6. Phase 3 would include Buildings 7 and 10, and Phase 4 would include Buildings 8 and 9. The construction emissions were calculated using

<sup>30</sup> LSA Associates, Inc. 2023. Air Quality Impact Analysis for the Sunset Crossroads Specific Plan. January.



CalEEMod (Version 2020.4.0) and are shown in **Table 4.8.B: Short-Term Construction Greenhouse Gas Emissions** below (details are provided in the CalEEMod output in the Greenhouse Gas Analysis Sunset Crossroads Project report appendices).

Table 4.8.B: Short-Term Construction Greenhouse Gas Emissions

Construction Voca	Total Emissions per Phase (MT/yr)			Total Emissions per
Construction Year	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	Phase (MT CO₂e/yr)
2023	2,675.62	0.54	0.08	2,712.85
2024	5,685.29	1.12	0.15	5,759.16
2025	3,724.55	0.73	0.09	3,724.55
2026	1,940.62	0.41	0.03	1,961.01
2027	462.26	0.09	>0.01	467.18
<b>Total Emissions for Entire Construction Process</b>			14,624.76	
Total Construction Emissions Amortized over 30 years <sup>1</sup>			487.49	

Source: Table C, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

CH<sub>4</sub> = methane MT = metric tons

CO<sub>2</sub> = carbon dioxide MT/yr = metric tons per year

 $CO_2e$  = carbon dioxide equivalent  $N_2O$  = nitrous oxide

Operational Emissions. Long-term operational emissions would occur over the lifetime of the Development Project. Operational GHG emissions were calculated in CalEEMod independent of the Air Quality Analysis done by LSA in order to more precisely depict project-generated GHG emissions associated with electricity consumption. The Development Project will be served by the Banning Electric Utility, which is not a default setting in CalEEMod. To depict the GHG emissions associated with electricity consumption, emission factors were inputted into CalEEMod using the generation mix specific to the Banning Electric Utility which currently has a renewable portfolio of 75 percent. According to Banning Electric Utility, that renewable portfolio is expected to drop to 70 percent in 2027 as sources of generation change. Overall, the following activities associated with long-term operations of the Development Project could directly or indirectly contribute to the generation of GHG emissions:

- Landscape Equipment: Landscape maintenance equipment would generate emissions from fuel
  combustion and evaporation of unburned fuel. Equipment in this category would include
  lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to
  maintain the landscaping of the Development Project.
- Natural Gas, Electricity, and Water Use: Natural gas use results in the emission of two GHGs: CH<sub>4</sub> (the major component of natural gas) and CO<sub>2</sub> (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. The Development Project will use electricity from the Banning Electric Utility, and emission factors were derived based upon the Banning Electric Utility's estimated generation mix in years 2024 through 2029. This information can be found in the 2015 Power Supply Integrated Resource Plan. This plan states that the Banning Electric Utility's Power Purchase Agreements and local hydroelectric units, which are the basis of the estimated generation mix, anticipate that the

<sup>&</sup>lt;sup>1</sup> Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans. SCAQMD 2008.



renewable portfolio will constitute 70 percent of the energy sources through 2027, which will increase once additional power agreements come online. California's water conveyance system is energy intensive. Water-related electricity use is 48 terawatt hours per year and accounts for nearly 20 percent of California's total electricity consumption.

- Solid Waste Disposal: Solid waste generated by the Development Project could contribute to GHG emissions in a variety of ways. Landfills and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfills, the most common waste management practice, result in the release of CH<sub>4</sub> from the anaerobic decomposition of organic materials. CH<sub>4</sub> is 28 times more potent a GHG than CO<sub>2</sub>. However, landfill CH<sub>4</sub> can also be a source of energy.
- Light-Duty Motor Vehicle Use: The Development Project would result in GHG emissions from the
  combustion of fossil fuels in daily automobile and light-duty truck trips. The Traffic Impact Analysis
  (TIA) for the Development Project included VMT for automobiles and light-duty trucks. The
  CalEEMod inputs were adjusted to match the VMT in the TIA in order to better depict the
  Development Project.
- Medium and Heavy-Duty Truck Use: The industrial land uses within the Development Project will include trucks, primarily heavy-duty trucks including tractor-trailers. To determine emissions from trucks for the proposed industrial uses, the analysis incorporated truck trips from the TIA for the Development Project. The analysis also incorporated the SCAQMD recommended truck trip length of 40 miles. The CalEEMod model was adjusted to calculate medium and heavy-duty truck VMT based on the TIA and the SCAQMD recommended truck trip lengths.
- On-Site Cargo Handling Equipment: It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. Based on SCAQMD survey data, 3.6 pieces of cargo handling equipment (CHE) were required for every 1 million square feet of space. As such, for purposes of this analysis, it is assumed that Phase 1 would require up to five pieces of CHE, Phase 2 would require up to 18 pieces of CHE, and Phases 3 and 4 would require up to 18 pieces of CHE for a total of 41 pieces of CHE operating at Project buildout. For analytical purposes, it is assumed that each CHE would include an engine with approximately 200 horsepower (hp), be powered by compressed natural gas, gasoline, or diesel, and operate approximately 4 hours a day, 31 365 days of the year.
- Transportation Refrigeration Units (TRUs): In order to account for the possibility of refrigerated uses, trucks associated with the cold-storage land use are assumed to also have TRUs. For modeling purposes, 74 two-way truck trips have been estimated to include TRUs (e.g., all truck trips that would be associated with up to 100,000 sf of High-Cube Cold Storage use). TRUs are

Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.



accounted for during on-site and off-site travel. The TRU calculations are based on the 2017 Off-road Emissions model, version 1.0.1 (Orion), developed by the CARB.

The 65-megawatt capacity battery energy storage system (BESS) facility will operate within one of the industrial zoned areas of the Proposed Project. BESS was modeled in CalEEMod as a 10,000 sf light industrial area. BESS facilities are typically skid mounted battery banks within steel containers/cabinets and are not enclosed in a traditional building. The following adjustments were made within the CalEEMod model to reflect the nature of the BESS: no vehicle emissions because these emissions were already captured under the General Industrial category of land uses, no natural gas or water consumption because BESS is not a staffed facility, and solid waste generation is limited to periodic activities associated with maintenance of the facility. Electricity consumption would be for lights, computer control panels, and air conditioning. Electricity associated with charging and discharging of the BESS is used for electric grid stability and not considered "consumed," by the Development Project.

The Travel Center was modeled in CalEEMod as a gasoline/service station with 26 fueling positions. This land use in CalEEMod was chosen because it most closely matches a Travel Center. Heavy-Duty truck and passenger vehicle related vehicle miles traveled (VMT) were adjusted to match the Traffic Impact Analysis (TIA) and depict a Travel Center. The square footage of the gasoline/service station was also increased to 7,500 square feet to match the Project Description and better depict the utility use of a Travel Center.

GHG emissions from the activities listed above at buildout were calculated using CalEEMod. Based on SCAQMD guidance<sup>32</sup>, construction emissions were amortized over 30 years (a typical project lifetime) and added to the total Development Project operational emissions to determine long-term annual GHG emissions resulting from the Development Project.

The Development Project will be built in phases, with Phase 1 operational in 2024, Phase 2 in 2025, Phase 3 in 2026, and buildout by year 2027. The Development Project was modeled at buildout in CalEEMod because buildout of the Development Project will result in the greatest levels of activities and GHG emissions. To estimate the emissions associated with the phased nature of the Development Project, the buildout emissions were proportioned by the land use activities within each phase. As an example, Phase 1 will construct approximately 61 percent of the total industrial land uses (primarily warehouses with one building designated general light industrial). To estimate GHG emissions associated with the operations of Phase 1, 61 percent of the GHG emissions associated with warehouse and general light industrial was used. Each phase was estimated in this way to provide some perspective on the GHG emissions impacts associated with each phase. Therefore, Phase 2 equals all of the commercial component of the project plus Buildings 5 and 6, which is an additional 9 percent of the warehouse floor area (total of 70 percent warehousing). Phase 3 will construct Buildings 7 and 10, which is an additional 25.5 percent of warehousing (90.5 percent total warehouse

South Coast Air Quality Management District (SCAQMD). 2008. Greenhouse Gas CEQA Significance Thresholds. Website: <a href="http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds">http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds</a> (accessed September 2023).

The development schedule for the Development Project has been delayed; however, the annual emissions are an accurate representation of the projected emissions.



area), and Phase 4 constructs Buildings 8 and 9 for total buildout. Another assumption in the phasing of the Development Project is that each subsequent phase would include all operational and amortized construction emissions from the previous phases, and each phase would incorporate the following project design features:

The Project Applicant proposes the following Project Design Features (PDFs) that would be incorporated into the Development Project design and construction or implemented as part of the Development Project during operations. The following are the PDFs of the Development Project:

- Occupant sensing lighting that dims to at least 50 percent when unoccupied shall be within the interior areas of warehouses and offices.
- Office space heating within warehouses must utilize heat pumps.
- Development Project street improvements will include sidewalks.
- Secure bicycle storage racks or bicycle lockers, and employee lockers will be provided within the industrial land uses of the Development Project.
- Larger parking spaces will be provided that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas.
- Provide adequate areas for on-site truck parking, on-site truck queuing, and truck check-in point.
- Post signs clearly showing the designated entry and exit points from the public street to the designated on-site truck check-in and truck parking areas.
- Post signs indicating that all parking and maintenance of trucks must be conducted within the designated on-site areas and not within the surrounding community or public streets.
- Development Project installed traffic signals shall be smart signals that can be synchronized and connected to an ITS system.

Buildout of the Development Project will be completed in 2027, and the impacts associated with GHG emissions are analyzed for that year.

Phase 1 Operational Emissions. GHG emissions associated with Phase 1 of the Development Project are summarized in Table 4.8.C: Unmitigated Phase 1 Greenhouse Gas Emissions. As shown in Table 4.8.C, the Development Project's unmitigated emissions with PDFs incorporated would be approximately 26,004.52 MT CO<sub>2</sub>e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MT CO<sub>2</sub>e per year threshold. The majority of the GHG emissions (71 percent of unmitigated emissions) are associated with nonconstruction related mobile sources.



**Table 4.8.C: Unmitigated Phase 1 Greenhouse Gas Emissions** 

Source	GHG Emissions (MT CO₂e/year)	
Construction Emissions Amortized over 30 Years	90.60	
Operational Em	issions	
On-Site Commercial Emissions	0.00	
Off-Site Commercial Mobile Emissions	0.00	
On-Site Industrial Emissions	7,565.86	
Off-Site Industrial Emissions	18,348.05	
Total On-Site Emissions	7,565.86	
Total Off-Site Mobile Emissions	18,348.05	
Total Project Emissions	26,004.52	

 $Source: Table\ D,\ Greenhouse\ Gas\ Analysis,\ Sunset\ Crossroads\ Project,\ Banning,\ California\ (Michael\ Constraints)$ 

Hendrix Consulting 2023).

GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year

Emissions of motor vehicles are controlled by State and federal standards, and the Development Project has no control over these standards.

Phase 2 Operational Emissions. GHG emissions associated with Phase 2 of the Development Project are summarized in Table 4.8.D: Unmitigated Phase 2 Greenhouse Gas Emissions. The assumption in Phase 2 is that Phase 1 is also operating at this time, so Table 4.8.E: Unmitigated Phase 3 Greenhouse Gas Emissions shows the combined operations of Phase 1 and Phase 2. As shown in Table 4.8.D, the Development Project's unmitigated emissions with incorporation of the PDFs under Phase 2 would be approximately 45,322.47 MT CO<sub>2</sub>e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MT CO<sub>2</sub>e per year threshold. The majority of the GHG emissions (66 percent of unmitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and federal standards, and the Development Project has no control over these standards.

**Table 4.8.D: Unmitigated Phase 2 Greenhouse Gas Emissions** 

Source	GHG Emissions (MT CO₂e/year)
Construction Emissions Amortized over 30 Years	283.52
Operational Em	issions
On-Site Commercial Emissions	4,794.12
Off-Site Commercial Mobile Emissions	7,938.25
On-Site Industrial Emissions	10,532.27
Off-Site Industrial Emissions	21,774.31
Total On-Site Emissions	15,326.39
Total Off-Site Mobile Emissions	29,712.56
Total Project Emissions	45,322.47

Source: Table E, *Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California* (Michael Hendrix Consulting 2023).

GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year



**Table 4.8.E: Unmitigated Phase 3 Greenhouse Gas Emissions** 

Source	GHG Emissions (MT CO₂e/year)
Construction Emissions Amortized over 30 Years	408.37
Operational Em	issions
On-Site Commercial Emissions	4,794.12
Off-Site Commercial Mobile Emissions	7,938.25
On-Site Industrial Emissions	13,119.46
Off-Site Industrial Emissions	27,897.04
Total On-Site Emissions	17,913.57
Total Off-Site Mobile Emissions	35,835.29
Total Project Emissions	54,157.23

Source: Table F, *Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California* (Michael Hendrix Consulting 2023).

GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year

Phase 3 Operational Emissions. GHG emissions associated with Phase 3 of the Development Project are summarized in Table 4.8.E. The assumption in Phase 3 is that Phase 1 and Phase 2 are also operating at this time, so Table 4.8.E shows the combined operations of Phase 1 through Phase 3. As shown in Table 4.8.E, the Development Project's unmitigated emissions with incorporation of the PDFs would be approximately 54,157.23 MT CO<sub>2</sub>e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MT CO<sub>2</sub>e per year threshold. The majority of the GHG emissions (66 percent of unmitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and federal standards, and the Development Project has no control over these standards.

Long-Term Emissions at Buildout. Long-term GHG emissions associated with buildout of the Development Project (Phase 1 through Phase 4 are all operating) are summarized in Table 4.8.F: Unmitigated Long-Term Greenhouse Gas Emissions at Buildout. As shown in Table 4.8.F, the Development Project's unmitigated emissions with incorporation of the PDFs would be approximately 56,902.96 MT CO<sub>2</sub>e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MT CO<sub>2</sub>e per year threshold. The majority of the GHG emissions (66 percent of unmitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Development Project has no control over these standards.

*Impact Conclusion.* Under this threshold the Development Project would have *potentially significant* emissions and mitigation would be required.

Level of Significance Prior to Mitigation: Potentially Significant Impact.

**Regulatory Compliance Measures and Mitigation Measures:** The Project shall implement **Mitigation Measure AIR-2**, many provisions of which in addition to reducing air quality emissions would result in a reduction in GHG emissions.



Table 4.8.F: Unmitigated Long-Term Greenhouse
Gas Emissions at Buildout

Source	GHG Emissions (MT CO₂e/year)
Construction Emissions Amortized over 30 Years	487.49
Operational Em	issions
On-Site Commercial Emissions	4,794.12
Off-Site Commercial Mobile Emissions	7,938.25
On-Site Industrial Emissions	14,076.41
Off-Site Industrial Mobile Emissions	29,606.70
Total On-Site Emissions	18,870.53
Total Off-Site Mobile Emissions	37,544.94
Total Project Emissions	56,902.96

Source: Table G, Greenhouse Gas Analysis Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year

The following summarizes the GHG reducing aspects of **Mitigation Measure AIR-2** shown in **Section 4.3** of this EIR.

- All facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site shall meet or exceed 2010 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on site demonstrating compliance with this requirement and shall make records available for inspection by the City of Banning, SCAQMD, and State upon request.
- All on-site cargo handling equipment including yard trucks, hostlers, yard goats, pallet jacks, forklifts and other on-site equipment shall be electric with the necessary electrical plug-in charging included in the design of the Development Project electrical system, buildings, and equipment storage and parking areas.
- Tenant lease agreements for the Development Project shall include contractual language restricting trucks and support equipment from nonessential idling longer than 5 minutes while on site. The idling restriction will be presented on signs at the entrance to the industrial portions of the Development Project as well as at loading docks and truck parking areas.
- All facility operators shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Interior- and exterior-facing signs, including signs directed at all dock and delivery areas, shall be
  provided identifying idling restrictions and contact information to report violations to CARB, the
  air district, and the building manager.



- At buildout of the industrial land uses a minimum of 50 Level 3 AC Class 8 electric vehicle (EV) truck chargers shall be installed at the tractor trailer parking spaces in logical locations to facilitate electric truck charging.
- For the warehouse/industrial portions of the Development Project, the buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for installation of electric charging systems for electric trucks and power transport refrigeration units (TRUs). Conduit shall be installed from the electrical room to all tractor trailer parking spaces in logical locations on site to facilitate future electric truck charging.
- At buildout, the Development Project shall include the higher value of either:
  - At least 350 Level 2 AC EV chargers; or
  - A percentage of total parking spaces with Level 2 AC EV chargers to comply with the minimum requirements of the California Code of Regulations (CCR), Title 24, Part 11: California Green Building Standards Code.
- All truck/dock bays that serve cold storage facilities within the proposed buildings shall be electrified to facilitate plug-in capabilities and support use of electric standby and/or hybrid electric TRUs.
- Prior to issuance of occupancy permits for the industrial/warehouse area, the Development Project operators employing 200 or more employees shall be required to establish and promote a rideshare program, prepare and submit a Transportation Demand Management Program detailing strategies that discourage single-occupancy vehicle trips by employees by increasing and providing financial incentives for alternate modes of transportation, including carpooling/ vanpools, public transit, and biking.
- Signs at every truck exit driveway shall be provided showing directional information to the truck route.
- Every tenant shall be required to train staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Facility operators shall also be required to maintain records on site demonstrating compliance and make records available for inspection by the City of Banning, SCAQMD, and State upon request.
- Tenants shall be required to enroll in the United States Environmental Protection Agency's SmartWay program, and tenants shall be required to use carriers that are SmartWay carriers.
- Industrial and commercial buildings within the Development Project shall be all electric unless the land use requires natural gas (i.e., restaurants, bakeries, dental and medical laboratories)
- Tenants shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.



The following are additional mitigation measures that would be required to address significant GHG emissions:

# MM GHG-1 Pro

Provide separate recycling bins within each commercial/industrial building and provide large external recycling collection bins at central locations in the commercial and industrial land uses for collection truck pickup. Provide a commercial recycling/composting program that provides 70 percent diversion of waste for the commercial land uses. Provide an industrial recycling program that provides 80 percent diversion of waste for the industrial land uses.

## MM GHG-2

Provide drought tolerant low-water landscaping and trees throughout the Project site and use recycled (purple pipe) irrigation water with drip irrigation and weather based smart irrigation controllers.

#### MM GHG-3

Prior to the issuance of building permits, the Project Applicant or successor in interest shall provide documentation to the City of Banning demonstrating that the Project is designed to achieve energy efficient buildings exceeding Title 24 standards with the following design criteria:

- Building envelops insulation of conditioned space within all commercial and industrial buildings shall be R15 or greater for walls and R30 or greater for attics/roofs.
- Windows of commercial and industrial buildings shall have an insulation factor of 0.28 or less U-factor and 0.22 or less SHGC.
- All roofing material for commercial buildings shall be CRRC Rated 0.15 aged solar reflectance or greater and 0.75 thermal emittance.
- All heating/cooling ducting within the commercial and industrial buildings shall be insulated with R6 or greater insulation.
- All heating and cooling equipment shall be ERR 14/78 percent AFUE, or 7.7 HSPF levels of efficiency or greater.
- All water heaters in the commercial and industrial buildings shall be high efficiency electric water heaters with a minimum 0.72 Energy Factor or greater.
- Lighting within the commercial and industrial buildings shall be high efficiency LED lighting with a minimum of 40 lumens/watt for 15 watt or less fixtures, 50 lumens/watt for 15–40-watt fixtures, and 60 lumens/watt for fixtures greater than 40 watts.

#### MM GHG-4

All appliances within the commercial and industrial land uses shall be energy star rated appliances.



MM GHG-5 All water fixtures shall be water efficient (toilets/urinals [1.5 GPM or less],

showerheads [2.0 GPM or less], and faucets [1.28 GMM or less]).

MM GHG-6 All landscape equipment used to maintain the landscaping within the Development Project shall be electric.

Emission reductions associated with implementation of these mitigation measures are provided in Table 4.8.G: Mitigated Phase 1 Greenhouse Gas Emissions, Table 4.8.H: Mitigated Phase 2 Greenhouse Gas Emissions, Table 4.8.I: Mitigated Phase 3 Greenhouse Gas Emissions, and Table 4.8.J: Mitigated Long-Term Greenhouse Gas Emissions at Buildout. Additionally, State regulations including the Zero Emission Vehicle Program, the reduction of emissions from electric generation due to increased renewable energy in the Renewable Portfolio Standard, waste diversion requirements, and water efficiency requirements will all contribute to long-term reductions in GHG emissions in the year 2040. Therefore, a forecast of 2040 levels of emissions associated with the Development Project by phase and at buildout with mitigation are included for informational purposes only.

Table 4.8.G: Mitigated Phase 1 Greenhouse Gas Emissions

Source	GHG Emissions (MT CO₂e/year)			
Source	Mitigated 2027	Estimated Mitigated 2040		
Construction Emissions Amortized over 30 Years	90.60	90.60		
0	Operational Emissions			
On-Site Commercial Emissions	0.00	0.00		
Off-Site Commercial Mobile Emissions	0.00	0.00		
On-Site Industrial Emissions	3,248.81	1.520.12		
Off-Site Industrial Emissions	12,294.29	5,752.50		
Total On-Site Emissions	3,248.81	1,520.12		
Total Off-Site Mobile Emissions	12,294.29	5,752.50		
Total Project Emissions	15,633.70	7,363.22		

Source: Table D, *Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California* (Michael Hendrix Consulting 2023). GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year

**Table 4.8.H: Mitigated Phase 2 Greenhouse Gas Emissions** 

Source	GHG Emissions (MT CO₂e/year)		
Source	Mitigated 2027	Estimated Mitigated 2040	
Construction Emissions Amortized over 30 Years	283.52	283.52	
0	perational Emissions		
On-Site Commercial Emissions	2,639.75	1,235.14	
Off-Site Commercial Mobile Emissions	5,594.92	2,617.86	
On-Site Industrial Emissions	8,137.27	3,807.43	
Off-Site Industrial Emissions	14,311.35	6,696.28	
Total On-Site Emissions	10,777.02	5,042.57	
Total Off-Site Mobile Emissions	19,906.38	9,314.15	
Total Project Emissions	30,966.81	14,640.23	

Source: Table E, *Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California* (Michael Hendrix Consulting 2023). GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year



**Table 4.8.I: Mitigated Phase 3 Greenhouse Gas Emissions** 

Source	GHG Emissions (MT CO₂e/year)		
Source	Mitigated 2027	Estimated Mitigated 2040	
Construction Emissions Amortized over 30 Years	408.37	408.37	
Operational Emissions			
On-Site Commercial Emissions	2,639.75	1,235.14	
Off-Site Commercial Mobile Emissions	5,594.92	2,617.86	
On-Site Industrial Emissions	9,243.64	4,325.10	
Off-Site Industrial Emissions	18,390.24	8,604.79	
Total On-Site Emissions	11,883.39	5,560.24	
Total Off-Site Mobile Emissions	23,985.16	11,222.66	
Total Project Emissions	36,276.92	17,191.26	

Source: Table F, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023). GHG = greenhouse gas

MT CO<sub>2</sub>e/year = metric tons carbon dioxide equivalent per year

Table 4.8.J: Mitigated Long-Term Greenhouse Gas Emissions at Buildout

Course	GHG Emissions (MT/year)		
Source	Mitigated 2027	Estimated Mitigated 2040	
Construction Emissions Amortized over 30 Years	487.49	487.49	
Op	perational Emissions		
On-Site Commercial Emissions	2,639.75	1,235.14	
Off-Site Commercial Mobile Emissions	5,594.92	2,617.86	
On-Site Industrial Emissions	9,737.48	4,556.17	
Off-Site Industrial Emissions	20,266.59	9,482.74	
Total On-Site Emissions	12,377.24	5,791.31	
Total Off-Site Mobile Emissions	25,861.52	12,100.60	
Total Project Emissions	38,726.25	18,379.40	

Source: Table G, *Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California* (Michael Hendrix Consulting 2023). GHG = greenhouse gas

MT CO₂e/year = metric tons carbon dioxide equivalent per year

As shown in **Table 4.8.J**, even with all feasible mitigation, emissions would exceed the City's threshold of 3,000 MT CO<sub>2</sub>e at Development Project Buildout. No additional feasible mitigation measures are available that can reduce impacts to less than significant. As explained below, the Development Project incorporates all feasible mitigation measures that could be implemented to further reduce the Project's GHG emissions, but emissions cannot be reduced below the 3,000 MT CO<sub>2</sub>e threshold. There are no additional measures available that would further reduce emissions because the majority of the Development Project's emissions come from mobile sources that are regulated by the State and not the City of Banning.

Reliance on carbon offsets to reduce either the Development Project's mobile or non-mobile emissions is also not feasible. No local program is available that meets CEQA's criteria. Offset credits must be quantifiable, additional, and verifiable. It has been determined that even offset credits purchased from CARB-approved offset project registries do not adequately ensure that purchased offset credits accurately and reliably represent actual emissions reductions or cannot guarantee that such reductions are additional to any reduction that would occur under business-as-usual operations



and reductions required by law, and do not meet the definition of a valid mitigation measure. See Golden Door Properties, LLC v. County of San Diego (2020) 50 Cal.App.5th 467. In addition, as the Lead Agency, the City of Banning is responsible for enforcing project mitigation measures that are relied upon to reduce GHG impacts and has no enforcement authority over offset credits that fund carbon reduction projects outside of the City.

**Level of Significance After Mitigation:** Significant and Unavoidable Impact.

# 4.8.5.2 Greenhouse Gas Plan, Policy, Regulation Consistency

Threshold 4.8.2: Would the Development Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs?

Plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, SCAG's 2020–2045 RTP/SCS, the County of Riverside Climate Action Plan, the City of Banning General Plan, and the Air Quality Management Plan. Analysis of whether the Development Project would conflict with a plan, policy, or regulation adopted to reduce GHG emissions is presented below.

Riverside Climate Action Plan. Portions of the Development Project are currently located in the unincorporated area of Riverside County within the Sphere of Influence (SOI) of the City. Under the Riverside County CAP, projects that generate less than 3,000 MT CO<sub>2</sub>e are considered less than significant; projects that generate more than 3,000 MT CO<sub>2</sub>e must achieve at least 100 points on the Riverside County GHG Emissions Screening Tables (Screening Tables) to demonstrate consistency with the CAP. Projects that achieve 100 points on the Screening Tables are also considered less than significant. The Screening Tables establish a points system that assigns values for each GHG emissions mitigation design element or operational program feature incorporated into a given development project. Because the Development Project will be located entirely within the City, the Riverside County CAP does not apply. For informational purposes, the Project is also shown to be consistent with the Riverside County CAP.

**Table 4.8.K: Project Consistency Analysis with Riverside County CAP Screening Tables** provides an overview of the points the Development Project will achieve within the Screening Tables and shows how the Project Applicant (through PDF or mitigation) incorporates the described feature into the Development Project.

The Development Project gains over 500 points in the County of Riverside CAP Screening Tables, and these measures will be implemented as part of the Development Project through the PDFs and **Mitigation Measures AIR-2, GHG-1, GHG-2, GHG-4, GHG-5,** and **GHG-6**. Since the Development Project greatly exceeds the 100-point threshold needed to show consistency with the CAP, the Development Project would implement a greater amount of the reduction measures than needed and would be consistent with the County of Riverside CAP if it applied to the entire project.



# Table 4.8.K: Project Consistency Analysis with Riverside County CAP Screening Tables

Feature	Description	Assigned Point Values	Project PDF or Mitigation Measure (MM)	
	Building Envelope			
Insulation	Modestly Enhanced Insulation (walls: R-13; roof/attic: R-38)	9	MM GHG-3	
Windows	Modestly Enhanced window insulation (0.4 U-Factor, 0.32 SHGC)	4	MM GHG-3	
Cool Roof	Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7	MM GHG-3	
	Indoor Space Efficiencies			
Heating/Cooling Distribution System	Modest Duct Insulation (R-6)	5	MM GHG-3	
Space Heating/Cooling Equipment	Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF)	4	MM GHG-3	
Water Heaters	High Efficiency Water Heater (0.72 Energy Factor)	10	MM GHG-3	
Artificial Lighting	Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)	8	MM GHG-3	
	Energy Star Commercial Refrigerator	2	MM GHG-4	
Appliances	Energy Star Commercial Dish Washer	2	MM GHG-4	
	Energy Star Commercial Close Washer	2	MM GHG-4	
	Irrigation and Landscaping			
Water Efficient Landscaping	Only moderate water using plants	3	MM GHG-2	
Water Efficient Irrigation Systems	Weather based Irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use)	3	MM GHG-2	
	Potable Water		l	
Toilets	Water Efficient Toilets/Urinals (1.5 gpm)	2	MM GHG-5	
Faucets	Water Efficient faucets (1.28 gpm)	2	MM GHG-5	
Commercial Dishwashers	Water Efficient dishwashers (20% reduction)	2	MM GHG-5	
	Commercial/Industrial Reclaimed Water Use			
Recycled Water	Recycled (purple pipe) irrigation system onsite	5	MM GHG-2	
R	de Sharing and Bike-to-Work Programs within Businesses			
Car/Vanpool	Car/vanpool program with preferred parking	2	MM AIR-2	
Employee Bicycle/Pedestrian Program	Bike lockers and secure racks	1	MM AIR-2	
Parking	Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles	1	MM AIR-2	
	Provide larger parking spaces for vanpools	1	PDF	
	Signal Synchronization and Intelligent Traffic Systems			
C'anal I annual annual	Synchronize signals along arterials used by project.	1	PDF	
Signal Improvements	Connect signals along arterials to existing ITS.	3	PDF	
Implement the Bicycle Master Plan and Expand Bike Routes around the County				
Sidewalks	Provide sidewalks on both sides of the street <sup>1</sup>	1	PDF	
Electrify the Fleet				
Electric Vehicle Charging	Install electric vehicle charging stations in garages/parking areas	500+	MM AIR-2	
Reduce Waste at Landfills				
Recycling	Commercial/industrial recycling programs goal of 80% diversion.	5	MM GHG-1	
	Total Points Earned by Commercial/Industrial Project	586+		

Source: Table I, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

Public street improvements by the Development Project will include sidewalks and where the City has designated bike lanes, will include bike lanes.



City of Banning General Plan. The Air Quality Element of the City of Banning General Plan<sup>34</sup> identify goals, policies, and programs meant to balance the City's actions regarding land use, circulation, and other regulatory actions and their associated potential effects on local and regional air quality. Some of the goals and policies in this element also reduce GHG emissions. Table 4.8.L: Project Consistency with Banning General Plan Air Quality Element provides a summary of the Development Project's consistency with relevant goals and policies within the Banning General Plan that reduce GHG emissions.

**Table 4.8.L: Project Consistency with Banning General Plan Air Quality Element** 

Policies	Project Consistency	
2006 Banning General F	Plan Air Quality Policies	
AQ Policy 1: The City shall be proactive in regulating local pollutant emitters and shall cooperate with the SCAG and the SCAQMD to assure compliance with air quality standards.	<b>Consistent.</b> The Development Project includes project design features and mitigation measures to reduce greenhouse gas emissions through energy efficiency, zero emission vehicles, zero emissions equipment, water efficiency, and waste diversion.	
AQ Policy 2: The City shall continue to coordinate and cooperate with local, regional and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM <sub>10</sub> and ozone emissions, as well as other emissions associated with diesel-fueled equipment and motor vehicles.	<b>Consistent.</b> The Development Project requires the use of zero emissions equipment and facilitates the use of alternative modes of transportation by providing electric vehicle infrastructure, electric vehicle charging stations and other amenities for alternative fuel vehicles including automobiles and medium and heavy-duty electric trucks that in addition to reducing the air pollutants described in this Policy will also reduce greenhouse gas emissions.	
AQ Policy 4: Development proposals brought before the City shall be reviewed for potential adverse local and regional air quality impacts and shall be required to mitigate any significant impacts.	<b>Consistent:</b> The Development Project includes project design features and mitigation measures to reduce potential air quality impacts, and greenhouse gas emissions.	
AQ Policy 5: The City shall promote the use of clean and/or renewable alternative energy sources for transportation, heating and cooling.	<b>Consistent.</b> The Development Project requires zero emissions onsite equipment, energy efficient electric heating and cooling systems, and facilitates the use of alternative modes of transportation by providing electric vehicle charging stations and other amenities for alternative fuel vehicles.	
AQ Policy 6: The City shall support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle paths and lanes, and community-wide multi-use trails.	Consistent. The Development Project includes sidewalks on both sides of the streets, connects sidewalks to residential land uses within 0.25 mile of the Development Project, creates a pedestrian friendly commercial development, and facilitates the use of alternative modes of transportation by providing electric vehicle charging stations and other amenities for alternative fuel vehicles.	
Policies in the Energy and N		
<b>EMR Policy 1:</b> Promote energy conservation throughout all areas of the community and sectors of the local economy, including the planning and construction of urban uses and in City and regional transportation systems.	<b>Consistent.</b> The Development Project requires zero emissions onsite equipment, energy efficient electric heating and cooling systems, and facilitates efficient use of transportation by providing electric vehicle (EV) charging stations and other amenities for alternative fuel vehicles.	
<b>ERM Policy 2:</b> Promote the integration of alternative energy systems, including but not limited to solar thermal, photovoltaics and other clean energy systems, directly into building design and construction.	<b>Consistent.</b> The Development Project includes solar ready rooftops, energy efficient electric heating and cooling systems, and facilitates electric transportation by providing EV charging stations.	
<b>ERM Policy 4:</b> Support public and private efforts to develop and operate alternative systems of wind, solar and other electrical production, which take advantage of local renewable resources.	<b>Consistent.</b> The Development Project includes solar ready rooftops, energy efficient electric heating and cooling systems, and facilitates electric transportation by providing EV charging stations.	

Source: Table H, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

<sup>&</sup>lt;sup>34</sup> City of Banning. 2006. Op. cit.



**Scoping Plan Consistency.** The CARB's 2022 Scoping Plan<sup>35</sup> was adopted in December 2022 and outlines the main State strategies for meeting the net carbon neutrality target and to reduce GHGs that contribute to global climate change by 85 percent below 1990 levels no later than 2045 on a statewide basis. Pursuant to AB 1279, the Scoping Plan must identify and make recommendations on direct emission reduction measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable carbon dioxide removal and carbon capture, utilization, and storage technologies to complement these emission reductions in order to achieve net carbon neutrality no later than 2045.

Building decarbonization measures are intended to maximize energy efficiency building and appliance standards, maximize distributed renewable energy generation and energy storage, eliminate the use of natural gas, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California, and are included in the Scoping Plan. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The Development Project would be constructed to comply with the California Green Building Standards Code (CALGreen). Therefore, the Development Project would not conflict with energy efficient measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The Development Project would comply with the CALGreen standards and would include low-flow plumbing fixtures, drought-tolerant landscaping, and other features that would reduce water demand. Therefore, the Development Project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to transition all on-road and offroad vehicles to zero-emissions technologies and implement alternative modes of transportation. The Development Project would implement the use of zero emission vehicles (ZEV) and ZEV infrastructure (1.e. electric vehicle chargers) and would increase the use of alternative means of transportation. Therefore, the Development Project would not conflict with the identified transportation and motor vehicle measures. A summary of the Development Project's consistency with the measures identified in Appendix D of the 2022 Scoping Plan is shown in **Table 4.8.M: Project Consistency with Applicable 2022 Scoping Plan Appendix B Measures**.

The Development Project would not conflict with pertinent Statewide action measures in the 2022 Scoping Plan. Therefore, the Development Project would not conflict with a plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

California Air Resources Board (CARB). 2022. California's 2022 Climate Change Scoping Plan. November. Website: <a href="https://www.arb.ca.gov/cc/scopingplan/scoping-plan-2017.pdf">https://www.arb.ca.gov/cc/scopingplan/scoping-plan-2017.pdf</a> (accessed September 2023).



Table 4.8.M: Project Consistency with Applicable 2022 Scoping Plan Appendix D Measures

2022 Scoping Plan Appendix B Measures	Project Consistency
Convert local fleets to Zero Emission Vehicles (ZEV) and provide EV charging at public sites.	Consistent. The Development Project includes a commitment of at least 350 EV chargers, or the number required by the CALGreen Code, whichever is higher, within the commercial parking lots and industrial employee parking lots. In addition, the Development Project would include 50 electric truck vehicles.
Implement Complete Streets.	<b>Consistent.</b> All public street improvements will include sidewalks and where the City has designated bike lanes, will include bike lanes.
Increase public access to clean mobility options including bike share, care share and walking.	<b>Consistent</b> . The Development Project would include ride share programs, secure bike racks, and sidewalks.
Implement all-electric new construction.	<b>Consistent</b> . The Development Project buildings will be all electric unless the land use requires natural gas (restaurants, bakeries, dental and medical laboratories, etc.).
Deployment of renewable energy production and distribution and energy storage on private owned land uses.	Consistent. The Development Project will provide solar ready roofs in compliance with the building code. In addition, Banning Electric Utility which will supply electricity to the Project has a renewable portfolio that exceeds the state requirement.

Source: Table J, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

SCAG's 2020–2045 RTP/SCS. On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently, and improve the jobs/housing balance in the Inland Empire area. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Development Project comparison to the RTP/SCS is an appropriate indicator of whether the Development Project would inhibit the post-2020 GHG



reduction goals promulgated by the State. The Development Project's consistency with the RTP/SCS goals is analyzed in detail in **Table 4.8.N: Project Consistency with the 2020 RTP/SCS**.

**Air Quality Management Plan.** A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality and climate concerns are addressed.

The Development Project would not conflict with applicable control measures within the 2022 AQMP. The Development Project's consistency with the AQMP goals is analyzed in detail in **Table 4.8.0**: **Project Consistency with Applicable 2022 AQMP Control Strategies**.

*Impact Conclusion.* As shown in **Tables 4.8.K** through **4.8.O**, the Development Project would not conflict with any of the local, regional, and Statewide plans, polices, programs, and regulations discussed above that are adopted for the purposes of reducing GHG emissions. Therefore, with respect to this threshold, the Development Project does not have a significant impact. However, despite plan consistency, the Development Project's long-term operational impacts would exceed the City's threshold of 3,000 MT CO₂e per year despite implementing PDFs and all feasible mitigation. Thus, the Development Project may impede long-term GHG reduction goals of various plans (e.g., for 2030 and 2050), and a *potentially significant* impact may occur as a result of the Development Project.

**Level of Significance Prior to Mitigation:** Potentially Significant Impact.

Regulatory Compliance Measures and Mitigation Measures: Implement Mitigation Measures AIR-2 and GHG-1 through GHG-6.

**Level of Significance After Mitigation:** Significant and Unavoidable Impact.



# Table 4.8.N: Project Consistency with the 2020 RTP/SCS

SCAG Goals	Project Consistency
<b>Goal 2:</b> Improve mobility, accessibility, reliability, and travel safety for people and goods.	<b>No Conflict</b> . The Project site is located approximately 0.1 miles south of I-10, which connects the City to the greater Los Angeles area, including the Ports of Los Angeles and Long Beach major gateways for international trade, and State Routes to other areas in the Inland Empire. Due to its proximity to I-10, visitors to the Development Project's commercial amenities have easy access to the site, and trucks accessing the Project site can efficiently access the State highway system to facilitate the movement of goods throughout the region.
<b>Goal 3:</b> Enhance the preservation, security, and resilience of the regional transportation system.	<b>No Conflict</b> . This policy is implemented by cities and the counties in the SCAG region as part of planning and maintenance of the regional transportation system. This policy provides guidance to City staff to monitor the transportation network and to continue to coordinate with other agencies. The Development Project would not be inconsistent with the City's planning or maintenance efforts.
<b>Goal 4:</b> Increase person and goods movement and travel choices within the transportation system.	<b>No Conflict</b> . The Development Project will add commercial and industrial uses along I-10, which connects to a regional transportation network (SR-60, I-15, and I-215). It will provide job opportunities in a housing-rich area and industrial uses in close proximity to the regional transportation network. Therefore, the Development Project increases person, goods movement, and travel choices within the transportation system.
Goal 5: Reduce GHG emissions and improve air quality.	No Conflict. Air quality impacts are addressed in a separate Air Quality Impact Analysis. GHG impacts would be reduced to the maximum extent feasible through the implementation of Mitigation Measures and project design features which limit truck idling, provide incentives for using clean engines and equipment, require installation of conduits for EV truck charging stations, electric indoor material handling equipment, and off-road equipment, preferential parking for fuel-efficient and carpool/van vehicles, EV charging stations, etc.  In addition, the Project would incorporate measures related to building design, landscaping, and energy systems to promote the efficient use of energy, thus minimizing GHG emissions. The Development Project is also consistent with the Riverside County CAP's requirement to achieve at least 100 points indicating that its GHG impacts are not considered cumulatively considerable. Moreover, the City is located in a priority growth area for job centers in the region under the Connect SoCal Plan. When growth is concentrated in Job Centers, the length of vehicle trips for residents can be reduced; thereby reducing GHG emissions and improving air quality.
<b>Goal 7:</b> Adapt to a changing climate and support an integrated regional development pattern and transportation network.	No Conflict. Adoption of the 2020 RTP/SCS led to significant changes in the goods movement industry including emerging and new technologies and more complex supply chain strategies. E-commerce continues to be one of the most influential factors shaping goods movement. The Development Project will develop a vacant site with industrial and commercial buildings that would add diversity to the City's economy and bring employment opportunities closer to the local workforce. Locating jobs near housing helps maintain the jobs to housing balance within the City and reduces GHG emissions caused by long commutes and contributes to integrated development patterns. The Project site is located near I-10, thereby reducing travel distances for movement of goods. Development of the Project in western Riverside County also could shorten the distance that goods need to travel between a logistics facility to their final destinations ("last mile" transit times). In addition, the Development Project includes water conservation measures and recycled water use that will adapt to climate change impacts on water supplies.
<b>Goal 8:</b> Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<b>No Conflict</b> . The Development Project is preparing for and implementing zero emission vehicle infrastructure to use in more efficient, lower emissions goods movement. The Project would meet contemporary industry standards and operational characteristics relative to transportation technologies.



# Table 4.8.N: Project Consistency with the 2020 RTP/SCS

SCAG Goals	Project Consistency
Goal 9: Encourage development of diverse	Not Applicable. The implementation of the Development Project would rezone the
housing types in areas that are supported by	site from residential development to enable development of industrial uses while
multiple transportation options.	retaining commercial and open space/conservation uses. To comply with the
	requirements of Government Code Section 66300 et seq. regarding no net loss of
	residential capacity, the City has identified a maximum of 1,146 units on the Project
	site within the City that it will relocate to property in the City currently zoned as Public
	Facilities that it will rezone to very high density residential. By providing no fewer than
	1,146 units on that site, the City avoids net loss of residential capacity and maintains
	development of diverse housing types within the City. Therefore, implementation of
	the Development Project would not interfere with the City's ability to encourage
	development of diverse housing types that are supported by multiple transportation
	options in other parts of the City, as appropriate.
Goal 10: Promote conservation of natural	No Conflict. The Development Project includes 52.8 acres of open space area that will
and agricultural lands and restoration of	be maintained with the natural vegetation and topography after construction and
habitats	designed to retain three deeply incised existing natural drainages (from east to west:
	Pershing Wash, Smith Creek, and Highland Wash) and associated features within the
	Development Site.

Source: Table L, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).

# Table 4.8.O: Project Consistency with the 2022 AQMP

2022 AQMPs	Project Consistency
Promote widespread deployment of available Zero Emissions (ZE) and low NOx technologies for on-road mobile sources.	Consistent. The Development Project includes the electrical capacity and conduit to provide on-site Class 8 electric truck charging and includes 50 Level 3 electric truck chargers for medium-duty and heavy-duty electric truck charging. The Development Project will also include at least 150 electric vehicle chargers in the public parking areas and will comply with the minimum requirements of the California Code of Regulations, Title 24, Part 11: California Green Building Standards Code.
Promote widespread deployment of available Zero Emissions (ZE) and low NOx technologies for off-road mobile sources.	Consistent. The Development Project would restrict all on-site cargo handling equipment to be electric and provide electric charging capacity for the equipment.
Provide energy efficient buildings to lower electric generation demand.	Consistent. The Development Project would include increased building envelope insulation in the conditioned portions of the buildings, high efficiency lighting, energy efficient appliances, and energy efficient heating/cooling systems.
Electric utilities' compliance with the renewable portfolio standard (RPS).	<b>Not Applicable</b> . The Development Project Applicant is not a public utility. However, the Banning Electric Utility currently has 75 percent of its electricity provided from qualified renewable energy sources, which exceeds the current RPS. Banning Electric Utility has planned for the continued renewable mix of generation to meet or exceed the minimum requirements of RPS.
Expand urban forestry and green infrastructure in new land development.	<b>Consistent.</b> The Development Project would include new low-water landscaping and trees throughout the Project site. Additionally, weather based smart irrigation controllers would be used.
Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands.	Consistent. The Development Project would provide outdoor electric outlets and requires electric landscape equipment.

Source: Table K, Greenhouse Gas Analysis, Sunset Crossroads Project, Banning, California (Michael Hendrix Consulting 2023).