

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Introduction

The purpose of this section is to describe the potential for implementation of the Beaumont Summit Station Specific Plan Project (Project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts within the City of Beaumont. Because no single project is large enough to result in a measurable increase in global concentrations of GHG, climate change impacts of a project are considered on a cumulative basis.

This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). Modeling of GHG emissions was conducted using the California Emissions Estimator Model (CalEEMod), Version 2020.4, the California Air Resources Board's (CARB) EMFAC2021, Version 1.0.1, and CARB's OFFROAD2017 (Orion Web Database), Version 1.0.1. Model outputs are in **Appendix F, Greenhouse Gas Emissions Assessment**, of this Draft EIR.

4.7.2 Environmental Setting

Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and

cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere.¹ **Table 4.7-1, Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

Table 4.7-1: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N ₂ O)	N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298.
Methane (CH ₄)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.

¹ Intergovernmental Panel on Climate Change, Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013. http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.

Greenhouse Gas	Description
Hydrochlorofluoro-carbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF ₃)	NF ₃ was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.
Source: Compiled from U.S. EPA, <i>Overview of Greenhouse Gases</i> , (https://www.epa.gov/ghgemissions/overview-greenhouse-gases), accessed 2-5-2020; U.S. EPA, <i>Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016</i> , 2018; Intergovernmental Panel on Climate Change, <i>Climate Change 2007: The Physical Science Basis</i> , 2007; National Research Council, <i>Advancing the Science of Climate Change</i> , 2010; U.S. EPA, <i>Methane and Nitrous Oxide Emission from Natural Sources</i> , April 2010.	

4.7.3 Regulatory Setting

Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare.

Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 Federal Register [FR] 64510–64660), also known as the Clean Power Plan (CPP). These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units.

The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: one fossil-fuel-fired electric utility steam-generating unit and two stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the CPP pending resolution of several lawsuits. Additionally, in March 2017, the federal government directed the EPA Administrator to review the CPP to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Presidential Executive Order 13783

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth issued on March 28, 2017, orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of CO₂, N₂O, and CH₄.

State

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂ equivalents (CO₂e) in the world and produced 459 million gross metric tons of CO₂e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB

determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as “business-as-usual”).² The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State’s Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.³ Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California’s GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California’s long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California’s transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California’s freight transport system is essential to supporting the State’s economic development in coming decades while reducing pollution.
- CARB’s Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future

² CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB’s definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

³ The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State’s Climate Adaptation Strategy.

fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan.⁴ The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of

⁴ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed May 9, 2018.

Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined-cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078 and SBX1-2 (Renewable Electricity Standards)

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load-serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized

Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1346 (Air Pollution: Small Off-Road Engines)

Signed into Law in October 2021, AB 1346 requires CARB, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

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

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07

Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08

Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08

Issued on November 17, 2008, Executive Order S-14-08 expands the State’s Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly-owned electricity retailers.

Executive Order S-21-09

Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15

Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State’s climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18

Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.

This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations

The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, §§ 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and took effect on January 1, 2020. Under the 2019 standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards.

Title 24 California Green Building Standards Code

The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017. Updates to the 2016 CALGreen Code took effect on January 1, 2020 (2019 CALGreen). The 2019 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

Regional

South Coast Air Quality Management District Rule 2305 (Warehouse Indirect Source Rule)

Rule 2305 was adopted by the SCAQMD Governing Board on May 7, 2021 to reduce NO_x and particulate matter emissions associated with warehouses and mobile sources attracted to warehouses. However, Rule 2305 would also reduce GHG emissions. This rule applies to all existing and proposed warehouses over 100,000 square feet located in the SCAQMD. Rule 2305 requires warehouse operators to track annual vehicle miles traveled associated with truck trips to and from the warehouse. These trip miles are used to calculate the warehouses WAIRE (Warehouse Actions and Investments to Reduce Emissions) Points Compliance Obligation. WAIRE Points are earned based on emission reduction measures and warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. Reduction strategies listed in the WAIRE menu include acquire zero emission (ZE) or near zero emission (NZE) trucks; require ZE/NZE truck visits; require ZE yard trucks; install on-site ZE charging/fueling infrastructure; install onsite energy systems; and install filtration systems in residences, schools, and other buildings in the adjacent community. Warehouse operators that do not earn a sufficient number of WAIRE points to satisfy the WAIRE Points Compliance Obligation would be required to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby.

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a 3,000 MTCO₂e threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). The Working Group indicated that the 10,000 MTCO₂e per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

GHG efficiency metrics are utilized as thresholds to assess the GHG efficiency of a project on a per capita basis or on a service population basis (the sum of the number of jobs and the number of residents

provided by a project) such that a project would allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020 and 2035). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal of the State, by the estimated 2035 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32, and is appropriate, because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use).

Southern California Association of Governments

Per SB 375, CARB set the following regional transportation greenhouse emissions reduction targets for the Southern California Association of Governments (SCAG) (SB 2015, pp. 7-8):

- 8 percent reduction from the 2005 per capita amount by 2020
- 13 percent reduction from the 2005 per capita amount by 2035

SCAG's SCS is included in the SCAG 2016-2040 Regional Transportation Plan Sustainable Communities Strategy (RTP/SCS) (SCAG 2016). The goals and policies of the RTP/SCS that reduce VMT focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play and designing communities so there is access to high quality transit service (SCAG 2016, pp. 17, 64-65.). The 2016-2040 RTP/SCS would result in an eight percent reduction in GHG emissions per capita by 2020, an 18 percent reduction by 2035 and a 21 percent reduction by 2040—compared with 2005 levels (SCAG 2016, p. 153.). This meets or exceeds the State's mandated reductions established by CARB and meets the requirements of SB 375 as codified in Government Code § 65080(b) et seq., which are eight percent by 2020 and 13 percent by 2035. The 2016-2040 RTP/SCS is expected to reduce the number of VMT per capita by more than seven percent and Vehicle Hours Traveled (VHT) per capita by 17 percent (for automobiles and light/medium duty trucks) as a result of more location efficient land use patterns and improved transit service (SCAG 2016, p. 153).

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020. (SCAG 2020, webpage).

CARB updated the regional targets in 2018 to ensure consistency with the more stringent statewide reduction goals subsequently introduced by the California legislature and the Governor's office. For the SCAG region, the updated targets are 8 percent below 2005 per capita emissions levels by 2020 (this value is unchanged from the previous 2020 CARB target), and 19 percent below 2005 per capita emissions levels by 2035. (SCAG 2020, p. 138.).

Connect SoCal SCS has been found to meet state targets for reducing GHG emissions from cars and light trucks. Connect SoCal achieves per capita GHG emission reductions relative to 2005 levels of 8 percent in 2020, and 19 percent in 2035, thereby meeting the GHG reduction targets established by the CARB for the SCAG region. (SCAG 2020, p. 138.).

Local

Beaumont 2040 Plan

The Beaumont 2040 Plan goals, policies, and implementation actions that reduce potential GHG impacts include:

Land Use and Community Design Element

Goal 3.1: **A City structure that enhances the quality of life of residents, meets the community's vision for the future, and connects new growth areas together with established Beaumont neighborhoods.**

Policy 3.1.3 Establish or preserve areas for mixed-use districts that contain a mix of retail, service, office, and residential uses in a compact, walkable setting along SR-79 (between I-10 and SR-60).

Policy 3.1.8 Require new major centers and larger residential developments to be accessible to major transportation facilities, a well-connected street network, and safe and efficient access to transit.

Policy 3.1.11 Strive to create development patterns such that most residents are within one-half mile walking distance of a variety of neighborhood-serving uses, such as parks, grocery stores, restaurants, cafes, dry cleaners, laundromats, banks, hair salons, pharmacies, religious institutions, and similar uses.

Goal 3.3: **A City that preserves its existing residential neighborhoods and promotes development of new housing choices.**

Policy 3.3.7 Require well-connected walkable neighborhoods with quality access to transit, pedestrian and bicycle facilities.

Goal 3.7: **A City with a high-quality pedestrian environment for people, fostering interaction, activity, and safety.**

Policy 3.7.1 Require that all new neighborhoods be designed and constructed to be pedestrian friendly and include features such as short blocks, wide sidewalks, tree-shaded streets, buildings oriented to streets or public spaces, traffic-calming features, convenient pedestrian street crossings, and safe streets that are designed for pedestrians, cyclists and vehicles.

Policy 3.7.2 Create pedestrian-oriented streetscapes by establishing unified street tree planting, sidewalk dimensions and maintenance, pedestrian amenities, and high-quality building frontages in all new development.

Goal 3.8: **A City that encourages a healthy lifestyle for people of all ages, income levels, and cultural backgrounds.**

Policy 3.8.1 Design neighborhoods to emphasize connectivity and promote physical activity, including increased pedestrian access by promoting high-density, mixed use

development, access to existing and proposed transit, and the use of bicycles and walking as alternatives to driving.

Policy 3.8.3 Ensure the design of context-specific streetscaping that promotes safe travel for all users, including signs, curbs, trees and landscaping to provide a more pleasant environment for drivers, cyclists, and pedestrians.

Policy 3.8.6 Support Safe Routes to School partnerships that increase the number of school children who walk, bicycle, use public transportation and carpool to and from school.

Implementation LUCD10 Development Monitoring. Establish a monitoring and reporting system for land use development within the City. Key metrics may include housing by type and income level, commercial floor area, jobs, vehicle miles traveled, and greenhouse gas emissions. Report annual changes to the Planning Commission and City Council.

Implementation LUCD22 Tree Planting Program. Partner with local non-profit organizations to implement a tree planting program (planting of trees on City-owned and private property).

Mobility Element

Goal 4.1: **Promote smooth traffic flows and balance operational efficiency, technological, and economic feasibility.**

Policy 4.1.4 Strengthen partnerships with transit management organizations to develop citywide demand management programs and incentives to encourage non-automotive transportation options.

Policy 4.1.5 Require residential and commercial development standards that strengthen connections to transit and promote walking to neighborhood services.

Goal 4.2: **Support the development of a comprehensive network of complete streets throughout the City that provides safe, efficient, and accessible connectivity for users of all ages and abilities.**

Policy 4.2.3 Design residential streets to minimize traffic volumes and/or speed, as appropriate, without compromising connectivity for emergency first responders, cyclists, and pedestrians.

Goal 4.3: **A healthy transportation system that promotes and improves pedestrian, bicycle, and vehicle safety in Beaumont.**

Policy 4.3.3 Support Safe Routes to School partnerships that increase the number of school children who walk, bicycle, use public transit, and carpool to and from school.

Policy 4.3.5 Integrate land use and transportation infrastructure to support higher-density development, a balanced mix of residential and commercial uses, and a connected system of sidewalks, bikeways, greenways, and transit.

Goal 4.4: **A balanced transportation system that provides adequate facilities for people in the City to bicycle, walk, or take transit to their destinations.**

Policy 4.4.1 Ensure connectivity of pedestrian and cyclist facilities to key destinations, such as downtown, commercial centers, and employment centers, and link these facilities to each other by providing trails along key utility corridors.

Policy 4.4.4 Develop a comprehensive trails network to connect neighborhoods and key attraction areas.

Policy 4.4.5 Promote policies and programs that encourage the use of transit and increased transit service.

Goal 4.5: **Work collaboratively with regional transit agencies to enhance existing transit facilities and promote the implementation of future transit opportunities.**

Policy 4.5.1 Collaborate with transit agencies and RCTC to ensure the development of transit facilities in Beaumont can accommodate future rail service between the Coachella Valley and City of Riverside.

Policy 4.5.3 Work with SunLine Transit and RCTC to analyze and forecast commuter traffic trends and develop strategies to make a more efficient transit system.

Goal 4.7: **Manage and provide an adequate parking supply that meets the needs of people who live, work, and visit Beaumont.**

Policy 4.7.2 Encourage developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, joint parking districts, or off-site parking within a reasonable walking time of 10 minutes or less.

Implementation M3 TDM Plan Requirements. Update the City's development processing requirements to require that TDM plans and strategies are developed for residential and employment land uses that reduce vehicle trips or vehicle trip lengths.

Implementation M4 Bicycle and Pedestrian Plan. Update the City's Bicycle and Pedestrian Connectivity Plan with a focus on connectivity to transit, neighborhood centers, and schools while identifying state-of-the-practice techniques for improving safety.

Implementation M25 Special Events. Minimize parking and vehicle travel to special events through traffic management and promotion of transit to the event.

Implementation M29 Zoning Code Update. Update the City's parking Standards to:

- Provide a reduction in parking standards if comprehensive TDM programs are provided.
- Increase the number of electric vehicle charging stations in parking areas.

Economic Development and Fiscal Element

Goal 5.1: **A dynamic local economy that attracts diverse business and investment.**

Policy 5.1.4 Encourage growth and expansion of businesses and employment centers near public transit to increase transportation options for employees and limit traffic congestion.

Health and Environmental Justice Element

Goal 6.5: **A City that builds neighborhoods that enhance the safety and welfare of all people of all ages, income levels, and cultural backgrounds.**

Policy 6.5.1 Design neighborhoods that promote pedestrian and bicycle activity as alternatives to driving. This policy is implemented through the Land Use and Community Design Element.

Policy 6.5.3 Integrate land use and transportation infrastructure to support higher-density development, a balanced mix of residential and commercial uses, and connected system of sidewalks, bikeways, greenways, and transit.

Policy 6.5.4 Prioritize transportation system improvements that encourage walking, biking and transit use in the areas with the highest need. This policy is implemented through the Mobility Element.

Community Facilities and Infrastructure Element

Goal 7.1: **City-wide infrastructure to support existing development and future growth.**

Policy 7.1.7 Promote the design of infrastructure projects that use sustainable materials and minimize use of natural resources during construction.

Policy 7.1.8 As feasible, identify the long-term risks from climate change, including changes in flooding, storm intensity, water availability, and wildfire, during infrastructure planning and design to adapt to those changes. This policy is implemented through the Safety Element.

Goal 7.3: **Buildings and landscapes promote water conservation, efficiency, and the increased use of recycled water.**

Policy 7.3.1 Partner with BCVWD to promote and implement water conservation measures and reuse practices, including water efficient fixtures, leak detection, water recycling, grey water reuse and rainwater harvesting.

Policy 7.3.2 When feasible, augment regional conservation programs with City resources to encourage reduced water use in homes and businesses.

Policy 7.3.3 Support and engage in educational and outreach programs that promote water conservation and wide-spread use of water-efficient technologies to the public, homebuilders, business owners, and landscape installers.

Policy 7.3.4 Support and implement third-party programs and financing sources, such as the PACE program, to improve water efficiency of existing buildings.

Policy 7.3.5 Expand the supply of recycled water and distribution facilities in the City for irrigation at city facilities/parks/sports fields. When such supply is available, require new developments to utilize for their common irrigation needs.

- Policy 7.3.6** Encourage innovative water recycling techniques, such as rainwater capture, use of cisterns, and installation of greywater systems.
- Policy 7.3.7** Update and improve water conservation and landscaping requirements for new development.
- Policy 7.3.8** Require the use of recycled water for irrigation of parks and golf courses in Beaumont.
- Goal 7.4:** **Incorporate sustainable and improved stormwater management practices.**
- Policy 7.4.2** Explore opportunities for “green streets” that use natural processes to manage stormwater runoff, when feasible.
- Policy 7.4.3** Require new development and redevelopment projects to reuse stormwater on-site to the maximum extent practical and provide adequate stormwater infrastructure for flood control.
- Goal 7.6:** **A zero-waste program that increases recycling and reduces waste sent to the landfill.**
- Policy 7.6.2** Expand programs to collect food waste and green waste from commercial and residential uses.
- Policy 7.6.3** Promote green purchasing options across all City departments. Consider the lifecycle effects from purchases.
- Policy 7.6.5** Ensure construction demolition achieves the State’s 65 percent target for material salvage and recycling of non-hazardous construction materials.
- Policy 7.6.6** Promote waste reduction, recycling, and composting by making separate containers available in gathering areas of City-owned facilities.
- Goal 7.7:** **Provide for a clean and healthy community through an effective solid waste collection and disposal system.**
- Policy 7.7.1** Implement source reduction, recycling, composting, and other appropriate measures to reduce the volume of waste materials entering regional landfills. Establish a goal to achieve 100% recycling citywide for both residential and nonresidential development.
- Policy 7.7.2** Implement a commercial solid waste recycling program that consists of education, outreach, and monitoring of businesses in order to divert commercial solid waste and report progress in the annual report to CalRecycle.
- Policy 7.7.3** Require businesses (including public entities) that generate four cubic yards or more of commercial solid waste per week, or a multifamily residential dwelling of five units or more, to arrange for recycling services.
- Policy 7.7.4** Offer economic incentives to businesses within the City which are “zero waste.”
- Policy 7.7.5** Develop City programs and/or advertise County-wide programs that encourage residents to donate or dispose of surplus furniture, old electronics, clothing, oils/grease, household hazardous materials and other household items rather than disposing of such materials in landfills.

Goal 7.9: High-quality community facilities and services that meet the needs and preferences of all residents in the City.

Policy 7.9.2 Provide community facilities and services throughout the City close to or on accessible transit corridors and priority bikeways. Ensure connecting sidewalks are well maintained for accessibility.

Implementation CF12 Zoning and Implementation Ordinances. Update zoning and building codes to enable innovative sustainability measures such as:

- Greywater capture and reuse systems
- On-site bioretention-based stormwater facilities
- Coordinated below grade installation/repair between various providers and agencies
- Wind generation on residential and commercial buildings
- Electric vehicle infrastructure requirements
- Green building performance standards

Implementation CF16 Water Education. Develop a water conservation and stewardship strategy with local partners and water providers to reduce water consumption, raise awareness of stormwater pollution, and encourage conservation behaviors.

Implementation CF17 Educational materials. Produce a City resource guide for commercial and residential water recycling techniques, including conservation strategies landscaping, rainwater capture, greywater systems, and use of cisterns.

Implementation CF120 Green Streets. Implement best practices for Green Streets on transportation corridors associated with new and existing redevelopment projects.

Implementation CF126 Zero Waste. Work with regional partners, such as the Riverside County Department of Waste Resources, and community partners to foster a zerowaste culture, including outreach, marketing, and local grant program to support efforts.

Implementation CF127 Public Stewards of Zero Waste. Commit all City departments to zero waste, including provision of technical support and diversion at City facilities.

Implementation CF128 Technical Assistance. Partner closely with commercial and owners of multifamily properties to start or expand recycling and waste reduction practices.

Implementation CF129 Debris Recycling Ordinance. Create a construction and demolition debris recycling ordinance to support the diversion of recyclable and recoverable materials. Work with local partners to conduct outreach targeting waste generators.

Implementation CF130 Composting Program. Expand existing recycling programs to include composting yard and garden waste.

Conservation and Open Space Element

Goal 8.1: A City with green buildings and developments that promote energy efficiency.

Policy 8.1.1 Promote, and incentivize when possible, energy efficiency upgrades, such as weatherization and lighting retrofits for qualified households.

Policy 8.1.2 Increase educational and outreach efforts to residential, commercial, and institutional building owners to increase awareness of Southern California Edison programs and incentives to improve energy efficiency in existing buildings.

Policy 8.1.3 Support and implement third party programs and financing sources, such as PACE or HERO programs, to install energy efficiency upgrades in existing buildings. Provide incentives for households to improve resource efficiency, such as rebate programs, and giveaways of items such as low-flow shower heads and electrical outlet insulation.

Policy 8.1.4 Partner with local residential and business associations to create a policy requiring energy disclosure, audits, and/or upgrades at time of sale of residential and commercial properties.

Policy 8.1.5 Encourage new development to reduce building energy use by adopting passive solar techniques and heat island reduction strategies:

- Maximizing interior daylighting.
- Using cool exterior siding, cool roofing, and paving materials with relatively high solar reflectivity to reduce solar heat gain.
- Planting shade trees on south- and west-facing sides of new buildings to reduce energy loads.
- Installing water efficient vegetative cover and planting, substantial tree canopy coverage.

Policy 8.1.6 When reviewing development proposals, encourage applicants and designers to consider warming temperatures in the design of cooling systems.

Policy 8.1.7 Encourage new buildings and buildings undergoing major retrofits to exceed Title 24 energy efficiency standards.

Policy 8.1.8 Require design of new development and renovations to not impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.

Policy 8.1.9 Require that any new building constructed in whole or in part with City funds incorporate passive solar design features, where feasible.

Policy 8.1.10 Strive for high levels of energy efficiency in municipal facilities.

Policy 8.1.11 Whenever possible, use energy-efficient models and technology when replacing or providing new city facilities and infrastructure, such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.

- Goal 8.2:** **A City which encourages energy from renewable sources.**
- Policy 8.2.1** Promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.
- Policy 8.2.2** Establish clear guidance for new solar residential mandate established by the California Energy Commission as part of the 2019 California Building Code update.
- Policy 8.2.3** Establish an expedited and streamlined permit process for small photovoltaic systems (10-15 kW maximum power output).
- Goal 8.3:** **A City that reduces citywide greenhouse gas emissions.**
- Policy 8.3.1** Establish greenhouse gas emission reduction targets in line with State requirements that call for reducing greenhouse gas emissions as follows:
- 1990 levels by 2020
 - 40 percent below 1990 levels by 2030
 - 60 percent below 1990 levels by 2040
- Policy 8.3.2** Implement greenhouse gas reduction measures to achieve greenhouse gas reduction targets by updating the Climate Action Plan or similar.
- Policy 8.3.4** Use the emissions inventory and monitoring tools to identify, prioritize, and update programs that effectively contribute to greenhouse gas reductions.
- Policy 8.3.5** Prioritize municipal policies and programs that reduce the City’s carbon footprint such as purchasing alternative fuel vehicles, pursuing solar installations, implementing green purchasing policies, and retrofitting existing buildings.
- Policy 8.3.6** Promote greenhouse gas reduction measures that support local job training and placement in green industries focused on environmental sustainability, renewable energy, renewable-related technologies, and bioremediation.
- Policy 8.3.7** Collaborate with regional and State partners to implement the Sustainable Communities Strategy to reduce greenhouse gas emissions, balance jobs and housing, and develop transportation systems that support all modes of circulation.
- Goal 8.11:** **A City where archaeological, cultural resources, tribal cultural resources, and historical places are identified, recognized, and preserved.**
- Implementation C1** Energy Efficiency Programs. Develop and advertise energy efficiency programs that improve energy efficiency in existing buildings. Coordinate with WRCOG on regional initiatives.
- Implementation C2** Energy Disclosure Policy. Develop a policy requiring energy disclosure, audits, and/or upgrades at time of sale for all residential and commercial buildings.
- Implementation C3** Passive Solar Techniques. Review proposed developments for solar access, site design techniques, and use of landscaping that can increase energy efficiency and

reduce lifetime energy costs without significantly increasing housing production costs.

Implementation C4 Green Affordable Housing. Develop incentives for affordable housing projects that integrate sustainable and long-term green building design.

Implementation C5 Green Building Design. Update the Municipal Code to identify and prioritize green building design features that mitigate the impacts of climate change.

Implementation C6 Shade Assessment. Partner with local and regional agencies to identify and prioritize areas for shade in public places.

Implementation C8 Greenhouse gas inventory. Prepare a revised greenhouse gas inventory on regular 3-year cycles.

Implementation C9 Climate Adaptation Plan. Develop a Climate Adaptation Plan to identify Beaumont’s most significant potential climate change risks and vulnerabilities in order to create a framework for decision makers to build a more resilient and sustainable community. The Climate Adaptation Plan shall include a vulnerability assessment, adaptation strategy, and plan maintenance. Special focus should be provided related to drought, extreme heat, and wildfire risk.

Implementation C10 Advanced and Green Industry Workforce Training. Coordinate with local, regional, and state entities to identify or create training and placement programs in advanced and green industries, including advanced manufacturing, green building, and sustainable industries (e.g., renewable energy industries, water treatment, and wastewater management).

Implementation C11 Sustainable Communities Strategy. Coordinate with state and regional agencies to implement the Sustainable Communities Strategy.

Implementation C12 Energy Education. Promote awareness and incorporation of energy efficiency best practices for new development, including incorporation of alternative energy generation and energy efficient retrofits.

Implementation C13 Solar Access. Update municipal code to require design of new development and renovations to not impair adjacent buildings’ solar access, unless shading benefits substantially offset the impacts of solar energy generation potential.

Safety Element

Goal 9.10: **A City that is prepared for the potential impacts of climate change.**

Policy 9.10.1 Establish partnerships with Federal, State, regional, and local agencies to cooperate and better understand regional impacts of climate change and develop multijurisdictional solutions.

Policy 9.10.2 Encourage new development and redesign of existing buildings to take steps to reduce the impacts of extreme heat events, including:

- Design buildings to use less mechanical heating and cooling through use of passive solar techniques.
- Support and incentivize, as feasible, energy efficiency and weatherization programs.
- Protect and expand the City’s urban tree canopy to provide shade, increase carbon sequestration, and purify the air.
- Provide shade structures in public parks, outdoor playgrounds, and bus shelters.

Policy 9.10.3 Require enhanced water conservation measures in new development and redesign of existing buildings to address the possibility of constrained future water supplies, including:

- Compliance with existing landscape water conservation ordinance (Chapter 17.06 of the Municipal Code).
- Use of water conservation measures in new development beyond current requirements.
- Installation of recycled water use and graywater systems.

Policy 9.10.4 Continue to work with the Riverside University Health Services Department and County of Riverside Emergency Management Department to establish public outreach programs (through social media and websites) to distribute information on climate change impacts on vulnerable populations including actions they can take to reduce exposure to unhealthy conditions.

Policy 9.10.5 Prioritize programs that ensure the benefits of climate action programs are fairly distributed and prioritized to those most in need, particularly populations most likely to be impacted by climate change.

Policy 9.10.6 Pursue climate change grant funding opportunities for expanding education programs and funding necessary retrofits.

Implementation S8 Climate Change Risk Assessment. Conduct a climate change risk assessment to identify potential risks and vulnerable populations. Prioritize programs and funding for populations most likely to be impacted by climate change, in accordance with SB379.

Implementation S28 Water Conservation. Review Chapter 17.06 of the Municipal Code to consider adding additional water conservation measures.

Revised Zoning Ordinance

The Revised Zoning Ordinance adds § 17.11.140 to provide regulations for the establishment, maintenance and operation of wind energy conversion systems (WECS) in the City, which reduces potential GHG impacts.

Sustainable Beaumont Plan

In 2015, the City of Beaumont developed and approved Sustainable Beaumont: The City’s Roadmap to Greenhouse Gas Reductions, a plan for reducing greenhouse gas emissions. The City committed to providing a more livable, equitable, and economically vibrant community through the incorporation of energy efficient features and the reduction of GHG emissions. (Beaumont 2040 Plan, p. 198.)

The Sustainable Beaumont Plan details a variety of goals, policies, and actions at the community and municipal levels aimed at conserving energy and reducing emissions in order to meet its GHG reduction targets. By implementing Statewide and local reduction measures, the City would achieve its reductions targets for 2020 and 2030. (SB 2015, p. 64.)

4.7.4 Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning greenhouse gas emissions. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

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

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the *CEQA Guidelines* specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project’s GHG emissions will have a “significant” impact on the environment. The guidelines direct that agencies are to use “careful judgment” and “make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” the project’s GHG emissions⁵.

GHG Thresholds

On December 5, 2008, the SCAQMD Governing Board adopted a 10,000 MTCO₂e industrial threshold for projects where SCAQMD is the lead agency. The SCAQMD GHG CEQA Significance Threshold Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.) during Meeting #8. Additionally, the SCAQMD GHG Significance Threshold Stakeholder Working Group has specified that a warehouse is considered to be an industrial project. During the GHG CEQA Significance Threshold Working Group Meeting #15, the SCAQMD noted that it was considering extending the industrial GHG significance threshold for use by all lead agencies. Furthermore, the Working Group indicated that the 10,000 MTCO₂e per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The

⁵ 14 California Code of Regulations, Section 15064.4a

SCAQMD has not announced when staff is expecting to present GHG thresholds for land use projects where the SCAQMD is not the lead agency to the governing board.

The City of Beaumont has not adopted project-specific significance thresholds, and instead relies on SCAQMD's recommended Tier 3 screening thresholds to determine the significance of a project's GHG emissions. Although this Project proposes industrial warehouses, the considerable majority of GHG emissions generated in relation to the project would result from mobile truck emissions, and not stationary industrial sources. Therefore, to provide the most conservative analysis, the City will apply the 3,000 MTCO₂e/year screening threshold recommended by SCAQMD for residential and commercial projects, the emissions of which primarily the result of mobile, and not stationary, sources.

Methodology

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 GtCO₂/year.⁶ As such, the geographic extent of climate change and GHG emissions cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Details of the modeling assumptions and emission factors are provided in **Appendix F, Greenhouse Gas Emissions Assessment**. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Construction was modeled generally according to the following timeline:

- Phase 1: Commence in the second quarter of 2023 and conclude in the third quarter of 2024 (an approximate 18-month duration).
- Phase 2: Commence in early 2026 and conclude mid to late 2027 (an approximate 18-month duration).

The Project's operational GHG emissions would be generated by vehicular traffic, off-road equipment, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. Construction was modeled generally according to the following timeline:

- Phase 1: Commence in the second quarter of 2023 and conclude in the third quarter of 2024 (an approximate 18-month duration).

⁶ Intergovernmental Panel on Climate Change, *Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2014.

- Phase 2: Commence in early 2026 and conclude mid to late 2027 (an approximate 18-month duration).

The Project's operational GHG emissions would be generated by vehicular traffic, off-road equipment, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. These emissions categories are discussed below.

- **Area Sources.** Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. The Project involves warehouse uses and would not include hearths. Landscaping and consumer products would be limited. Negligible quantities of consumer products (i.e., personal care products, home, lawn, and garden products, disinfectants, sanitizers, polishes, cosmetics, and floor finishes) would be used. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions.
- **Energy Consumption.** Energy consumption consists of emissions from project consumption of electricity and natural gas. Primary uses of electricity and natural gas by the Project would be for miscellaneous warehouse equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy emissions are calculated based on consumption rates and emissions factors in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Solid Waste.** Solid waste releases GHG emissions in the form of methane when these materials decompose. Solid waste emissions are calculated based on generation rates and emissions factors in CalEEMod.
- **Water and Wastewater.** Project GHG emissions would be generated from energy consumption associated with water and wastewater conveyance and treatment. Water and wastewater emissions are calculated based on the estimated consumption in the Project Water Supply Assessment (Albert A Webb Associates, *Water Supply Assessment, Beaumont Summit Station Specific Plan Project*, November 2021) and emissions factors in CalEEMod.
- **Off-Road Equipment.** Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. Off-road emissions were calculated with emissions rates derived from CARB's OFFROAD database. For this project it was assumed that the warehouses would include 51 forklifts and 9 off-highway trucks for loading and unloading goods per the SCAQMD *High Cube Warehouse Truck Trip Study White Paper*⁷. It should be noted that Project Design Feature (PDF) AQ-1 indicates that the Project does not include cold storage. Cold storage is also not an allowed use in the Specific Plan. Therefore, this analysis models the warehouses as unrefrigerated, and the Project would not include emissions from transport refrigeration units (TRUs).
- **Emergency Backup Generators.** As the Project warehouses are speculative, it is unknown whether emergency backup generators would be used. Backup generators would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an

⁷ SCAQMD, *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results*, June 2014.

emergency backup generator for each warehouse building were calculated separately from CalEEMod; refer to Appendix A. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the SCAQMD prior to installation. Emergency backup generators must meet SCAQMD's Best Available Control Technology (BACT) requirements and comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), which would minimize emissions.

- **Mobile Sources.** Mobile sources are emissions from motor vehicles. The Project generated traffic was obtained from the Project's Traffic Impact Study prepared by Kimley-Horn and Associates (July 2021). Project trip generation from the Trip Generation Analysis is based on the following Institute of Transportation Engineers (ITE) land use categories:

Phase 1

- ITE Land Use 154: High-Cube Short-Term Storage (2,199.095 thousand square feet, 3,079 total daily vehicle trips, which include 493 truck trips).
- ITE Land Use 150: Warehousing (358.370 thousand square feet, 613 total daily vehicle trips, which include 166 truck trips).

Phase 2

- ITE Land Use 310: Hotel (220 rooms, 1,758 daily vehicle trips).
- ITE Land Use 820: Shopping Center (25 thousand square feet, 1,361 total daily vehicle trips, 898 net trips after pass-by reduction).
- ITE Land Use 932: High-Turnover (Sit-Down) Restaurant (15 thousand square feet, 1,608 total daily vehicle trips, 1,539 net trips after pass-by reduction).
- ITE Land Use 934: Fast-Food Restaurant with Drive-Through (10 thousand square feet, 4,675 total daily vehicle trips, 4,290 net trips after pass-by reduction).

Phase 1 of the Project would generate 3,692 daily trips, which includes 3,033 passenger car trips and 659 truck trips. Passenger car/employee commute trip lengths use CalEEMod default lengths for projects in Riverside County, truck trip lengths are assumed to be 33.2 miles one way.⁸ Phase 2 of the project would generate 8,485 daily vehicle trips. Full Project buildout would (Phase 1 and Phase 2) would generate 12,177 total daily vehicle trips. Warehouse truck mix percentages are based on the SCAQMD Truck Trip Generation Study applied to ITE truck percentages. Mobile source emissions rates in CalEEMod have been updated with EMFAC2021 emissions rates consistent with the methodology described in the CalEEMod *User's Guide (Appendix A, Section 5.2)*.⁹ It should be noted that EMFAC2021 emissions rates include CARB SAFE Rule adjustment factors.¹⁰

⁸ California Air Resources Board, *Appendix B: Emissions Estimation Methodology for On-Road Diesel-Fueled Heavy-Duty Drayage Trucks at California Ports and Intermodal Rail Yards*, 2007. Available at: https://ww3.arb.ca.gov/msei/onroad/downloads/drayage_trucks/appbf.pdf

⁹ California Air Pollution Control Officers Association (CAPCOA), *CalEEMod User Guide Appendix A: Calculation Details, Section 5.2 Methodology for Converting EMFAC2017 Emission Rates into CalEEMod Vehicle Emission Factors*, May 2021.

¹⁰ California Air Resources Board, *EMFAC2021 Volume III Technical Document*, March 21, 2021.

Emissions reductions attributable mitigation measures were applied in CalEEMod are derived from methodologies compiled in the CAPCOA report *Quantifying GHG Measures*.¹¹ Each measure was assessed to determine its consistency with CAPCOA criteria for the use of the measure. The following mitigation measure were applied in CalEEMod include:

- Transportation Demand Management Measures: TRT-1 (Implement Trip Reduction Program), TRT-7 (Market Commute Trip Reduction Option), and TRT-11 (Employee Vanpool/Shuttle).
- A-1 - Electric Landscape Equipment.
- BE-1 – Exceed Title 24. The project would be required to comply with CALGreen Tier 2, which requires a 30 percent improvement.
- SW-1 – 75 Percent Reduction in Solid Waste Disposal.

Additionally, the following design features/mitigation measures were quantified outside of CalEEMod:

- **Electric Cargo Handling Equipment.** Electric cargo handling equipment (see Project Design Feature (PDF) AQ-2, below) emissions from energy consumption were calculated based on 51 forklifts and 9 yard trucks operating for 12 hours per day and the Southern California Edison (SCE) electricity CO₂e emissions factor from CalEEMod. As noted above, the assumptions for the equipment is based on the SCAQMD *High Cube Warehouse Truck Trip Study White Paper* (2014).
- **On-Site Renewable Energy.** Solar photovoltaic (PV) panels installed on Phase 1 or other source of renewable energy generation on-site would provide 100 percent of the expected building load (i.e., the Title 24 electricity demand and the plug-load, conservatively anticipated to be approximately 8.87 kilowatt hours (kWh) per year per square foot (sf)^{12, 13}). With expected energy consumption at 8.87 kWh/ sf, a PV panel array covering approximately one quarter of the proposed roof space would provide sufficient on-site renewable energy generation to offset consumption. The final PV generation facility size would require approval by Southern California Edison (SCE). SCE's Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system. Should SCE limit the off-site export, the proposed project could utilize a battery energy storage system (BESS) to lower off-site export while maintaining on-site renewable generation to offset consumption.

Should the energy consumption characteristics of a future tenant differ from this projection, there is sufficient space on the rooftop for the system to roughly triple on-site generation. The building would include an electrical system, roof structure consideration, and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure would be clearly labeled with noticeable and permanent signage.

Project Design Features

The Project applicant proposes the following Project Design Features (PDFs) that would be incorporated into the Project design and constructed or implemented as part of the Project. PDFs are specific design and/or operational characteristics proposed by the Project Applicant that are incorporated into the

¹¹ California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.

¹² U.S. Energy Information Administration, *Commercial Buildings Energy Consumption Survey*. Table PBA4. Electricity consumption totals and conditional intensities by building activity subcategories, 2012. 75th percentile value for Nonrefrigerated Distribution Center = 8.5kWh/year/sf

¹³ Additional consumption of 30 Level 2 EV chargers providing 6 hours of charge time for two employee shifts per day = 0.37kWh/year/sf

Project and part of the Project description and Specific Plan. Because PDFs are incorporated into the Project, they do not constitute mitigation measures. It should be noted that PDF AQ-1 indicates that the Project would not include cold storage. Cold storage is also not an allowed use in the Specific Plan. Therefore, this analysis models the warehouses as unrefrigerated. PDF AQ-2 notes that all cargo handling equipment would be powered by electricity. Emissions from diesel cargo handling equipment are provided in the impact analysis for informational purposes and implementation of PDF AQ-2 is reflected under the mitigated scenario. Additional emissions benefits from implementation of PDF AQ-3 through PDF AQ-18 are conservatively not quantified; no credit is taken for these measures.

- PDF AQ-1** The Project does not include cold storage.
- PDF AQ-2** All Phase 1 outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, and forklifts) shall be powered by electricity. Each building shall include the necessary charging stations for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements. Note that SCAQMD Rule 2305 (Warehouse Indirect Source Rule) Warehouse Actions and Investments to Reduce Emissions (WAIRE) points may be earned for electric/zero emission yard truck/hostler usage.
- PDF AQ-3** Tenant lease agreements for Phase 1 shall include contractual language restricting trucks and support equipment from nonessential idling longer than 5 minutes while on site.
- PDF AQ-4** All heavy-duty vehicles registered in California entering or operated on Phase 1 shall be model year 2010 or later. This requirement shall be included as part of tenant's agreement with third-party carriers. Tenants shall maintain records on its fleet equipment and ensure that all heavy-duty trucks accessing the Phase 1 use year 2010 or newer engines. The records shall be maintained onsite and be made available for inspection by the City. Encouraging the use of model year 2010 or newer trucks and other efficiency measures could incentivize near zero emission (NZE) or zero emission (ZE) truck visits, which would facilitate compliance with SCAQMD Rule 2305 (Warehouse Indirect Source Rule).
- PDF AQ-5** Phase 1 facility operators shall be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements.
- PDF AQ-6** Phase 1 tenants shall train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Facility operators shall maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request. The building manager or their designee shall be responsible for enforcing these requirements.
- PDF AQ-7** Phase 1 tenants shall maintain records on its fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles serving the warehouses within the project are in good condition, and in proper tune pursuant to manufacturer's

specifications. The building manager or their designee shall be responsible for enforcing these requirements.

PDF AQ-8 The facility operator for Phase 1 shall ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board-approved courses (such as the free, one-day Course #512). The building manager or their designee shall be responsible for enforcing these requirements.

PDF AQ-9 Phase 1 tenants shall include contractual language in tenant lease agreements that requires the tenant be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation.

PDF AQ-10 The Phase 1 site shall install 30 light-duty vehicle charging stations and conduit for 59 future electric light-duty vehicle charging stations. Spaces with conduit for future charging stations shall have properly sized and listed raceways/conduits, dedicated branch circuits, service panel or subpanel(s). Both the service panel or subpanel(s) and the raceway termination location shall be visibly marked as "EV CAPABLE."

PDF AQ-11 Designate 119 parking spaces for clean air/electric vehicle/vanpool parking on the Phase 1 site.

PDF AQ-12 Phase 1 tenants shall enroll in the United States Environmental Protection Agency's SmartWay program and tenants shall use carriers that are SmartWay carriers.

PDF AQ-13 The Phase 1 facility operator shall provide tenants with an information packet that:

- Provides information on incentive programs, such as the Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer Program) and Voucher Incentive Program, and other similar funding opportunities to upgrade their fleets. The Moyer Program On-Road Heavy-Duty Vehicles Voucher Incentive Program (VIP) provides funding to individuals seeking to purchase new or used vehicles with 2013 or later model year engines to replace an existing vehicle that is to be scrapped.
- Recommends the use of electric or alternatively fueled sweepers with high efficiency particulate air (HEPA) filters;
- Recommends the use of water-based or low VOC cleaning; and
- For occupants with more than 250 employees, information related to SCAQMD Rule 2202, which requires the establishment of a transportation demand management program to reduce employee commute vehicle emissions.

PDF AQ-14 Signs shall be installed at each Phase 1 exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow. Truck routes shall be clearly marked pursuant to the Municipal code.

PDF AQ-15 The Phase 1 site shall be designed such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside the facility. Vehicles can access the building using paved roads and parking lots. Further, the applicant shall provide

signage to ensure that no trucks are queuing outside the facility. Signage shall also be placed at the entrance of the site for the community in case of complaints and shall include the phone number of the building manager or designee. The building manager or designee shall be responsible for ensuring compliance with this measure tenant and third-party truck owners.

PDF AQ-16 The Phase 1 portion of the Project shall provide funding for 30 grants for the purchase of zero emission vehicle passenger cars for on-site employees. The program shall prioritize applicants who live in the City of Beaumont and the surrounding area (i.e., employees that are residents of Beaumont, Banning, or Calimesa) and who do not already own a zero emission vehicle. Additionally, grantees must be employed at the Project site for a minimum of five years. Grantees employed for less than five years must return the zero emission vehicle so that it can be used by a current employee.

PDF AQ-17 Phase 1 shall install photocatalytic pavements or pavement coatings (such as PURETi Coat or PlusTi) that lessens pavement-related radiative forcing by reducing heat absorption and the convective re-release (pavement emissivity) from solar radiation, as well as naturally decomposing surrounding atmospheric NO₂ when exposed to ultraviolet (UV) light.

PDF AQ-18 During Phase 1, the Project shall improve vegetation and tree canopy for all sensitive receptors' properties located within a 300-foot radius of the Project boundary for a maximum one-time contribution of \$5,000 per sensitive receptor's property. The funds may be used for vegetation installation, the vegetation itself, and vegetation irrigation. If the Applicant provides reasonable evidence to the City of contacting the property owners of the sensitive receptor(s) and offering to plant vegetation and tree canopy, and the offer is declined or the property owner(s) cannot be reached, no further action shall be required.

4.7.5 Impacts and Mitigation Measures

Impact 4.7-1 *Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?*

Level of Significance: Significant Unavoidable Impact

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of CO₂, N₂O, and CH₄ from construction equipment and the transport of materials and construction workers to and from the Project site. The GHG emissions only occur during temporary construction activities and would be cease once construction is complete. The total GHG emissions generated during all phases of construction were combined and are shown in **Table 4.7-2, Construction-Related Greenhouse Gas Emissions**.

Table 4.7-2: Construction-Related Greenhouse Gas Emissions

Category	MTCO ₂ e
Phase 1 Construction	
Construction Year 1 (2023)	3,809
Construction Year 2 (2024)	4,041
Total Phase 1 Construction Emissions	7,850
Phase 1: 30-Year Amortized Construction Emissions	262
Phase 2 Construction	
Construction Year 3 (2026)	698
Construction Year 4 (2027)	299
Total Phase 2 Construction Emissions	997
Phase 2: 30-Year Amortized Construction Emissions	33
Source: CalEEMod version 2020.4.0. Refer to Appendix F for model outputs.	

As shown, Phase 1 of the Project would result in the generation of approximately 7,850 MTCO₂e over the course of construction and Phase 2 would generate approximately 997 MTCO₂e over the course of construction. Construction GHG emissions are typically summed and amortized over a 30 year period and then added to the operational emissions. The amortized Project Phase 1 construction emissions would be 262 MTCO₂e per year while the amortized Project Phase 2 construction emissions would be 33 MTCO₂e per year. Total amortized emissions for Project Buildout would be 295 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

Phase 1 Operational Emissions

GHG emissions associated with Phase 1 of the Project are summarized in **Table 4.7-3, Phase 1 Greenhouse Gas Emissions**. As shown in **Table 4.7-3**, the Project’s unmitigated emissions would be approximately 20,646 MTCO₂e annually from both construction and operations. Project-related GHG emissions would exceed the City’s 3,000 MTCO₂e per year threshold. The majority of the GHG emissions (67 percent of unmitigated emissions and 96 percent of mitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards.

Table 4.7-3: Phase 1 Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year		
	Unmitigated	Mitigated	Mitigated 2040 ⁸
Area and Indirect Stationary Sources			
Construction Amortized Over 30 Years	262	262	262
Area Source ¹	0.12	0.07	0.07
Energy ²	1,512	1,355	470
Off-road (Forklifts and Yard Trucks) ³	3,649	848	848
Emergency Backup Generator	59	59	59
Waste	1,211	303	303
Water and Wastewater ⁴	83	83	32
Solar PV ⁵	N/A	-2,417	-2,417
Subtotal	6,776	493	-443
Mobile Sources³			
Warehouse Trucks ⁶	8,856	8,856	5,949
Warehouse Passenger Cars ⁶	5,014	4,754	3,943
30 Zero Emission Vehicles ⁷	N/A	-99	-78
Subtotal	13,870	13,511	9,814
Total	20,646	14,004	9,371
<i>Beaumont GHG Threshold</i>	<i>3,000</i>	<i>3,000</i>	<i>3,000</i>
Exceeds Threshold?	Yes	Yes	Yes
1. Mitigation Measure GHG-4 requires electric landscaping equipment, which would reduce area source emissions. 2. Mitigation Measure GHG-2 requires buildings to meet or exceed CALGreen Tier 2 standards. 3. PDF AQ-2 requires cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, and forklifts) to be powered by electricity. Unmitigated emissions from diesel equipment are disclosed for informational purposes. 4. Water consumption is based on the Project's Water Supply Assessment. 5. Mitigation Measure GHG-1 requires the installation of photovoltaic solar panels to offset energy emissions. 6. Mitigation Measure AQ-3 (refer to the Projects Air Quality Assessment) requires implementation of a TDM program. 7. The Project would provide a grant program for the purchase of 30 electric passenger cars for on-site employees per PDF AQ-16. Note that these emissions reductions have been included for informational purposes and are not considered as part of the significance determination. 8. 2040 emissions are provided for informational purposes only. Emissions decrease in future years due to phased-in emissions standards, fleet turnover, and more stringent renewable electricity goals pursuant to state regulations. Source: CalEEMod version 2020.4.0. Refer to Appendix F for model outputs.			

Phase 2 Operational Emissions

GHG emissions associated with Phase 2 of the Project are summarized in **Table 4.7-4: Phase 2 Greenhouse Gas Emissions**. As shown in **Table 4.7-4**, the Project's unmitigated emissions would be approximately 11,580 MTCO₂e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MTCO₂e per year threshold. The majority of the GHG emissions (86 percent unmitigated and 90 percent mitigated) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards.

Table 4.7-4: Phase 2 Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year		
	Unmitigated	Mitigated	Mitigated 2040
Stationary Sources			
Construction Amortized Over 30 Years	33	33	33
Area Source ¹	0.02	0.01	0.01
Energy ²	1,284	1,085	679
Waste ³	221	55	55
Water and Wastewater ⁴	99	99	24
Subtotal	1,639	1,272	791
Mobile Sources			
Employee, Delivery, and Retail Customers ⁵	9,943	9,831	8,021
Subtotal	9,943	9,983	8,021
Total	11,580	11,103	8,812
<i>Beaumont GHG Threshold</i>	<i>3,000</i>	<i>3,000</i>	<i>3,000</i>
Exceeds Threshold?	Yes	Yes	Yes
1. Mitigation Measure GHG-4 requires electric landscaping equipment, which would reduce area source emissions. 2. Mitigation Measure GHG-2 requires buildings to meet or exceed CALGreen Tier 2 standards. 3. PDF AQ-2 requires cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, and forklifts) to be powered by electricity. Unmitigated emissions from diesel equipment are disclosed for informational purposes. 4. Water consumption is based on the Project's Water Supply Assessment. 5. Mitigation Measure AQ-3 (refer to the Projects Air Quality Assessment) requires implementation of a TDM program. 6. 2040 emissions are provided for informational purposes only. Emissions decrease in future years due to phased-in emissions standards, fleet turnover, and more stringent renewable electricity goals pursuant to state regulations. Source: CalEEMod version 2020.4.0. Refer to Appendix F for model outputs.			

The Project includes numerous PDFs that would minimize emissions. For example, the project would not include cold storage, which would reduce emissions from electricity consumption and transport refrigeration units (TRUs). All cargo handling equipment (forklifts, yard trucks, etc.) is required to be electrically powered to reduce on-site criteria pollutant emissions. All heavy-duty vehicles registered in California and entering or operated on the project site shall be model year 2010 or later. In order to promote the use of alternative fuels and clean fleets and facilitate future installation of electric vehicle supply equipment, the Project would install 30 light-duty vehicle charging stations, install conduit for 59 future electric light-duty vehicle charging stations, and designate 119 parking spaces for clean air/electric vehicle/vanpool parking. Additionally, the Project would require future tenants to attend CARB training for record keeping and ensuring vehicles comply with CARB regulations and are in good condition, enroll in the EPA's SmartWay program, provide information on CARB's Carl Moyer Voucher Incentive Program to upgrade fleets, include signage for truck routes and locate check-in points to ensure truck queues do not occur outside of the facility.

Additionally, **MM AQ-3** through **MM AQ-6** have been identified in **Section 4.2, Air Quality** to reduce operational emissions. **MMAQ-3** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-4** requires the buildings to be designed to accommodate electric vehicle (EV) infrastructure, **MM AQ-5** prohibits idling

when engines are not in use, and **MM AQ-6** is required to incentivize the use of cleaner operating trucks to reduce emissions.

Standard Conditions (SC) GHG-1 through SC GHG-9, as required by the California Building Code, would provide designated parking to promote the use of alternative fuels and clean fleets, facilitate future installation of electric vehicle supply equipment, and limit idling times. **MM GHG-1** requires the installation of solar photovoltaic (PV) panels to offset the Project's energy consumption and **MM GHG-2** requires the Project to meet or exceed CALGreen Tier 2 standards to further improve energy efficiency. Additionally, **MM GHG-3** requires the Project to divert 75 percent of waste from landfills and **MM GHG-4** requires landscape equipment to be 100 percent electric.

In addition, the Project would be required to comply with SCAQMD Rule 2305 which would directly reduce emissions or to otherwise facilitate emissions reductions. Alternatively, warehouse operators can choose to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby. Although Rule 2305 focuses on air quality pollutant emissions, the rule would facilitate cleaner vehicles and supporting infrastructure that would also result in GHG benefits.

Warehouse owners and operators are required to earn Warehouse Actions and Investments to Reduce Emissions (WAIRE) Points each year. WAIRE points are a menu-based system earned by emission reduction measures. Warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. WAIRE points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero-Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options.

A preliminary WAIRE calculation has been conducted for the proposed Project. The Project would include rooftop solar (refer to **MM GHG-1**) and nine zero emission yard trucks that would operate for approximately 8 hours per day, 365 days per year. Based on the SCAQMD WAIRE User Calculator the Project would have a Warehouse Points Compliance Obligation (WPCO) of 1,122 and would earn 9,283 points. As a result, the Project more than fulfill its WPCO and would bank 8,161 points.¹⁴

As shown in **Table 4.7-3** and **Table 4.7-4**, mitigation and PDFs would individually reduce Phase 1 and Phase 2 stationary emissions to below the City's industrial threshold of 3,000 MTCO₂e, however mobile source emissions would continue to exceed the threshold. The TDM program required by **MM AQ-3** will reduce GHG emissions from employees commuting to work, however the number of delivery trips and retail customer trips would not be reduced by a TDM program.

Implementation of these PDFs, mitigation measures, and standard conditions would reduce Phase 1 GHG emissions to 34,306 MTCO₂e per year and Phase 2 GHG emissions to 11,311 MTCO₂e per year, the

¹⁴ Note that this calculation is preliminary and provided for informational purposes. The WAIRE Points Compliance Obligation is determined by the actual number of truck trips to the facility based on logs of truck trips submitted on January 1 after the first year of operation. The trip rates that SCAQMD uses in the WAIRE User Calculator would be slightly different than what is used in the Project's Traffic Study.

Project's emissions would still exceed the 3,000 MTCO₂e per year threshold. Additional mitigation to further reduce these emissions is not feasible.

Additional mitigation to reduce the Project's mobile emissions is not feasible due to the limited ability of the City of Beaumont to address emissions resulting from trucks, cars, and/or emissions generated by these trucks outside of the City's limits. As with all land use projects, the Project's mobile and transportation related GHG emissions are a function of two parameters: emissions control technology and vehicle miles traveled (VMT).

CARB is directly responsible for regulating mobile and transportation source emissions in the State. Regarding the first parameter, California addresses emissions control technology through a variety of legislation and regulatory schemes, including the state's Low Carbon Fuel Standard (Executive Order S-01-07) (LCFS), a regulatory program designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. The regulatory standards are expressed in terms of the "carbon intensity" of gasoline and diesel fuel and their substitutes. Different types of fuels are evaluated to determine their "life cycle emissions" which include the emissions associated with producing, transporting, and using the fuels. Each fuel is then given a carbon intensity score and compared against a declining carbon intensity benchmark for each year. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets these declining benchmarks for each annual compliance period. In 2018, CARB approved amendments to the LCFS, which strengthened the carbon intensity benchmarks through 2030 to ensure they are in-line with California's 2030 GHG emission reduction target enacted through SB 32. This ensures that the transportation sector is meeting its obligations to achieve California's GHG reduction targets. The state is also implementing legislation and regulations to address the second parameter affecting transportation related GHG emissions by controlling for VMT. Examples of this include SB 375, which links land use and transportation funding and provides one incentive for regions to achieve reductions in VMT, and SB 743, which discourages VMT increases for passenger car trips above a region-specific benchmark. However, the state has determined that VMT regulations are not applicable to heavy trucks, such as those that will utilize the proposed Project and generate the majority of the Project's GHG emissions.

As such, the City of Beaumont has no regulatory control over emissions control technology and therefore limited ability to control or mitigate emissions associated with truck emissions associated with this Project.

Additional mitigation to further reduce the Project's non-mobile emissions is also not feasible. The Project's PDFs already address non-mobile emissions to extent possible, by designing buildings to provide environmental design features, incorporate energy and water conservation measures, and provide electrical, heating, ventilation, lighting, and power systems that meet CALGreen Standards (**MM GHG-2** requires the Project to meet or exceed CALGreen Tier 2 standards, which exceeds code requirements). Further, the project would offset energy demand with solar PV infrastructure (**MM GHG-1**), divert 75 percent of solid waste from landfills (**MM GHG-3**) and require landscape equipment to be 100 percent electric (**MM GHG-4**). Additionally, the project includes design features to require electric cargo handling equipment, EV charging stations, among various others describe above.

The reliance on carbon offsets to reduce either the Project's mobile or non-mobile emissions is also not feasible, as no local programs are available that would meet CEQA's criteria for a valid mitigation measure. To reduce emissions, purchased offset credits must be genuine, quantifiable, additional, and verifiable. Even offset credits purchased from CARB-approved offset project registries have been determined to not adequately assure 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. Such offsets have been determined to not comply with CEQA's definition of a valid mitigation measure. See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467.

The City of Beaumont, the lead agency for the Project and the entity responsible for enforcing any mitigation measures incorporated into the Project and relied upon to reduce impacts to a less than significant level, has no enforcement authority over offset credits that fund carbon reduction projects outside of the City. Many offset credits "sell" reductions in emissions generated outside of California, which may not be genuine or verifiable. International offsets are even more difficult to verify, guarantee and enforce. Even CARB does not have enforcement authority over such reductions, let alone the City of Beaumont. Thus, the purchase of offset credits is not a feasible mitigation measure to reduce the emissions impact of the proposed Project.

Therefore, despite the incorporation of all feasible mitigation measures, the remaining mobile emissions in Phase 1 and Phase 2 cannot feasibly be mitigated because neither the Project nor the City has the regulatory authority to control tailpipe emissions. For additional information, **Table 4.7-3** and **Table 4.7-4** show anticipated Phase 1 and Phase 2 emissions in 2040, as current State and Federal regulations continue to reduce GHG emissions. However even by 2040, mobile source emissions would remain above the City's threshold.

Project Buildout Operational Emissions

GHG emissions associated with the entire Project are summarized in **Table 4.7-5, Project Buildout Greenhouse Gas Emissions**. As shown in **Table 4.7-5**, at Project Buildout, the combination of Phase 1 and Phase 2, the unmitigated emissions would be approximately 32,226 MTCO₂e annually from both construction and operations. Project-related GHG emissions would exceed the City's 3,000 MTCO₂e per year threshold. The majority of the GHG emissions (74 percent unmitigated and 93 percent mitigated) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards.

Table 4.7-5: Project Buildout Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year		
	Unmitigated	Mitigated	Mitigated 2040 ⁸
Area and Indirect Sources			
Construction Amortized Over 30 Years	295	295	295
Area Source ¹	0.14	0.08	0.08
Energy ²	2,796	2,440	1,149
Off-road (Forklifts and Yard Trucks) ³	3,649	848	848
Emergency Backup Generator	59	59	59
Waste	1,432	358	358
Water and Wastewater ⁴	182	182	56
Solar PV ⁵	N/A	-2,417	-2,417
Subtotal	8,413	1,765	348
Mobile Sources³			
Trucks, Employees, Delivery, and Retail Customers ⁶	23,813	23,441	17,913
30 Zero Emission Vehicles ⁷	N/A	-99	-78
Subtotal	23,813	23,342	17,835
Total	32,226	25,107	18,183
<i>Beaumont GHG Threshold</i>	<i>3,000</i>	<i>3,000</i>	<i>3,000</i>
Exceeds Threshold?	Yes	Yes	Yes
1. Mitigation Measure GHG-4 requires electric landscaping equipment, which would reduce area source emissions. 2. Mitigation Measure GHG-2 requires buildings to meet or exceed CALGreen Tier 2 standards. 3. PDF AQ-2 requires cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, and forklifts) to be powered by electricity. Unmitigated emissions from diesel equipment are disclosed for informational purposes. 4. Water consumption is based on the Project's Water Supply Assessment. 5. Mitigation Measure GHG-1 requires the installation of photovoltaic solar panels to offset energy emissions. 6. Mitigation Measure AQ-3 (refer to the Projects Air Quality Assessment) requires implementation of a TDM program. 7. The Project would provide a grant program for the purchase of 30 electric passenger cars for on-site employees per PDF AQ-16. Note that these emissions reductions have been included for informational purposes and are not considered as part of the significance determination. 8. 2040 emissions are provided for informational purposes only. Emissions decrease in future years due to phased-in emissions standards, fleet turnover, and more stringent renewable electricity goals pursuant to state regulations. Source: CalEEMod version 2020.4.0. Refer to Appendix F for model outputs.			

Since mitigated future mobile source emissions exceed the City's 3,000 MTCO₂e threshold and no additional feasible mitigation beyond **MM AQ-3** through **MM AQ-6** (refer to **Section 4.2, Air Quality**) and **MM GHG-1** through **MM GHG-4** are available to further reduce emissions, this impact remains significant and unavoidable.

Standard Conditions and Requirements

Standard Conditions are existing requirements and standard conditions that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because

Standard Conditions are neither Project specific nor a result of development of the Project, they are not considered to be either PDFs or Mitigation Measures.

- SC GHG-1** Require construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.
- SC GHG-2** In accordance with California Title 24 Standards, buildings will be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.
- SC GHG-3** Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City’s Water Efficient Landscape Requirements (Section 17.06.030 of the City’s Municipal Code).
- SC GHG-4** Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- SC GHG-5** Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.
- SC GHG-6** Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.
- SC GHG-7** Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance with Section 5.106.5.2, Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
- SC GHG-8** Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- SC GHG-9** Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.

Mitigation Measures

Refer to **MM AQ-1** through **MM AQ-6** in **Section 4.2, Air Quality**. The following additional mitigation is also required.

- MM GHG-1** Phase 1 of the Project shall install solar photovoltaic (PV) panels or other source of renewable energy generation on-site, or otherwise acquire energy from the local utility that has been generated by renewable sources, that would provide 100 percent of the expected building load (i.e., the Title 24 electricity demand and the plug-load,

conservatively anticipated to be approximately 8.87 kilowatt hours per year [kWh/year] per square foot^{15,16}).

With expected energy consumption at 8.87 kWh/sf, a PV panel array covering approximately one quarter of the proposed roof space would provide sufficient on-site renewable energy generation to offset consumption. The final PV generation facility size requires approval by Southern California Edison (SCE). SCE's Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system. Should SCE limit the off-site export, the proposed Project may utilize a battery energy storage system (BESS) to lower off-site export while maintaining on-site renewable generation to offset consumption.

Should the energy consumption characteristics of a future tenant differ from this projection, there is sufficient space on the rooftop for the system to roughly triple on-site generation. The building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage.

MM GHG-2 Prior to the issuance of a Phase 1 or Phase 2 building permit, the Project Applicant or successor in interest shall provide documentation to the City of Beaumont demonstrating that the Project is designed to achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed CalGreen Tier 2 standards in effect at the time of building permit application.

MM GHG-3 The development (Phase 1 and Phase 2) shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of occupancy, a recyclables collection and load area shall be constructed in compliance with Riverside County Waste Management Department's Design Guidelines for Recyclable Collection and Loading Areas.

MM GHG-4 Prior to the issuance of Phase 1 or Phase 2 occupancy permits, the Planning Department shall confirm that tenant lease agreements include contractual language that all landscaping equipment used onsite shall be 100 percent electrically powered. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.

Level of Significance

Significant and unavoidable impact. No additional feasible mitigation measures are available that can reduce impacts to less than significant. As explained above, the Project incorporates all feasible mitigation measures that could be implemented to further reduce the Project's GHG emissions below the 3,000 MTCO₂e threshold. There are no additional measures available that would further reduce emissions because the majority of the Project's emissions come from mobile sources which are regulated by the State and not the City of Beaumont. Further, for the reasons discussed above, the purchase of offset credits is not feasible, as no local programs exist, and those offset registries that are available would not

¹⁵ U.S. Energy Information Administration, Commercial Buildings Energy Consumption Survey. Table PBA4. Electricity consumption totals and conditional intensities by building activity subcategories, 2012. 75th percentile value for Nonrefrigerated Distribution Center = 8.5kWh/year/sf.

¹⁶ Additional consumption of 30 Level 2 EV chargers providing 6 hours of charge time for two employee shifts per day = 0.37kWh/year/sf.

meet CEQA’s definition of a verifiable, enforceable, and therefore, valid, mitigation measure. Impacts would remain significant and unavoidable.

Impact 4.7-2 *Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?*

Level of Significance: Significant Unavoidable Impact

Sustainable Beaumont: The City’s Roadmap to Greenhouse Gas Reductions (Climate Action Plan)

The City approved Sustain Beaumont (Climate Action Plan) in 2015, which serves as a long-term plan for achieving sustainability by utilizing resources effectively and reducing GHG emissions. By using energy more efficiently, harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes, the City can keep dollars in the local economy, create new green jobs, and improve community quality of life. The goals outlined in the Climate Action Plan are shown in **Table 4.7-6, City of Beaumont, Sustainable Beaumont Plan (Climate Action Plan) Consistency**. As shown in **Table 4.7-6**, the Project would not conflict with the goals in the Climate Action Plan.

Table 4.7-6: City of Beaumont, Sustainable Beaumont Plan (Climate Action Plan) Consistency

SBCOG Goals		Compliance	
GOAL 1:	Increase energy efficiency in existing residential units.	N/A:	This is not a residential project therefore this goal is not applicable.
GOAL 2:	Increase energy efficiency in new residential development.	N/A:	This is not a residential project therefore this goal is not applicable.
GOAL 3:	Increase energy efficiency in existing commercial units.	N/A:	The Project site is undeveloped; therefore, this goal is not applicable.
GOAL 4:	Increase energy efficiency in new commercial development.	Consistent:	Project is required to comply with the provisions of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen).
GOAL 5:	Increase energy efficiency through water efficiency.	Consistent:	The Project will incorporate low flow appliances and water efficient landscaping.
GOAL 6:	Decrease energy demand through reducing urban heat island effect.	Consistent:	The Project will incorporate light colored materials to reduce heat absorption in accordance with Section 140.3(a) of the California Building Code.
GOAL 7:	Decrease GHG emissions through reducing vehicle miles traveled.	Consistent:	The Project will incorporate a Transportation Design Management program (refer to MM AQ-3 in the Section 4.2 Air Quality).
GOAL 8:	Decrease GHG emissions through reducing solid waste generation.	Consistent:	The Project will comply with AB 939 and will divert at least 50 percent of solid waste from landfills. Additionally, MM GHG-3 requires the Project to divert 75 percent of its solid waste from landfills
GOAL 9:	Decrease GHG emissions through increasing clean energy use.	Consistent:	Project is required to comply with the provisions of the California Building Energy Efficiency Standards and CALGreen. MM GHG-2 requires the Project to meet CalGreen Tier 2 standards.

SBCOG Goals	Compliance
GOAL 10: Decrease GHG emissions from new development through performance standards	N/A: The City has not implemented the GHG Screening Table.
Source: City of Beaumont, Sustainable Beaumont: The City's Roadmap to Greenhouse Gas Reductions, October 2015.	

Riverside County Climate Action Plan Greenhouse Gas Screening Tables

Although the Project is currently located in the City of Beaumont, the Project area was annexed from Riverside County in 2016. Under the Riverside County CAP, projects that generate less than 3,000 MTCO₂e are considered less than significant, projects that generate more than 3,000 MTCO₂e must achieve at least 100 points on the Riverside County GHG Emissions Screening Tables (Screening Tables) to demonstrate consistency with CAP. Projects that achieve 100 points on the Screening Tables are also considered less than significant. The Screening Tables establishes a points system that assigns values for each GHG emissions mitigation design element or operational program feature incorporated into a given development project. For informational purposes, the Project is also shown to be consistent with the Riverside County CAP.

Table 4.7-7, Riverside County Climate Action Plan Screening Table identifies potential design features and their associated scores for commercial/industrial projects. Typical development projects for this category of the Screen Tables include retail commercial, big box retail, office buildings, business parks, and typical warehousing. However, more unusual types of industrial projects, such as cement manufacturing, metal foundries, refrigerant manufacturing, electric generating stations, and oil refineries, cannot use the Screening Tables because the emission sources for those types of uses were not contemplated in the Riverside County CAP. **Table 4.7-7** shows that the proposed Project has the potential to achieve 100 points on the Screening Tables.

Table 4.7-7: Riverside County Climate Action Plan Screening Table

Feature	Description	Assigned Point Value
Insulation	2017 Title 24 Requirements (walls: R-13; roof/attic: R-30)	0
	Modestly Enhanced Insulation (walls: R-13; roof/attic: R-38)	9
	Enhanced Insulation (rigid wall insulation: R-13; roof/attic: R-38)	11
	Greatly Enhanced Insulation (spray foam wall insulated walls R-15 or higher) roof/attic R-38 or higher)	12
Windows	2016 Title 24 Windows (0.57 U-factor, 0.4 solar heat gain coefficient (SHGC))	0
	Modestly Enhanced Window Insulation {0.4 U-Factor, 0.32 SHGC}	4
	Enhanced Window Insulation {0.32 U-Factor, 0.25 SHGC}	5
	Greatly Enhanced Window Insulation {0.28 or less U-Factor, 0.22 or less SHGC}	7
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7
	Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	8

Feature	Description	Assigned Point Value
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	10
Air Infiltration	Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)	7
	Blower Door HERS Verified Envelope Leakage or equivalent	6
Thermal Storage of Building	Modest Thermal Mass (10% of floor or 10% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	2
	Enhanced Thermal Mass (20% of floor or 20% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	4
	Enhanced Thermal Mass (80% of floor or 80% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	14
Indoor Space Efficiencies		
Heating/Cooling Distribution System	Minimum Duct Insulation (R-4.2 required)	0
	Modest Duct insulation (R-6)	5
	Enhanced Duct Insulation (R-8)	6
	Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	8
Space Heating/Cooling Equipment	2016 Title 24 Minimum HVAC Efficiency (EER 13/75% AFUE or 7.7 HSPF)	0
	Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF)	4
	High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF)	5
	Very High Efficiency HVAC (EER 16/82% AFUE or 9 HSPF)	7
Water Heaters	2016 Title 24 Minimum Efficiency (0.57 Energy Factor)	0
	Improved Efficiency Water Heater (0.675 Energy Factor)	8
	High Efficiency Water Heater (0.72 Energy Factor)	10
	Very High Efficiency Water Heater (0.92 Energy factor)	11
	Solar Pre-heat System (0.2 Net Solar Fraction)	2
	Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	5
Daylighting	All peripheral rooms within building have at least one window or skylight	0
	All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)	1
	All rooms daylighted	1
Artificial Lighting	Efficient lights (25% of In-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures: 50 lumens/watt for 15 to 40 watt fixtures, 60 lumens/watt for fixtures >40watt)	5
	High Efficiency lights (50% of in-unit fixtures are high efficacy)	7

Feature	Description	Assigned Point Value
	Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)	8
Appliances	Energy Star Commercial Refrigerator (new)	2
	Energy Star Commercial Dish Washer (new)	2
	Energy Star Commercial Clothes Washing	2
Miscellaneous Commercial Building Efficiencies		
Building Placement	North/south alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting	4
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21st	6
Clean Energy		
Photovoltaic	Solar panels provide 30 percent of power needs of the project	8
	Solar panels provide 40 percent of power needs of the project	12
	Solar panels provide 50 percent of power needs of the project	16
	Solar panels provide 60 percent of power needs of the project	19
	Solar panels provide 70 percent of power needs of the project	23
	Solar panels provide 80 percent of power needs of the project	26
	Solar panels provide 90 percent of power needs of the project	30
	Solar panels provide 100 percent of power needs of the project	34
Wind Turbines	Wind turbines provide 30 percent of power needs of the project	8
	Wind turbines provide 40 percent of power needs of the project	12
	Wind turbines provide 50 percent of power needs of the project	16
	Wind turbines provide 60 percent of power needs of the project	19
	Wind turbines provide 70 percent of power needs of the project	23
	Wind turbines provide 80 percent of power needs of the project	26
	Wind turbines provide 90 percent of power needs of the project	30
	Wind turbines provide 100 percent of power needs of the project	34
Irrigation and Landscaping		
Water Efficient Landscaping	Eliminate conventional turf from landscaping	0
	Only moderate water using plants	2
	Only low water using plants	3
	Only California Native landscape that requires no, or only supplemental, irrigation	5
Water Efficient Irrigation Systems	Low precipitation spray heads < .75"/hour, or drip irrigation	1
	Weather based Irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use)	3

Feature	Description	Assigned Point Value
Potable Water		
Showers	Water Efficient Showerheads (2.0 gpm)	2
Toilets	Water Efficient Toilets (1.5 gpm)	3
	Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	3
Faucets	Water Efficient faucets (1.28 gpm)	2
Commercial Dishwashers	Water Efficient Dishwasher (20% water savings)	2
Commercial Laundry Washers	Water Efficient laundry (15% water savings)	2
	High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)	4
Increase Commercial/Industrial Reclaimed Water Use		
Recycled Water	Graywater (purple pipe) irrigation system on site	5
Ride-Sharing and Bike-to-Work Programs		
Alternative Scheduling	Provide flexibility in scheduling such that at least 30% of employees participate in 9/80 work week, 4-day/40-hour workweek, or telecommuting 1.5 days/week.	5
Car/Vanpools	Car/vanpool program	1
	Car/vanpool program with preferred parking	2
	Car/vanpool with guaranteed ride home program	3
	Subsidized employee incentive car/vanpool program (Note: combine all applicable points for total value)	5
Employee Bicycle/ Pedestrian Programs	Complete sidewalk to residential within ½ mile	1
	Complete bike path to residential within 3 miles	1
	Bike lockers and secure racks	1
	Showers and changing facilities	2
	Subsidized employee walk/bike program (Note: combine all applicable points for total value)	3
Shuttle/Transit Programs	Local transit within ¼ mile	1
	Light rail transit within ½ mile	3
	Shuttle service to light rail transit station	5
	Guaranteed ride home program	1
	Subsidized Transit passes (Note: combine all applicable points for total value)	2
Preferential Parking		
Parking	Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles.	1

Feature	Description	Assigned Point Value
	<i>Provide larger parking spaces that can accommodate vans used for ridesharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas.</i>	1
Signal Synchronization and Intelligent Traffic Systems		
Signal Improvements	Synchronize signals along arterials used by project	1 per signal
	Connect signals along arterials to existing ITS.	3 per signal
Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County		
Sidewalks	Provide sidewalks on one side of the street (required)	0
	Provide sidewalks on both sides of the street	1
	Provide pedestrian linkage between commercial and residential land uses within 1 mile	3
Bicycle Paths	Provide bicycle paths within project boundaries	1
	Provide bicycle path linkages between commercial and other land uses	2
	Provide bicycle path linkages between commercial and transit	5
Electrify the Fleet		
Electric Vehicle Recharging	Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations	2 per area
	<i>Install electric vehicle charging stations in garages/parking areas</i>	8 pts. per station / 240
Neighborhood Electric Vehicle (NEV) Infrastructure	Provide NEV safe routes within the project site	3
	Provide NEV safe routes between the project site and other land uses.	5
Reduce Waste to Landfills		
Recycling	<i>Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up</i>	2
	Provide commercial/industrial recycling programs that fulfill an on-site goal of 80% diversion of solid waste	5
TOTAL SCREENING TABLE POINTS		353
Note: Selected design features are shown in <i>Bold</i> . Source: Riverside County Climate Action Plan Update, revised November 2019.		

As proposed, the Project would generate 353 points on the County’s Screening Tables. Therefore, the Project is consistent with the Riverside County CAP.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

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 Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project’s consistency with the RTP/SCS goals is analyzed in detail in **Table 4.7-8, Regional Transportation Plan/Sustainable Communities Strategy Consistency**.

Table 4.7-8: Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals	Compliance
GOAL 1: Encourage regional economic prosperity and global competitiveness.	N/A: This is not a project-specific policy and is therefore not applicable. However, the Project is located on a vacant site and development of the site would contribute to regional economic prosperity.
GOAL 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent: Although this Project is not a transportation improvement project, the Project is located near existing transit routes on I-10.
GOAL 3: Enhance the preservation, security, and resilience of the regional transportation system.	N/A: This is not a transportation improvement project and is therefore not applicable.
GOAL 4: Increase person and goods movement and travel choices within the transportation system.	N/A: This is not a transportation improvement project and is therefore not applicable. However, the Project includes an e-commerce use that would support goods movement.
GOAL 5: Reduce greenhouse gas emissions and improve air quality.	Consistent: The Project is located within an urban area in proximity to existing truck routes and freeways. Location of the project within a developed area

SCAG Goals	Compliance
	would reduce trip lengths, which would reduce GHG and air quality emissions.
GOAL 6: Support healthy and equitable communities	Consistent: Although the Project exceeds regional thresholds for criteria pollutants, the Project does not exceed localized thresholds. Based on the <i>Friant Ranch</i> decision, projects that do not exceed the SCAQMD's LSTs would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A: This is not a project-specific policy and is therefore not applicable.
GOAL 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A: This is not a project-specific policy and is therefore not applicable.
GOAL 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	N/A: The Project involves development of an e-commerce facility and commercial uses and does not include housing.
GOAL 10: Promote conservation of natural and agricultural lands and restoration of habitats.	N/A: This Project is located on previously disturbed land and is not located on agricultural lands.
Source: Southern California Association of Governments, <i>Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy, 2020</i> .	

The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4.7-8**, the Project would be consistent with the stated goals of the RTP/SCS. Therefore, the Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

California Air Resource Board Scoping Plan Consistency

The California State Legislature adopted Assembly Bill (AB) 32 in 2006. AB 32 focuses on reducing GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program.

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As shown in **Table 4.7-9, Project Consistency with Applicable CARB Scoping Plan Measures**, the Project is consistent

with most of the strategies, while others are not applicable to the Project. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Table 4.7-9: Project Consistency with Applicable CARB Scoping Plan Measures

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and-Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-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 combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	Consistent. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the Project would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related GHG Targets.	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	Consistent. The Project would provide development in the region that is consistent with the growth projections in the RTP/SCS.
	Goods Movement	Goods Movement Action Plan January 2007	Not applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	Consistent. This measure applies to medium and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the Project would be required to comply with the requirements of this regulation.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
	High Speed Rail	Funded under SB 862	Not applicable. This is a statewide measure that cannot be implemented by a project applicant or Lead Agency.
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	Consistent. The Project would not conflict with implementation of this measure. The Project would comply with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard.	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	Consistent. The Project would obtain electricity from the electric utility, Southern California Edison (SCE). SCE obtained 36 percent of its power supply from renewable sources in 2019. Therefore, the utility would provide power when needed on-site that is composed of a greater percentage of renewable sources.
Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	Consistent. This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.	
Million Solar Roofs Program	Tax Incentive Program		
Water	Water	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use. The Project would also comply with the City's Water-Efficient Landscaping Regulations (Chapter 17.06, Section 17.06.030 of the Beaumont Code of Ordinances).
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	Consistent. The State is to increase the use of green building practices. The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CalGreen requirements. The Project includes sustainability design features that support the Green Building Strategy.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	Not applicable. The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 MTCO ₂ e of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. As shown above, although total Project GHG emissions would exceed 10,000 MTCO ₂ e, the majority of these emissions are from mobile sources. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen code. The City has consistently achieved its state recycling mandates.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap and Trade Offset Projects	Not applicable. The Project is in an area designated for urban uses. No forested lands exist on-site.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	Consistent. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage system. The Project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset Projects for Livestock and Rice Cultivation	Not applicable. The Project site is designated for urban development. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist on-site or are proposed to be implemented by the Project.

Source: California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017 and CARB, *Climate Change Scoping Plan*, December 2008.

As seen in **Tables 4.7-6** through **4.7-9**, the Project would be consistent with all applicable plan goals. In addition, the Project would include several sustainable design features that would help reduce GHG emissions. **Table 4.7-5** shows that with mitigation the Project at buildout (Phase 1 and Phase 2) is estimated to emit approximately 25,107 MTCO₂e per year in the opening year and 18,183 MTCO₂e in 2040 directly from on-site activities and indirectly from off-site motor vehicles.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed Project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, CARB’s Mobile Source Strategy, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

The majority of the GHG reductions from the Scoping Plan would result from continuation of the Cap-and-Trade regulation. AB 398 (2017) extends the state’s Cap-and-Trade program through 2030 and the Scoping Plan provide a comprehensive plan for the state to achieve its GHG targets through a variety of regulations enacted at the state level. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply 60 percent renewable electricity by 2030 and 100 percent renewable by 2045), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the Mobile Source Strategy and Sustainable Freight Action Plan.

Several of the State’s plans and policies would contribute to a reduction in mobile source emissions from the Project. These include the following:

- **CARB’s Advanced Clean Truck Regulation:** CARB’s Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- **Executive Order N-79-20:** Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035 and all medium and heavy-duty vehicles will be zero-

emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new ZEVs “towards the target of 100 percent.”

- **CARB’s Mobile Source Strategy:** CARB’s Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California’s targets by increasing the adoption of ZEV buses and trucks.
- **CARB’s Sustainable Freight Action Plan:** The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project site and may include existing trucks or new trucks that are part of the statewide goods movement sector.
- **CARB’s Emissions Reduction Plan for Ports and Goods Movement:** CARB’s Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any commercial activity associated with goods movement would be required to comply with these measures as adopted. As such, the Project would not interfere with their implementation.

The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. As described above, the Project would be consistent with all applicable plan goals. Compliance with applicable State standards (e.g., continuation of the Cap-and-Trade regulation; CARB’s Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60 percent renewable electricity by 2030 and 100 percent renewable by 2045, etc.) would ensure consistency with State and regional GHG reduction planning efforts.

As discussed above, **MM AQ-3** through **MM AQ-6** as identified in **Section 4.2, Air Quality**, would reduce mobile source emissions and would support the State’s transition to ZEVs by requiring electrical hookups at all loading bays, promoting the use of alternative fuels and clean fleets, requiring electric vehicle charging stations and/or infrastructure to support the future installation of truck charging stations. The Project would also benefit from implementation of the State programs for ZEVs and goods movement efficiencies that reduce future GHG emissions from trucks. **SC GHG-1** through **SC GHG-9**, as required by the California Building Code, would provide designated parking to promote the use of alternative fuels and clean fleets, facilitate future installation of electric vehicle supply equipment, and limit idling times. Furthermore, **MM GHG-1** requires the installation of solar panels to offset the Project’s energy consumption and **MM GHG-2** requires the Project to meet or exceed CalGreen Tier 2 standards to further improve energy efficiency.

In conclusion, the Project does not conflict with the applicable plans that are discussed above and therefore with respect to this particular threshold, the Project does not have a significant impact. However, despite plan consistency, the Project’s long-term operational GHG emissions would exceed the City’s significance threshold of 3,000 MTCO₂e per year despite the implementation of **MM AQ-3** through

MM AQ-6 in **Section 4.2, Air Quality**, **MM GHG-1** through **MM GHG-4**, and energy conserving PDFs, thus the Project could impede California's statewide GHG reduction goals for 2030 and 2050. A potentially significant impact would therefore occur as a result of the proposed Project.

Mitigation Measures

Refer to **MM AQ-3** through **MM AQ-6** in the **Section 4.2, Air Quality** and **MM GHG-1** through **MM GHG-4**, above.

Level of Significance

Significant and unavoidable impact. No additional feasible mitigation measures are available that can reduce impacts to less than significant.

4.7.6 Cumulative Impacts

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. As discussed above, the Project-related GHG emissions would exceed the SCAQMD's threshold of 10,000 MTCO₂eq despite implementation of **MM AQ-3** through **MM AQ-6** (refer to Section 4.2 Air Quality) and **MM GHG-1** through **MM GHG-4** and could impede statewide 2030 and 2050 GHG emission reduction targets. As such, the Project would result in a potentially significant cumulative GHG impact.

Mitigation Measures

Refer to **MM AQ-3** through **MM AQ-6** in **Section 4.2, Air Quality** and **MM GHG-1** through **MM GHG-4**, above.

Level of Significance

Significant and unavoidable impact. No additional feasible mitigation measures are available that can reduce impacts to less than significant.

4.7.7 Significant Unavoidable Impacts

Even with implementation of regulatory requirements, standard conditions of approval, and reasonable and feasible mitigation, the Project would result in significant and unavoidable impacts with respect to consistency with GHG plans and GHG emissions, on an individual and cumulative basis.

4.7.8 References

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U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources, 2010.*

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