

3.1.4 Greenhouse Gas Emissions

This section evaluates the significance of impacts from the Campo Wind Project with Boulder Brush Facilities (Project) on greenhouse gas (GHG) emissions by analyzing the increase in GHG emissions that would result, directly or indirectly, from implementation of the Project. The Project was examined relative to relevant regulations, including plans and policies designed to reduce GHG emissions.

The Project's GHG emissions estimates presented in this section were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2.¹

Comments received in response to the Notice of Preparation regarding GHG emissions included general concerns of the Project's contribution to GHG emissions. These concerns were considered in the preparation of this section. A copy of the Notice of Preparation and comment letters received in response to the Notice of Preparation are included in Appendix A of this Environmental Impact Report (EIR).

3.1.4.1 Existing Conditions

The approximately 2,520-acre Project Site is located in southeastern San Diego County, California (see Figure 1-1, Project Location, and Figure 1-2, Project Area, in Chapter 1 of this EIR). The Project consists of both the Campo Wind Facilities that would be located on Campo Band of Diegueño Mission Indians Reservation (Reservation) land within the Reservation Boundary under the jurisdiction of the Bureau of Indian Affairs (BIA), and the Boulder Brush Facilities that would be located on adjacent private lands within the Boulder Brush Boundary under the land use and permitting jurisdiction of the County of San Diego (County).

The Campo Wind Facilities would be located within the approximately 2,200-acre Campo Corridor inside the Reservation Boundary. The BIA is the Lead Agency for the Project under the National Environmental Policy Act (NEPA) and has prepared an Environmental Impact Statement for the Project (BIA 2019).

The Boulder Brush Facilities would be located within the approximately 320-acre Boulder Brush Corridor inside the Boulder Brush Boundary. Collectively, the Campo Corridor and the Boulder Brush Corridor compose the approximately 2,520-acre Project Site.

¹ CalEEMod is an emissions model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects. The model was developed for the California Air Pollution Control Officers Association in collaboration with multiple air districts across California. Numerous lead agencies in the state, including the County of San Diego, use CalEEMod to estimate GHG emissions in accordance with CEQA Guidelines Section 15064.4(a)(1).

Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in the Earth's energy balance, including variations in the sun's energy reaching the Earth, changes in the reflectivity of the Earth's atmosphere and surface, and changes in the "greenhouse effect," which affects the amount of heat retained by the Earth's atmosphere (EPA 2017).

The "greenhouse effect" is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales, and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, human activities have been the dominant cause of that warming since the mid-20th century, and are the most significant driver of observed climate change (EPA 2017; IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further under the subheading "Potential Effects of Climate Change," below.

Greenhouse Gases

As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons, sulfur hexafluoride (SF₆), nitrogen trifluoride (NF₃), and water vapor (see CEQA Guidelines Section 15364.5). Some GHGs, such as CO₂, CH₄, and N₂O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases, such as HFCs, hydrochlorofluorocarbons, perfluorocarbons, and SF₆, and are associated with certain industrial products and processes.

The following paragraphs provide a summary of the GHGs that are estimated in CalEEMod and relevant to this section's analysis.^{2,3}

Carbon Dioxide (CO₂). CO₂ is a naturally occurring gas and a by-product of human activities, and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO₂ include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO₂ are the combustion of coal, oil, natural gas, and wood.

Methane (CH₄). CH₄ is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide (N₂O). Sources of N₂O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and the use of N₂O as a propellant (such as in rockets, racecars, and aerosol sprays).

GHGs in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (IPCC 2007).

The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e).

² Climate-altering substances also include other substances, such as black carbon and aerosols. This section's analysis focuses on the GHGs that are estimated by CalEEMod because those GHGs are the most relevant to determining the potential climate change impacts from construction and operation of most development, including wind turbines.

³ The descriptions of these GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (IPCC 1995), IPCC Fourth Assessment Report (2007), California Air Resources Board's Glossary of Terms Used in GHG Inventories (CARB 2018a), and U.S. Environmental Protection Agency's Glossary of Climate Change Terms (EPA 2016).

CalEEMod (Version 2016.3.2) used in this analysis assumes that the GWP for CH₄ is 25 (so emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007).

Sources of Greenhouse Gas Emissions

Per the U.S. Environmental Protection Agency's (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2016 (EPA 2018), total U.S. GHG emissions were approximately 6,511 million metric tons (MMT) CO₂e in 2016 (EPA 2018). The primary GHG emitted by human activities in the United States was CO₂, which represented approximately 81% of total GHG emissions (5,313 MMT CO₂e). The largest source of CO₂, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 94% of CO₂ emissions in 2016 (4,966 MMT CO₂e). Relative to 1990, gross U.S. GHG emissions in 2016 were higher by 5%, down from a high of 16% above 1990 levels in 2007. GHG emissions decreased from 2015 to 2016 by 2% (83 MMT CO₂e), and overall, net emissions in 2016 were 12% below 2005 levels (EPA 2018).

According to California's 2000–2016 GHG emissions inventory (2018 edition), California emitted 429 MMT CO₂e in 2016, including emissions resulting from out-of-state electrical generation (CARB 2018b). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. California GHG emissions source categories and their relative contributions in 2016 are presented in Table 3.1.4-1, Greenhouse Gas Emissions Sources in California.

Between 2000 and 2015, per-capita GHG emissions in California dropped from a peak of 14.0 MT per person in 2001 to 10.8 MT per person in 2015, representing a 23% decrease. In addition, total GHG emissions in 2016 were approximately 12 MMT CO₂e less than 2015 emissions (CARB 2018b).

According to the GHG inventory data compiled by the Energy Policy Initiative Center, in 2010, San Diego County emitted 34.5 MMT CO₂e (EPIC 2013). In 2014, San Diego County emitted approximately 32.1 MMT CO₂e, showing a declining emissions trend (EPIC and Ascent Environmental 2017). As outlined in Table 3.1.4-2, San Diego County Greenhouse Gas Emissions by Sectors, on-road transportation created 45% of these emissions. Similar to emissions trends statewide, transportation is the largest emitter and electricity generation is the second biggest emitter.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The IPCC's 2014 Synthesis Report indicated that warming of the climate system is unequivocal and, since the 1950s,

many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a, 2010b). A brief summary of current and future climate change impacts to resource areas in California, as discussed in *Safeguarding California: Reducing Climate Risk* (CNRA 2014), is provided below.

Agriculture. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events; significant shifts in water availability and water quality; changes in pollinator lifecycles; temperature fluctuations; increased risks from invasive species and weeds, agricultural pests, and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production.

Biodiversity and Habitat. Specific climate change challenges to biodiversity and habitat include species migration, range shift, and novel combinations of species; pathogens, parasites, and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; and threshold effects (i.e., a change in the ecosystem that results in a “tipping point” beyond which irreversible damage or loss occurs).

Energy. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events, and sea level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants since power plant cooling is less efficient at higher ambient temperatures. Natural gas infrastructure in coastal California is threatened by sea level rise and extreme storm events.

Forestry. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts, and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat, and decreased carbon absorption.

Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions, and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems, in addition to threatening people and infrastructure located along the California coastline and in coastal communities.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the 21st century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies and extreme events, such as heat, floods, droughts, and wildfires. Increased frequency, intensity, and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat-related illness, and exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies.

Transportation. The transportation industry is vulnerable to climate change risks, including sea level rise and erosion, which threaten many coastal California roadways, airports, seaports, transit systems, bridge supports, and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of people and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

Water. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively affect groundwater reserves and result in increased overdraft and subsidence.

In March 2016, the California Natural Resources Agency (CNRA) released Safeguarding California: Implementation Action Plans, a document that shows how California is acting to convert the recommendations contained in the 2014 Safeguarding California plan into action (CNRA 2016). Additionally, the CNRA released Safeguarding California Plan: 2018 Update in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018).

Carbon Sequestration

Carbon sequestration is the process by which CO₂ is removed from the atmosphere and deposited into a carbon reservoir (e.g., vegetation). Trees and vegetation take in CO₂ from the atmosphere during photosynthesis, break down the CO₂, store the carbon within plant parts, and release the oxygen back into the atmosphere (CARB 2015). A development that changes land use type results in potential release of sequestered carbon into the atmosphere as CO₂ that would not have been released had there been no land-use-type change. Planting new trees and vegetation stores new carbon as their wood mass increases via normal growth.

3.1.4.2 Regulatory Setting

The following text describes executive orders, legislation, regulations, court decisions, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

Federal

Federal regulations are applicable to the Boulder Brush Facilities and to the Campo Wind Facilities.

Massachusetts v. EPA. In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, perfluorocarbons, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is the “endangerment finding.”
- The Administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do 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.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling in *Massachusetts v. EPA*, the George W. Bush Administration issued Executive Order (EO) 13432 in 2007 directing 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 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum 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 by 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 (77 FR 62624–63200). On April 2, 2018, the Administrator signed the Mid-Term Evaluation Final Determination, which found that the model year 2022–2025 GHG standards are not appropriate in light of the record before the EPA and, therefore, should be revised (EPA 2018).

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 (76 FR 57106–57513). 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% 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 years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

The Current Administration (2018). President Trump and the EPA have stated their intent to halt various federal regulatory activities to reduce GHG emissions. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and have committed to cooperating with other countries to implement global climate change initiatives. The timing and consequences of these types of federal decisions and potential responses from California and other states are speculative at this time.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. State regulations are applicable to the Boulder Brush Facilities located on private lands within the County. State regulations are not applicable to the Reservation or the Campo Wind Facilities.

State Climate Change Targets

California EO S-3-05. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32 and California Air Resources Board's Climate Change Scoping Plan. In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring

the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emissions limitation, emissions reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for 2020 consistent with the determined 1990 baseline (427 MMT CO₂e). CARB's adoption of this limit is in accordance with California Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with Health and Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals (CARB 2014).

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014). Those six areas are energy, transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale

electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies (CARB 2014).

In January 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below under the subheading "California SB 32 and AB 197"). The Second Update was approved by CARB's Governing Board on December 14, 2017 (CARB 2017).

California EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_{2e}. The EO also calls for state agencies to continue to develop and implement GHG emissions reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

California SB 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target, make changes to CARB's membership and increase legislative oversight of CARB's climate-change-based activities, and expand dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified a 2030 emissions reduction target that requires CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also adds two members of the Legislature to CARB as nonvoting members, requires CARB to make available and update (at least annually via its website) emissions data for GHGs and other pollutants from reporting facilities, and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

California SB 605 and SB 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs) in the state; SB 1383 (2016) required CARB to approve and implement the SLCP reduction strategy. SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH₄ and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy)

in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH₄, and fluorinated gases.

California EO B-55-18. EO B-55-18 (September 2018) establishes a new statewide goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” This executive order directs CARB to “work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.”

California EO N-79-20. EO N-79-20 establishes a new statewide goal that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. It establishes a further statewide goal that 100% of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. It also establishes a statewide goal to transition to 100% zero-emission off-road vehicles and equipment by 2035 where feasible.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations (CCR) was established in 1978 and serves to enhance and regulate California’s building standards. Although not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy-efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2016 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2017. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015).

The 2019 Title 24 standards become effective on January 1, 2020. In general, single-family homes built with the 2019 standards are anticipated to use about 7% less energy due to energy efficiency measures than those built to the 2016 standards. Those built with rooftop solar electricity generation under the 2019 standards are anticipated to use about 53% less energy than those built to the 2016 standards. Nonresidential buildings are anticipated to use about 30% less energy than those built to the 2016 standards, due mainly to lighting upgrades (CEC 2018).

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial; low-rise residential; and state-owned buildings, schools, and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The 2019 Standards will continue to improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 Standards will go into effect on January 1, 2020.

CCR Title 20. CCR Title 20 requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Renewable Energy and Energy Procurement

SB 1078. SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB 1368. SB 1368 (2006) requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants that have GHG emissions as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2. SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under SB X1 2, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid, and that the achievement not be achieved through resource shuffling.

Mobile Sources

AB 1493. In response to the transportation sector accounting for more than half of California's CO₂ emissions, AB 1493 (2002) required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles primarily used for noncommercial personal

transportation. The bill specifically required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. The near-term (2009–2012) standards were estimated to result in a reduction of approximately 22% in GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards were estimated to result in a reduction of approximately 30%.

EO S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining low-carbon fuel standard for GHG emissions measured in CO_{2e} grams per unit of fuel energy sold in California. The target of the low-carbon fuel standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375. SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), an SCS does not (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a General Plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the San Diego Association of Governments (SANDAG) are a 7% reduction in emissions per capita by 2020, and a 13% reduction by 2035.

SANDAG completed and adopted its 2050 RTP/SCS in October 2011 (SANDAG 2011). In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. In July 2017, the California Supreme Court held that SANDAG's EIR did not have to use EO S-3-05's 2050 goal of an 80% reduction in GHG emissions from 1990 levels as a threshold because the EIR sufficiently informed the public of the potential climate change impacts from the RTP/SCS.

In October 2015, SANDAG adopted San Diego Forward: The Regional Plan; this RTP/SCS was not challenged. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). CARB's GHG standards for model year 2017 to 2025 vehicles are estimated to reduce GHG emissions by 34% by 2025. The Zero Emissions Vehicle (ZEV) program acts as the focused advanced technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (EVs) in the 2018 to 2025 model years. The Clean Fuels Outlet regulation relatedly ensures that fuels, such as electricity and hydrogen, are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

EO B-16-12. EO B-16-12 (2012) directs state entities under the governor's direction and control to support and facilitate development and distribution of ZEVs. This executive order also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less emissions than 1990 levels by 2050. In furtherance of this executive order, the governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236. AB 1236 (2015) as enacted in California's Planning and Zoning Law requires local land use jurisdictions to approve applications for the installation of EV charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact on the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. In August 2016, the County Board of Supervisors adopted Ordinance No. 10437 (N.S.) adding a section to its County Code related to the expedited processing of EV charging station permits, consistent with AB 1236.

SB 350. In 2015, SB 350, the Clean Energy and Pollution Reduction Act, was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

EO B-48-18. EO B-48-18 (2018) launches an 8-year initiative to accelerate the sale of EVs through a mix of rebate programs and infrastructure improvements. The order also sets a new EV target of 5 million EVs in California by 2030. EO B-48-18 includes funding for multiple state agencies, including the CEC to increase EV charging infrastructure, and CARB to provide rebates for the purchase of new EVs and purchase incentives for low-income customers.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020 (CalRecycle 2015).

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The executive order includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

Other State Regulations and Goals

SB 97. SB 97 (2007) directed the Governor’s Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor’s Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project’s GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant (OPR 2008).

Subsequent to the release of the Governor’s Office of Planning and Research’s advisory and its development of proposed CEQA Guidelines provisions, the CNRA adopted CEQA Guidelines amendments in December 2009, which became effective in March 2010, and further amendments in December 2018. With respect to GHG emissions, the CEQA Guidelines state that lead agencies “shall make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions resulting from a project. The CEQA Guidelines note that lead agencies may identify emissions by either quantifying the project’s GHG emissions or by relying on “qualitative analysis or other performance-based standards” (14 CCR 15064.4(a)). The CEQA Guidelines also state that lead agencies should focus its analysis on the reasonably foreseeable incremental contribution of a project’s emissions to the effects of climate change, and should consider the following when determining the significance of impacts from GHG emissions on the environment: the extent a project may increase or reduce GHG emissions compared to the existing environmental setting; whether project emissions would exceed a threshold of significance that the lead agency determines applies to the project; and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

EO S-13-08. EO S-13-08 (November 2008) is intended to hasten California’s response to the impacts of global climate change, particularly sea level rise. Therefore, the executive order directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state’s vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016 (CNRA 2016). In January 2018, CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

Local

Local regulations are applicable to the Boulder Brush Facilities located on private lands within the County. Local regulations are not applicable to the Reservation or Campo Wind Facilities.

San Diego Air Pollution Control District

The San Diego Air Pollution Control District does not have established GHG rules, regulations, or policies.

County of San Diego

Climate Action Plan

The County ~~has~~ developed a Climate Action Plan (CAP) that is a comprehensive strategy to reduce GHG emissions in the unincorporated communities of San Diego County. The County also ~~has~~ developed implementation tools to use when conducting a CEQA analysis, including a General Plan Land Use Conformity Determination and CAP Consistency Review Checklist. On February 14, 2018, the County Board of Supervisors adopted the CAP and supporting implementation tools (County of San Diego 2018).

In December 2018, a court overturned the CAP EIR and enjoined the County from relying on CAP EIR mitigation measure M-GHG-1 when approving projects. M-GHG-1 applies only to projects that require a General Plan Amendment that would result in more GHG emissions than the land use permitted by the General Plan. M-GHG-1 is inapplicable to the Boulder Brush Facilities, which does not require a General Plan Amendment.

The court opinion did not address the majority of CAP measures, and the County finds those measures would reduce GHG emissions. For example, Measure E-2.1, Increase Renewable Energy, specifies a goal to achieve 90% renewable electricity for the unincorporated County by 2030. This measure is consistent with General Plan Strategy A-3, listed below. On appeal, the 4th District Court of Appeal for the most part held the lower court ruling and set aside the County's CAP. As with the lower court opinion the appellate court provided strong statement that the measures identified in the CAP, including Measure E-2.1, are valid measures to pursue to reduce GHG emissions. As the courts have set aside the County's CAP, and that the Checklist items in the CAP are not applicable to renewable energy projects, disclosure of consistency with the CAP has been removed from this EIR without consequence to the conclusions herein. The County Board of Supervisors rescinded the CAP and provided direction to continue to implement GHG reduction measures and to work on fixing the CAP EIR and bring back a corrected CAP for adoption.

A project's consistency with the CAP is evaluated in a two-step process. Step 1 in the CAP Consistency Checklist assesses a project's consistency with the growth projections and land use assumptions made in the CAP. If a project is consistent with the projections in the CAP, its associated growth in terms of GHG emissions was accounted for in the CAP's GHG projections and would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets. If a project is consistent with the existing General Plan land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Consistency Checklist. Step 2 of the CAP Consistency Checklist identifies CAP GHG reduction measures that would apply to discretionary projects, and establishes clear questions that can be used to assess a project's consistency with CAP measures. The specific applicable requirements outlined in the CAP Consistency Checklist are required as a condition of project approval. A project must provide substantial evidence that demonstrates how the project would implement each applicable CAP Consistency Checklist requirement described in Appendix C of the County's CAP, to the satisfaction of the Director of Planning and Development Services.

General Plan

The County's General Plan (County of San Diego 2011a) includes smart growth and land use planning principles designed to reduce GHG emissions. Climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan.

The strategies for reduction of GHG emissions in the General Plan are as follows (County of San Diego 2011a):

- **Strategy A-1:** Reduce vehicle trips generated, gasoline/energy consumption, and GHG emissions.
- **Strategy A-2:** Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- **Strategy A-3:** Increase generation and use of renewable energy sources.
- **Strategy A-4:** Reduce water consumption.
- **Strategy A-5:** Reduce and maximize reuse of solid wastes.
- **Strategy A-6:** Promote carbon dioxide consuming landscapes.
- **Strategy A-7:** Maximize preservation of open spaces, natural areas, and agricultural lands.

The General Plan also includes climate adaptation strategies to deal with potential adverse effects of climate change. The climate adaptation strategies include the following (County of San Diego 2011a):

- **Strategy B-1:** Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- **Strategy B-2:** Conserve and improve water supply due to shortages from climate change.
- **Strategy B-3:** Promote agricultural lands for local food production.
- **Strategy B-4:** Provide education and leadership.

The County General Plan's Conservation and Open Space Element also includes goals and policies that are designed to reduce GHGs emissions by enhancing the efficiency of energy use in buildings and infrastructure, promoting the use of renewable energy sources and conservation, and other methods of efficiency. The pertinent goals are as follows (County of San Diego 2011b):

- **Goal COS-14, Sustainable Land Development.** Land use development techniques and patterns that reduce emissions of criteria pollutants and GHGs through minimized transportation and energy demands, while protecting public health and contributing to a more sustainable environment.
- **Goal COS-15, Sustainable Architecture and Buildings.** Building design and construction techniques that reduce emissions of criteria pollutants and GHGs, while protecting public health and contributing to a more sustainable environment.
- **Goal COS-16, Sustainable Mobility.** Transportation and mobility systems that contribute to environmental and human sustainability and minimize GHG and other air pollutant emissions.
- **Goal COS-17, Sustainable Solid Waste Management.** Perform solid waste management in a manner that protects natural resources from pollutants while providing sufficient, long term capacity through vigorous reduction, reuse, recycling, and composting programs.
- **Goal COS-18, Sustainable Energy.** Energy systems that reduce consumption of non-renewable resources and reduce GHG and other air pollutant emissions while minimizing impacts to natural resources and communities.
- **Goal COS-19, Sustainable Water Supply.** Conservation of limited water supply supporting all uses including urban, rural, commercial, industrial, and agricultural uses.
- **Goal COS-20, Governance and Administration.** Reduction of local GHG emissions contributing to climate change that meet or exceed requirements of the Global Warming Solutions Act of 2006.

The Boulder Brush Facilities' consistency with the General Plan is evaluated in Section 3.1.4.3, Analysis of Project Impacts and Determination as to Significance, and in Section 3.1.6, Land Use and Planning, of this EIR.

Renewable Energy Plan

The County's Comprehensive Renewable Energy Plan researches and develops renewable energy options in the County. The planning effort covers the residential, commercial, and industrial sectors of the County, with a particular focus on unincorporated areas, and presents a comprehensive approach to renewable energy and energy efficiency (County of San Diego 2017a).

Strategic Plan to Reduce Waste

The County Strategic Plan to Reduce Waste outlines near, mid-, and long-term programs and policies to increase the County's solid waste diversion rate to meet state targets and support other County initiatives, such as the CAP. In April 2017, the County adopted a diversion goal of 75% by 2025 (County of San Diego 2017b).

Tribal

Tribal regulations are applicable to the Campo Wind Facilities, but not the Boulder Brush Facilities.

Tribal Implementation Plan

In the 1990 revision of the CAA, Congress recognized that Native American tribes have the authority to implement air pollution control programs. The EPA's Tribal Authority Rule gives tribes the ability to develop air quality management programs, write rules to reduce air pollution and implement and enforce their rules within tribal lands. While state and local agencies are responsible for all CAA requirements, tribes may develop and implement only those parts of the CAA that are appropriate for their lands. The EPA provides technical assistance and resources to help tribes build their program capacity. The EPA also implements the CAA requirements on tribal lands through programs such as the Federal Rules for Reservations, Title V permits, and air toxics rules.

Initially, the General Conformity Rule of 1993 did not specifically identify the roles of Native American tribes in the General Conformity process or the connection between the regulations and Tribal Implementation Plans (TIPs). In the revised 2011 regulations, the EPA specifically identified tribal agencies as stakeholders in the conformity process to ensure that in a nonattainment or maintenance area, federal actions conform to the air quality plans established in the applicable SIP or TIP such as requiring specific notification for any federally recognized tribes in the nonattainment or maintenance area where the action is occurring. In addition, the revised regulations also clarify that federal actions must conform to any applicable TIP. The Reservation is in attainment for all criteria pollutants. The Campo Band of Diegueño Mission Indians (Tribe) and the Reservation are not subject to the SIP.

The General Conformity Rule plays an important role in helping tribes improve air quality in those areas that do not meet NAAQS. Under the General Conformity Rule, federal agencies must work with state, tribal, and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plan established in the applicable SIP or TIP.

Campo Band of Diegueño Mission Indians Land Use Plan

Under the Campo Lease, the Campo Land Use Plan is not applicable to the Campo Wind Facilities, but it is included in this analysis for informational purposes.

The Campo Land Use Plan states that it is the intention of the Tribe to pursue diversity in land use. Tribal lands have been designated for a variety of purposes, including wilderness/recreational, residential/grazing/agricultural, commercial and light industrial, and civic uses. Additionally, the Campo Land Use Plan allows for the creation of a Campo Renewable Energy Zone, which allows for the development of wind and solar energy developments within any district and any land use designation within the Reservation, as approved by the General Council. Muht Hei may designate a Campo Renewable Energy Zone over one or more areas of land within the Reservation where development potential for renewable energy development, resources, or related businesses is commercially feasible, provided that such designation is an overlay that does not change the underlying land use designation approved by the General Council, and provided further that the designation of the Campo Renewable Energy Zone satisfies the criteria outlined in the Land Use Plan (Campo Band of Mission Indians 2010).

3.1.4.3 Analysis of Project Effects and Determination as to Significance

Methodology

Although the County as Lead Agency is analyzing the Project as a whole, the County's land use jurisdiction for the Project is limited to the Boulder Brush Facilities. The BIA has jurisdiction over the Campo Wind Facilities and has prepared an Environmental Impact Statement to evaluate Project effects under NEPA (BIA 2019). This analysis adopts and incorporates by reference the NEPA Environmental Impact Statement. Climate change effects are unaffected by the change in jurisdiction, and therefore the analysis herein analyzes the Project as a whole (i.e., the Boulder Brush Facilities and the Campo Wind Facilities).

The significance criteria used to evaluate the Project's GHG emissions impacts are based on the recommendations provided in Appendix G of the CEQA Guidelines, which allow quantitative approaches and analysis of consistency with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions.

The Project's potential impacts on GHGs will be assessed using the GHG thresholds set forth in Appendix G, Environmental Checklist Form:

- a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (14 CCR 15000 et seq.). Additional guidance regarding assessment of GHGs is discussed below.

CEQA Guidelines

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's greenhouse gas emissions or rely on a "qualitative analysis or other performance based standards" (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)).

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research's Technical Advisory titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Cumulative Nature of Climate Change

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project in the San Diego Air Basin would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change.

While the Project would result in emissions of GHGs during construction, decommissioning, and operation, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally believed that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory as scientific uncertainty regarding the significance a project's individual and cumulative effects on global climate change remains.

Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the CNRA, which noted in its Public Notice for the proposed CEQA amendments (pursuant to SB 97) that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009). Similarly, the Final Statement of Reasons for Regulatory Action on the CEQA Amendments confirms that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009).

In regards to evaluating the Project's significance with respect to CEQA Guidelines checklist question number 1, the Project's GHG emissions were compared to its production of carbon-free electricity.

To address the CEQA Guidelines checklist question number 2, whether the Project is consistent with plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs, the Project was evaluated against the County's CAP General Plan and Strategic Energy Plan, AB 32, SANDAG's RTP/SCS, and EO B-55-18.

~~In addition to the Project's potential impacts on GHGs using the GHG thresholds set forth in CEQA Appendix G, the analysis evaluates the Project using considering the County's CAP Consistency Checklist General Plan and Strategic Energy Plan.⁴ In December 2018, a court set aside the CAP and its supporting EIR. The court order allows the County to continue processing projects that do not require carbon offsets to mitigate impacts from GHG emissions. However, the County's CAP is still considered the applicable planning document for CEQA purposes. A project's consistency with the CAP is evaluated in a two-step process. Step 1 in the CAP Checklist assesses a project's consistency with the growth projections and land use assumptions made in the CAP. If a project is consistent with the projections in the CAP, its associated growth in terms of GHG emissions was accounted for in the CAP's projections and would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets. If a project is consistent with the existing General Plan land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Checklist. Step 2 of the CAP Checklist identifies CAP GHG reduction measures that would apply to discretionary projects and establishes clear questions that can be used to assess a project's consistency with CAP measures. The specific applicable requirements outlined in the CAP Checklist is required as a condition of project approval. Projects must provide substantial evidence that demonstrates how that project would implement each applicable CAP Checklist requirement (see Appendix C of the Air Quality and Greenhouse Gas Technical Report [Appendix C to this EIR]) to the satisfaction of the Director of Planning and Development Services.~~

Estimated Emissions

Estimated GHG emissions from construction, operation, and decommissioning of the Project are presented below.

Construction

Emissions from the construction phase of the Project were estimated using CalEEMod Version 2016.3.2. Detailed information regarding the methodology used to estimate the Project's

⁴ ~~The CAP is the subject of current litigation.~~

construction-related GHG emissions is provided in Section 3.4.2.1, Construction Emissions Methodology, of Appendix C; a brief summary of the methodology is provided below.

Project construction activities are anticipated to commence in late 2019⁵ and reach completion in late 2020, lasting a total of 14 months.

The equipment mix anticipated for construction was based on information provided by the Developer, best engineering judgment, and CalEEMod default values. The equipment mix is meant to represent a reasonably conservative estimate of construction activity. General construction equipment modeling assumptions are provided in Table 3.1.4-3, Construction Workers, Vendor Trips, and Equipment Use per Day. Based on data provided by the Developer and from similar projects in the general vicinity of the Project Site, the worker mix was assumed to include 55% coming from the west (San Diego County area) and 45% coming from temporary house site located at the Sacred Rock RV Park. The haul truck mix was assumed to include 45% from the east (Imperial County area) and 55% from the west (San Diego County area) (Terra-Gen 2019). The vendor trucks are assumed to come from the Padre Dam (approximately 57 miles from the Project Site, as noted below).

The Project would require import of water for dust control. An estimated maximum water demand of approximately 173 acre-feet of water would be required over the 14 months of construction (approximately 123 acre-feet for Campo Wind Facilities and approximately 50 acre-feet for Boulder Brush Facilities). Water would be imported from On- and Off-Reservation facilities, such as production wells on the Reservation and non-potable water obtained from commercial sellers such as Jacumba Community Services District and Padre Dam Municipal Water District. Water would be transported to the site using 4,000-gallon water trucks, which are categorized as heavy-duty haul trucks in CalEEMod. To present a conservative emissions estimate, water imported during construction activities would come from the Padre Dam, located approximately 57 miles from the Project Site,⁶ the farthest water source that would be used.

Blasting and rock-crushing activities would occur during the grading phase. No more than two blasts per day would occur during construction activities, and rock crushing would occur on an as-needed basis and would not occur every day during construction.

⁵ The analysis assumes a construction start date of late 2019. Assuming an earlier start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

⁶ Padre Dam Municipal Water District is used here as the water source (other options include on site and Jacumba Community Services District) as it is the farthest away of the possible water sources and thus provides a conservative analysis of water trucking for air quality purposes.

A temporary batch plant within the Campo Corridor would mix concrete for foundations of the turbines, substations, transmission poles, and operations and maintenance (O&M) facility. The temporary concrete batch plant would operate for the duration of the 14-month construction phase with a throughput of approximately 37,700 cubic yards (37,000 cubic yards of concrete for the construction of the Campo Wind Facilities, and 700 cubic yards of concrete for the construction of the Boulder Brush Facilities).

Table 3.1.4-4, Estimated Annual Construction Greenhouse Gas Emissions, shows the estimated annual GHG construction emissions associated with the Project by year. As shown in Table 3.1.4-4, estimated total Project-generated construction GHG emissions are approximately 6,544 MT CO_{2e}.

The calculation methodology and default values provided in CalEEMod (CAPCOA 2017) were used to calculate potential CO₂ emissions associated with the one-time change in carbon sequestration capacity. The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (i.e., vegetation community) (see the Biological Resources Technical Report, Appendix D of this EIR). The one-time sequestration loss from land use conversion (i.e., vegetation removal) on the Project Site was calculated at 13,575 MT CO_{2e}.

The estimated combined emissions for the construction activities (approximately 6,544 MT CO_{2e}) and vegetation removal (approximately 13,575 MT CO_{2e}) is approximately 20,119 MT CO_{2e}. The “Project life” is assumed to be 30 years, consistent with the 30-year lifetime used by the South Coast Air Quality Management District’s GHG guidance (SCAQMD 2008). Accordingly, the amortized GHG emissions over the lifetime of the Project (30 years) would be approximately 670 MT CO_{2e} per year.

Decommissioning

Emissions from the decommissioning phase of the Project were estimated using CalEEMod Version 2016.3.2. Detailed information regarding the methodology used to estimate the Project’s construction-related GHG emissions is provided in Section 3.4.2.1, Construction Emissions Methodology, of Appendix C; a brief summary of the methodology is provided below.

For the purposes of this analysis, Project construction activities are anticipated to commence in late 2019 and reach completion in late 2020. The Project is anticipated to operate for the term of the Campo Lease and any renewal extension (approximately 30 years, at minimum), after which it would be decommissioned, except for the SDG&E-owned and operated switchyard and connection lines to Sunrise Powerlink, which would not be decommissioned. Therefore, for the purposes of this analysis, Project decommissioning activities are anticipated to commence in January 2052 and would last approximately 7 months. However, because CalEEMod relies on the CARB EMFAC 2014, it is

only able to estimate mobile source emissions through 2050. Therefore, the emissions for decommissioning were estimated for year 2050. This is conservative, as the emissions are likely to be less in 2052 as vehicles and construction equipment become more efficient.

The estimated number of workers and haul truck trips were provided by the Developer. Changes to any standard default values or assumptions are reported in the CalEEMod output (see Appendix C). Based on data provided by the Developer and from similar projects in the general vicinity of the Project Site, the worker mix was assumed to include 55% coming from the west (San Diego County area) and 45% coming from temporary house site located at the Sacred Rock RV Park. The haul truck mix was assumed to include 45% from the east (Imperial County area) and 55% from the west (San Diego County area) (Terra-Gen 2019).

Table 3.1.4-5, Estimated Annual Decommissioning Greenhouse Gas Emissions, shows the estimated decommissioning emissions associated with the Project. The estimated GHG emissions for the decommissioning activities is approximately 1,611 MT CO₂e. The “Project life” is assumed to be 30 years, consistent with the 30-year lifetime used by the South Coast Air Quality Management District’s GHG guidance (SCAQMD 2008). Accordingly, the amortized GHG emissions over the lifetime of the Project (30 years) would be approximately 54 MT CO₂e per year.

Operation

Area Sources

During operations, one of the main sources of GHG emissions would be fugitive emissions from equipment containing SF₆ gas installed at the collector substation, switchyard, and high-voltage substation. SF₆ has a GWP of 23,900 using CO₂ at a reference value of 1 (IPCC 2007). The high-voltage substation would include three 500-kilovolt breakers that would contain SF₆ gas. It is estimated that the Project would maintain 1,209 pounds of SF₆ gas at the high-voltage substation. Although leakage is unlikely, for the purposes of the Project’s emissions inventory, it was assumed that the breakers would have a maximum annual leak rate of 0.5% in accordance with the Institute of Electrical and Electronics Engineers PC37.122 – Standard for High Voltage Gas-Insulated Substations Rated Above 52 kilovolts (IEEE 2018). It is estimated that 66 MT CO₂e annually would result from SF₆ gas leakage.

Operational Traffic

Project operations would generate minimal annual emissions from maintenance and security vehicles. According to the Developer, the Project would employ approximately 10 to 12 full-time employees throughout the life of the Project, generating 12 round trips per day (24 one-way trips), 7 days per week. Although workers may come from areas closer to the Project Site, such as Campo, workers were conservatively assumed to travel from downtown San Diego (68 miles one way), which includes worker vehicles traveling around the Project Site. CalEEMod default data,

including temperature, trip characteristics, variable start information, and emissions factors, were used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within CalEEMod.

Operations and Maintenance Facility

The O&M facility would require standard maintenance, including interior cleaning and housekeeping, removal of trash, repairs to the driveway surface, and cleaning/clearing of gutters. CalEEMod default values for commercial office buildings were used to estimate electricity demand of the Project's O&M facility. The O&M facility's water demand would be served by an on-site groundwater well. In the event that on-site well water is not available, water would be trucked in from Jacumba Community Services District or Padre Dam Municipal Water District. A self-contained on-site septic system would serve the O&M facility. The CalEEMod default value for electricity consumption and water use for the office land use to represent the O&M facility was applied for the Project (CAPCOA 2017).

Stationary Sources

The Project would include four 150-kilowatt emergency diesel generators, required at the O&M Facility, the collector substation, the high-voltage substation, and the switchyard. Each generator was assumed to operate for testing and maintenance approximately 30 minutes each month for a total of up to 50 hours per year. The CalEEMod default emission factors for emergency generators were used to estimate emissions from this source.

Estimated Amortized Construction, Decommissioning, Vegetation Removal, and Annual Operational GHG Emissions

As shown in Table 3.1.4-6, Estimated Annual Operational Greenhouse Gas Emissions, Project GHG emissions generated from operational activities (i.e., worker vehicle trips, O&M facility, emergency generators) is estimated to be approximately 205 MT CO_{2e} per year in 2021. Total operational GHG emissions combined with amortized construction, vegetation removal, and decommissioning would be 929 MT CO_{2e} per year, assuming a 30-year Project life.

County of San Diego CAP Consistency Checklist

Step 1—Land Use Consistency

~~In the County's General Plan, the land use designation for the Boulder Brush Boundary is designated as Rural Lands 80 (RL-80). The Boulder Brush Boundary is zoned General Rural (S92) by the County of San Diego Zoning Map (County of San Diego 2017c). The County does not have jurisdiction over Reservation land. Minor and major impact utilities may be allowed with approval of a Major Use~~

Permit. Major impact services and utilities (e.g., wind energy facilities) and minor impact utilities (e.g., electrical distribution substations) are defined under Sections 1350 and 1355 of the County Zoning Ordinance. The Boulder Brush Facilities require approval of a Major Use Permit from the County, but would not require a change in land use designation or zoning. The County's General Plan and zoning do not apply to land within the Reservation Boundary.

The Project does not include a residential component that would increase local population growth, or a commercial component that would substantially increase employment; rather, the Project would involve construction and operation of a renewable energy generation project. Implementation of the Project would not result in development in excess of that anticipated in local plans, or an increase in population/housing growth beyond those contemplated by SANDAG when preparing its SCS to reduce GHG emissions from mobile sources. As such, vehicle trip generation and planned development for the Project have been anticipated in the State Implementation Plan and San Diego Regional Air Quality Strategy. The Project would be consistent with Checklist Step 1.

Step 2 – CAP Consistency Checklist

The County CAP includes Strategy E-2, Increase Renewable Electricity Use, transitioning from fossil fuels to renewable energy for electricity generation (County of San Diego 2018), which would reduce emissions and provide a more sustainable source of electricity. The Project would aid the County in achieving Measure E-2.1, Increase Renewable Electricity, with the goal to achieve 90% renewable electricity for the unincorporated County by 2030 to lower GHG emissions by relying on cleaner energy (County of San Diego 2018). As a renewable energy project, the Project is a unique development that is not addressed in the County's CAP Consistency Checklist. The Project would not include a residential component, typical commuting workers (such as commuters traveling to and from an office land use), or agricultural operations, which are addressed in the CAP Consistency Checklist. Implementation of the Project would not interfere with the County's implementation of the CAP Consistency Checklist action items on projects where they are applicable. Additionally, the Project would further CAP Measure E-2.1, Increase Renewable Energy. Further, the CAP was developed to reduce GHG emissions throughout the County over time; therefore, any project that is contemplated in the CAP and/or would be consistent with the CAP would directly aid in the County's reduction of GHG emissions throughout the County's jurisdictional area.

Each CAP Consistency Checklist item, along with an explanation of why each specific measure does not apply to the Project, is outlined in Table 3.1.4-7, Climate Action Plan Consistency Checklist. Also see Appendix C for the Project's completed CAP Consistency Checklist. The Project is consistent with the land use build-out assumptions in the County's CAP, and would implement all applicable action items from the CAP Consistency Checklist.

~~The Project would not require a General Plan Amendment or zone change. Although the CAP Consistency Checklist's individual GHG measures would not apply to the Project because the CAP Checklist is designed for commercial, institutional, and residential projects, and not renewable energy projects, the Project would be consistent with the underlying assumptions of the CAP and would support goals within the CAP.~~

Analysis of Potential Effects and Determination as to Significance

The following evaluates the Project's GHG emissions impacts based on the CEQA thresholds discussed above.

- a) *Would the project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?*

Project

In keeping with the renewable energy target under the Scoping Plan and as required by SB 100 and EO B-55-18, the Project would provide a source of renewable energy to assist in progressing toward the RPS goals of 60% by 2030 and 100% by 2045. Renewable energy, in turn, is anticipated to offset GHG emissions generated by fossil-fuel power plants, in accordance with state legislation. As noted above, the Project would result in 929 MT CO₂e per year. The Project is expected to produce an estimated 756,000 megawatt-hours (MWh) of electricity per year. The default CalEEMod CO₂ emission factor for San Diego Gas & Electric Company (SDG&E) was 720.49 pounds of CO₂/MWh from 2009 (CAPCOA 2017). The renewable content for SDG&E for 2009 was 10%. SDG&E reported that 44% of its power mix was renewable in 2017, which would result in 448.30 pounds of CO₂/MWh (see Appendix C for more details). Assuming that SDG&E would meet the EO B-55-18 carbon neutrality target in 2045, a linear regression of the SDG&E GHG emission factor was calculated from 2017 to 2044. Assuming this, the Project would allow electricity end users to avoid a total of 1,784,378 MT CO₂ from 2020 through 2044. In contrast, including amortized construction emissions and carbon loss and decommissioning, the Project would emit 27,878 MT CO₂ over a 30-year lifetime. Thus, the Project would reduce emissions by approximately 1,756,500 MT CO₂e over its lifetime. Accordingly, the Project would avoid more GHG emissions than it would generate, resulting in a **less than cumulatively considerable contribution** to climate change impacts.

Boulder Brush Facilities

The Boulder Brush Facilities are necessary to transmit the energy produced by the Campo Wind Facilities to end users. The Boulder Brush Facilities are a necessary component to the Project and are consistent with state and local goals to increase renewable energy, including

the state’s RPS targets and the County’s General Plan goals to add renewable energy sources in the County. The Boulder Brush Facilities’ net GHG emissions and impact will be further assessed to include the benefit of producing zero GHG emission energy and the avoided GHG emissions associated with its use within the regional power grid. As described above, the Boulder Brush Facilities and the Campo Wind Facilities are integral for full Project operations, and the Project (including the Boulder Brush Facilities) would reduce emissions by approximately 1,756,500 MT CO₂e over its lifetime. Accordingly, the Project would avoid more GHG emissions than it would generate, resulting in **less than cumulatively considerable** climate change impacts.

Campo Wind Facilities

Although there are no specific requirements for evaluating GHG emissions under NEPA, estimated Project-generated construction and operational GHG emissions are included for disclosure. The Campo Wind Facilities’ net GHG emissions and impact will be further assessed to include the benefit of producing zero GHG emission energy and the avoided GHG emissions associated with its use within the regional power grid. As described above, the Campo Wind Facilities and the Boulder Brush Facilities are integral for full Project operations, the Project (including the Campo Wind Facilities) would reduce emissions by approximately 1,756,500 MT CO₂e over its lifetime. Accordingly, the Project would avoid more GHG emissions than it would generate, resulting in **less than cumulatively considerable** climate change impacts.

- b) *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?*

Project

County Greenhouse Gas Reduction Plans

As discussed above, the Project would be ~~consistent with the County’s CAP through application of the CAP Consistency Checklist. The Project also is~~ consistent with County plans and policies adopted to reduce GHG emissions. The County’s General Plan includes many goals and policies adopted to reduce GHG emissions, which the General Plan organizes into “strategies.” Strategy A-3 is to increase generation and use of renewable energy sources and includes Conservation and Open Space Policy COS-18.1. The Conservation and Open Space Element of the County’s General Plan “encourages and supports land use development patterns and transportation choices that reduce pollutants and greenhouse gases” and “encourages renewable energy production” (County of San Diego 2011b). Goal COS-18 promotes sustainable energy and encourages “[e]nergy systems that reduce consumption of non-renewable resources and reduce GHG and other air pollutant

emissions while minimizing impacts to natural resources and communities.” Policy COS-18.1 supports Goal COS-18 and directs the County to work with developers to facilitate the development of alternative energy systems. The Project is a renewable energy source and is therefore consistent with Strategy A-3, Goal COS-18, Policy COS-18.1, and one of the primary purposes of the Conservation and Open Space Element. Therefore, the Project would be consistent with the County’s GHG reduction plans.

Consistency with CARB’s Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California’s GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific proposed projects, nor is it intended to be used for proposed project-level evaluations.⁷ Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California’s GHG emissions. In keeping with the renewable energy target under the Scoping Plan and as required by SB 100 and EO B-55-18, the Project would provide a source of renewable energy to assist in progressing toward the RPS goals of 60% by 2030 and 100% by 2045. Renewable energy, in turn, potentially offsets GHG emissions generated by fossil-fuel power plants. Accordingly, the Project would avoid more GHG emissions than it would generate. Appendix B of the Scoping Plan includes local measures to reduce GHG emissions; however, these measures would not apply to the Project, since the Project is a renewable energy project. Table 3.1.4-87, Project Consistency with Scoping Plan GHG Emission Reduction Strategies, highlights measures that have been, or will be, developed under the Scoping Plan and the Project’s consistency with Scoping Plan measures. To the extent that these regulations are applicable to the Project, its inhabitants, or uses, the Project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

⁷ The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that “[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (CNRA 2009).

Based on the analysis in Table 3.1.4-87, the Project would be consistent with the applicable strategies and measures in the Scoping Plan.

The Project would not impede and may help the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-3-05, B-55-18, and SB 32. As discussed in Section 31.4.2, Regulatory Setting, EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014). EO B-55-18 established the goal to achieve carbon neutrality by 2045.

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that “California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the Second Update (CARB 2017), which states the following:

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that

California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

In addition, as discussed previously, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. Since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Project would be speculative and cannot be identified at this time. The Project's consistency with the Scoping Plan would assist in meeting the County's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40% reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. The Project would increase renewable energy production and thus would support the goals within SB 32, EO S-3-05, and EO B-55-18. Based on the considerations previously outlined, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required.

Consistency with SANDAG's San Diego Forward: The Regional Plan

Regarding consistency with SANDAG's Regional Plan, the Project operations would generate minimal annual operational mobile trips from maintenance and security vehicles.

Table 3.1.4-98, San Diego Forward: The Regional Plan Consistency Analysis, illustrates the Project's consistency with all applicable goals and policies of San Diego Forward: The Regional Plan (SANDAG 2015). The Project is consistent with all applicable Regional Plan policy objectives and strategies.

The Project would provide a potential reduction in GHG emissions from electricity use each year of operation if the electricity generated by the solar facility were to be used instead of electricity generated by fossil-fuel sources. Specifically, the Project would directly aid the state in achieving statewide GHG emission reductions through the increased production of renewable energy as called for under SB X1 2, SB 350, and SB

100, and discussed in the Scoping Plan. The latest of these bills, SB 100, requires utilities to provide an energy mix containing at least 60% renewables by 2030. The Project would aid in meeting that target.

Therefore, because the Project would assist in the attainment of the state's and County's goals by providing a new source of renewable energy that could displace electricity generated by fossil fuel-fired power plants, the Project would be consistent with the regulations, plans, goals, and objectives of the state and the County adopted to reduce GHG emissions, and impacts would be **less than cumulatively considerable**.

Boulder Brush Facilities

The Project would be consistent with state and local goals to increase renewable energy, including the state's RPS targets and the County's General Plan goals to add renewable energy sources in the County. Additionally, the Project is consistent with applicable state and local policies designed to reduce GHG emissions. The Boulder Brush Facilities are an integral part of the Project, allowing the energy produced by the wind turbines to be distributed to the grid. As stated above, the Project would be consistent with the regulations, plans, goals, and objectives of the state and the County adopted to reduce GHG emissions, and impacts would be **less than cumulatively considerable**.

Campo Wind Facilities

Although there are no specific requirements under NEPA for evaluating a project's potential GHG emissions, estimated GHG emissions from the Campo Wind Facilities are included for the purposes of disclosure and analysis. The Campo Wind Facilities would produce carbon-free energy. As stated above, the Project would be consistent with the regulations, plans, goals, and objectives of the state and the County adopted to reduce GHG emissions, and impacts would be **less than cumulatively considerable**.

3.1.4.4 Cumulative Impact Analysis

Because of the global nature of the assessment of GHG emissions and the effects of global climate change, impacts are analyzed from a cumulative impact context; therefore, this analysis includes the assessment of Project impacts as a cumulative impact, as discussed in Section 3.1.4.3, above. As determined in threshold questions a) and b), discussed above, the Project would make a **less than cumulatively considerable** contribution to significant cumulative climate change.

3.1.4.5 Significance of Impacts Prior to Mitigation

Project

The Project would be consistent with state and local goals to increase renewable energy, including the state's RPS targets and the County's General Plan goals to add renewable energy sources in the County. Additionally, the Project is consistent with applicable state and local policies designed to reduce GHG emissions. Furthermore, implementation of M-AQ-1 as described in Section 2.2.6 of this EIR would require use of electrical or natural-gas-powered construction, where feasible, which would reduce the use of diesel-powered off-road construction equipment and result in GHG co-benefits. As outlined in the threshold analyses above, Project impacts related to GHG emissions would be **less than cumulatively considerable**.

Boulder Brush Facilities

As stated above, the Project would be consistent with state and local goals to increase renewable energy, including the state's RPS targets and the County's General Plan goals to add renewable energy sources in the County. Additionally, the Project is consistent with applicable state and local policies designed to reduce GHG emissions. The Boulder Brush Facilities are an integral part of the Project, allowing the energy produced by the wind turbines to be distributed to the grid. Therefore, impacts related to GHG emissions as a result of the Boulder Brush Facilities would be **less than cumulatively considerable**.

Campo Wind Facilities

Although there are no specific requirements under NEPA for evaluating a project's potential GHG emissions, estimated GHG emissions from the Campo Wind Facilities were included for the purposes of disclosure and analysis. The Campo Wind Facilities (wind turbines) will produce carbon-free energy. For the reasons stated above under Section 3.1.4.3, impacts related to GHG emissions as a result of Campo Wind Facilities would be **less than cumulatively considerable**.

3.1.4.6 Conclusion

Project

The Project would reduce GHG emissions more than it would cause them, thereby having a net beneficial effect on GHG emissions. The Project is consistent with state and local goals to increase renewable energy, including the state's RPS targets and the County's General Plan goals to add renewable energy sources in the County. The Project is also consistent with applicable plans, policies, and regulations adopted to reduce GHG emissions, including SB X1 2, SB 350, and SB 100, and County General Plan Strategy A-3. The Project would not require a General Plan

Amendment or zone change. The Project also supports the County's Strategic Energy Plan. ~~Although the CAP Consistency Checklist's individual GHG measures would not apply to the Project, the Project would be consistent with the underlying assumptions of the CAP and would support goals within the CAP.~~ Additionally, the generation of renewable energy from the Project is integral in the County meeting CAP Goal E-2.1, "Increase Renewable Energy," and General Plan Strategy A-3, "Increase generation and use of renewable energy sources." Therefore, the Project would result in a **less than cumulatively considerable contribution to significant cumulative impacts** related to climate change.

Boulder Brush Facilities

The Boulder Brush Facilities are necessary to transmit the energy produced by the Campo Wind Facilities wind turbines to end users. The Boulder Brush Facilities are a necessary component to a wind energy project and are consistent with state and local goals to increase renewable energy, including the state's RPS targets and the County's General Plan goals to add renewable energy sources in the County. The Boulder Brush Facilities would not require a General Plan Amendment or zone change. ~~Although the CAP Consistency Checklist individual GHG measures would not apply to the Boulder Brush Facilities, the Boulder Brush Facilities would be consistent with the underlying assumptions of the CAP and would support goals within the CAP.~~ The Boulder Brush Facilities' net GHG emissions and impact will be further assessed to include the benefit of producing zero GHG emission energy and the avoided GHG emissions associated with its use within the regional power grid. Therefore, the Boulder Brush Facilities would result in a **less than cumulatively considerable contribution to significant cumulative impacts** related to climate change.

Campo Wind Facilities

Although there are no specific requirements for evaluating GHG emissions under NEPA, estimated Project-generated construction and operational GHG emissions are included for disclosure. The Campo Wind Facilities would not require a General Plan Amendment or zone change. ~~Although the CAP Consistency Checklist individual GHG measures would not apply to the Campo Wind Facilities, the Campo Wind Facilities would be consistent with the underlying assumptions of the CAP and would support goals within the CAP.~~ The Campo Wind Facilities' net GHG emissions and impact will be further assessed to include the benefit of producing zero GHG emission energy and the avoided GHG emissions associated with its use within the regional power grid. Therefore, Campo Wind Facilities would result in a **less than cumulatively considerable contribution to significant cumulative impacts** related to climate change.

**Table 3.1.4-1
Greenhouse Gas Emissions Sources in California**

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percentage of Total*
Transportation	176.1	41%
Industrial	98.8	23%
Electricity (in state)	42.9	10%
Electricity (imports)	25.8	6%
Agriculture	34.4	8%
Residential	30.1	7%
Commercial	21.5	5%
Total	429.4	100%

Source: CARB 2018b.

Notes: GHG = greenhouse gas; MMT CO₂e = million metric tons of carbon dioxide equivalent per year.

* Total may not sum due to rounding.

**Table 3.1.4-2
San Diego County Greenhouse Gas Emissions by Sectors**

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percentage of Total*
On-road transportation	14.6	45%
Electricity generation	7.6	24%
Natural gas end uses	2.9	9%
Off-road equipment and vehicles	0.37	1%
Solid waste	3.4	11%
Propane	0.10	<1%
Agriculture	1.6	5%
Water	1.3	4%
Wastewater	0.21	1%
Total	32.1	100%

Source: EPIC and Ascent 2017.

Notes: GHG = greenhouse gas; MMT CO₂e = million metric tons of carbon dioxide equivalent per year.

* Total may not sum due to rounding.

**Table 3.1.4-3
Estimated Construction Workers, Vendor Trips, and Equipment Use per Day**

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
<i>Campo Wind Facilities</i>						
Clearing and grading	72	108	734	Graders	3	8
				Rubber-tired dozers	8	8
				Scrapers	3	8
				Crushing/processing equipment	1	8

**Table 3.1.4-3
Estimated Construction Workers, Vendor Trips, and Equipment Use per Day**

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Construction of access roads	120	0	22	Scrapers	3	8
				Rubber tired loaders	7	8
Wind turbine foundation construction	168	20	3,046	Air compressors	3	8
				Generator sets	3	8
				Pumps	1	8
Wind turbine erection	144	0	720	Cranes	19	7
				Air compressors	2	8
				Generator sets	3	8
				Pumps	2	8
				Welders	7	8
Construction of underground electrical collection system	240	12	368	Rubber tired dozers	2	7
				Tractors/loaders/backhoes	4	8
				Trenchers	3	8
Construction of collector substation	48	4	138	Air compressors	1	8
				Cranes	21	7
				Generator sets	62	8
				Pumps	31	8
				Tractors/loaders/backhoes	3	7
				Welders	2	8
Gen-tie line foundation construction and pole erection	96	10	30	Forklifts	1	8
				Welder	1	7
				Air compressor	1	7
				Generator sets	2	6
				Pump	1	7
Gen-tie line stringing and pulling	72	10	20	Welder	1	7
				Air compressor	1	7
Operations and maintenance facility	120	4	20	Cranes	1	7
				Generator sets	1	8
				Tractors/loaders/backhoes	1	7
				Welders	1	8
Meteorological towers	24	4	4	Cranes	1	7
				Generator sets	2	8
				Tractors/loaders/backhoes	1	7
				Welders	1	8

**Table 3.1.4-3
Estimated Construction Workers, Vendor Trips, and Equipment Use per Day**

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
<i>Boulder Brush Facilities</i>						
High-voltage substation and switchyard	144	8	415	Air compressors	1	8
				Cranes	2	7
				Generator sets	6	8
				Pumps	3	8
				Tractors/loaders/backhoes	3	7
				Welders	2	8
Clearing and grading	48	20	0	Tractors/loaders/backhoes	4	7
				Rubber-tired dozers	4	8
				Graders	2	7
Unpaved construction access roads	48	10	32	Pavers	1	8
				Rollers	4	8
				Scrapers	2	8
				Paving equipment	4	8
				Pump	1	7
Gen-tie line foundation construction and pole erection	96	10	30	Forklifts	1	8
				Welder	1	7
				Air compressor	1	7
				Generator sets	2	6
				Pump	1	7
Gen-tie line stringing and pulling	72	10	20	Welder	1	7
				Air compressor	1	7
Paving of switchyard access road	66	0	0	Pavers	1	8
				Paving equipment	4	8
				Rollers	8	8

Note: See Appendix C for details.

**Table 3.1.4-4
Estimated Annual Construction Greenhouse Gas Emissions**

Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
	<i>Metric Tons per Year</i>			
<i>2019</i>				
Campo Wind Facilities	1,453.59	0.25	0.00	1,480.41
Boulder Brush Facilities	755.05	0.11	0.00	777.83
<i>2019 Total</i>	<i>2,208.64</i>	<i>0.36</i>	<i>0.00</i>	<i>2,258.24</i>
<i>2020</i>				
Campo Wind Facilities	3,017.04	0.44	0.00	3,028.13
Boulder Brush Facilities	1,254.61	0.12	0.00	1,257.49

**Table 3.1.4-4
Estimated Annual Construction Greenhouse Gas Emissions**

Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
2020 Total	4,271.65	0.56	0.00	4,258.62
Total	6,480.29	0.92	0.00	6,543.86
Amortized Emissions over 30 Years				218.13

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

Numbers may not add exactly due to rounding.

See Appendix C for complete results.

Blasting emissions were calculated separately and included in the 2019 construction emissions.

**Table 3.1.4-5
Estimated Annual Decommissioning Greenhouse Gas Emissions**

Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
2050				
Campo Wind Facilities	1,175.36	0.04	0.00	1,176.39
Boulder Brush Facilities	434.56	0.01	0.00	434.88
Total	1,609.92	0.05	0.00	1,611.27
Amortized Emissions over 30 Years				53.71

Notes: CH₄ = methane; CO₂ = carbon dioxide; CO₂e = carbon dioxide equivalent; N₂O = nitrous oxide.

See Appendix C for complete results.

**Table 3.1.4-6
Estimated Annual Operational Greenhouse Gas Emissions**

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
Area ^a	<0.01	0.00	0.00	65.53
Energy	13.91	<0.01	<0.01	13.99
Mobile	102.85	<0.01	0.00	102.92
Stationary ^b	15.23	<0.01	0.00	15.29
Solid waste	0.94	0.06	0.00	2.34
Water supply and wastewater	3.93	0.03	<0.01	4.88
<i>Subtotal</i>				204.93
Amortized Construction Emissions over 30 Years				218.13
Amortized Loss of Sequestered Carbon over 30 Years				452.51
Amortized Decommissioning Emissions over 30 Years				53.71
Total				929.28

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

^a Area sources includes gas insulated switch gear.

^b Stationary sources includes emergency generators.

Numbers may not add exactly due to rounding.

See Appendix C for complete results.

**Table 3.1.4-7
Climate Action Plan Consistency Checklist**

Climate Action Plan Checklist Item	Project Compliance
<p>1a. Reducing Vehicle Miles Traveled: Non-Residential: For non-residential projects with anticipated tenant occupants of 25 or more, will the project achieve a 15% reduction in emissions from commute vehicle miles traveled (VMT), and commit to monitoring and reporting results to demonstrate on-going compliance? VMT reduction may be achieved through a combination of Transportation Demand Management (TDM) and parking strategies, as long as the 15% reduction can be substantiated.</p>	<p>Not Applicable. The Project would employ 12 persons, and, thus, would not accommodate 25 or more tenant occupants.</p>
<p>2a. Shared and Reduced Parking: Non-Residential: For non-residential projects with anticipated tenant occupants of 24 or less, will the project implement shared and reduced parking strategies that achieves a 10% reduction in emissions from commute VMT? Check "N/A" if the project is a residential project or if the project would accommodate 25 or more tenant occupants.</p>	<p>Not Applicable. As a renewable energy development project, the Project is not a typical commercial or retail development that would have tenants with different schedules that can share parking spaces or include substantial parking supply. Employee trips would only be related to operation and maintenance activities associated with operation of the wind facility. Carpooling would be encouraged to the extent practical to reduce vehicle miles traveled (VMT) during operation, and the Project's parking spaces would not exceed County of San Diego's code requirements. This measure is intended to reduce VMT during typical commute hours.</p>
<p>3a. Electric or Alternately-Fueled Water Heating Systems Residential: For projects that include residential construction, will the project, as a condition of approval, install the following types of electric or alternately-fueled water heating system(s)?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Solar thermal water heater <input type="checkbox"/> Tankless electric water heater <input type="checkbox"/> Storage electric water heaters <input type="checkbox"/> Electric heat pump water heater <input type="checkbox"/> Tankless gas water heater <input type="checkbox"/> Other 	<p>Not Applicable. The Project does not include a residential component.</p>
<p>4a. Water Efficient Appliances and Plumbing Fixtures Residential: For new residential projects, will the project comply with all of the following water efficiency and conservation best management practices?</p> <ol style="list-style-type: none"> 1. Kitchen Faucets: The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 pounds per square inch (psi). Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.5 gallons per minute at 60 psi. 2. Energy Efficient Appliances: Install at least one qualified ENERGY STAR dishwasher or clothes washer per unit. 	<p>Not Applicable. The Project does not include a residential component.</p>
<p>5a. Rain Barrel Installations: Residential: For new residential projects, will the project make use of incentives to install one rain barrel per every 500 square feet of available roof area? Check "N/A" if the project is a non-residential project; if State, regional or local incentives/rebates to purchase rain barrels are</p>	<p>Not Applicable. The Project does not include a residential component.</p>

Table 3.1.4-7
Climate Action Plan Consistency Checklist

Climate Action Plan Checklist Item	Project Compliance
not available; or if funding for programs/rebates has been exhausted.	
6a. Reduce Outdoor Water: <u>Residential:</u> Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in current Maximum Applied Water Allowance (MAWA) for outdoor use? <u>Non-Residential:</u> Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in current MAWA for outdoor use?	Not Applicable. The Project would not include any landscaping that would necessitate preparation of a landscape plan or Landscape Document Package.
7a. Agricultural and Farming Equipment: Will the project use the San Diego County Air Pollution Control District's (SDAPCD's) farm equipment incentive program to convert gas- and diesel-powered farm equipment to electric equipment? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	Not Applicable. The Project would not include gas or diesel-powered farm equipment, and would not contain any agricultural or farming operations.
8a. Electric Irrigation Pumps: Will the project use SDAPCD's farm equipment incentive program to convert diesel- or gas-powered irrigation pumps to electric irrigation pumps? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	Not Applicable. The Project would not include irrigation pumps, and would not contain any agricultural or farming operations.
9a. Tree Planting: Residential: For residential projects, will the project plant, at a minimum, two trees per every new residential dwelling unit proposed? Check "N/A" if the project is a non-residential project	Not Applicable. The Project does not include a residential component.

Source: County of San Diego 2018.

Table 3.1.4-87
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
<i>Transportation Sector</i>		
Advanced Clean Cars	T-1	Not applicable. The Project would not prevent CARB from implementing this measure.
Low-Carbon Fuel Standard	T-2	Consistent. Motor vehicles driven by the Project's employees would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Advanced Clean Transit	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.

Table 3.1.4-87
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Last-Mile Delivery	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
Reduction in VMT	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Not applicable. The Project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable. The Project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	Not applicable. The Project would not prevent CARB from implementing this measure.
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable. The Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	Not applicable. The Project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
High-Speed Rail	T-9	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Electricity and Natural Gas Sector</i>		
Energy Efficiency Measures (Electricity)	E-1	Not applicable. The Project would not prevent CARB from implementing this measure.
Energy Efficiency (Natural Gas)	CR-1	Not applicable. The Project would not prevent CARB from implementing this measure.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Not applicable. The Project would not prevent CARB from implementing this measure.

Table 3.1.4-87
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Combined Heat and Power	E-2	Not applicable. The Project would not prevent CARB from implementing this measure.
Renewables Portfolio Standard (33% by 2020)	E-3	Consistent. The Project would generate 252 MW of wind energy to support the Renewables Portfolio Standard.
Renewables Portfolio Standard (50% by 2050)	N/A	Consistent. The Project would generate 252 MW of wind energy to support the Renewables Portfolio Standard.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Water Sector</i>		
Water Use Efficiency	W-1	Consistent. The Project would use water for dust suppression during construction and panel rinsing during operation. The water used would be sourced from on-site non-potable water wells.
Water Recycling	W-2	Not applicable. The Project would not prevent CARB from implementing this measure.
Water System Energy Efficiency	W-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Reuse Urban Runoff	W-4	Not applicable. The Project would not prevent CARB from implementing this measure.
Renewable Energy Production	W-5	Not applicable. This measure applies to renewable energy within the water sector. The Project would not prevent CARB from implementing this measure.
<i>Green Buildings</i>		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Industry Sector</i>		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable. The Project would not prevent CARB from implementing this measure.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable. The Project would not prevent CARB from implementing this measure.

Table 3.1.4-87
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Refinery Flare Recovery Process Improvements	I-4	Not applicable. The Project would not prevent CARB from implementing this measure.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Recycling and Waste Management Sector</i>		
Landfill Methane Control Measure	RW-1	Not applicable. The Project would not prevent CARB from implementing this measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable. The Project would not prevent CARB from implementing this measure.
Mandatory Commercial Recycling	RW-3	Consistent. The Project would recycle the maximum extent that is feasible in accordance with state and local regulations.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Anaerobic/Aerobic Digestion	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Extended Producer Responsibility	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Environmentally Preferable Purchasing	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Forests Sector</i>		
Sustainable Forest Target	F-1	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>High GWP Gases Sector</i>		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	Not applicable. The Project would not prevent CARB from implementing this measure.
SF ₆ Limits in Non-Utility and Non-Semiconductor Applications	H-2	Not applicable. The Project would not prevent CARB from implementing this measure.
Reduction of Perfluorocarbons (PFCs) in Semiconductor Manufacturing	H-3	Not applicable. The Project would not prevent CARB from implementing this measure.
Limit High GWP Use in Consumer Products	H-4	Not applicable. The Project would not prevent CARB from implementing this measure.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Not applicable. The Project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable. The Project would not prevent CARB from implementing this measure.

Table 3.1.4-87
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable. The Project would not prevent CARB from implementing this measure.
SF ₆ Leak Reduction Gas Insulated Switchgear	H-6	Consistent. The Project would utilize gas insulated switchgear that would be subject to CARB regulations and meet the leak rate mandates.
40% reduction in methane and hydrofluorocarbon (HFC) emissions	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
50% reduction in black carbon emissions	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
<i>Agriculture Sector</i>		
Methane Capture at Large Dairies	A-1	Not applicable. The Project would not prevent CARB from implementing this measure.

Source: CARB 2008, 2017a.

Notes: GHG = greenhouse gas; CARB = California Air Resources Board; N/A = not applicable; VMT = vehicle miles traveled; MW = megawatt; SB = Senate Bill; SF₆ = sulfur hexafluoride; GWP = global warming potential.

Table 3.1.4-98
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
<i>The Regional Plan – Policy Objectives</i>		
Mobility Choices	Provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.	Not applicable. The Project would not impair the ability of SANDAG to provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.
Mobility Choices	Take advantage of new technologies to make the transportation system more efficient and environmentally friendly.	Not applicable. The Project would not impair the ability of SANDAG to take advantage of new technologies to make the transportation system more efficient and environmentally friendly.
Habitat and Open Space Preservation	Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.	Not applicable. The Project would not impair the ability of SANDAG to set aside and restore more open space.
Habitat and Open Space Preservation	Protect and restore our region's urban canyons, coastlines, beaches, and water resources.	Not applicable. The Project would not impair the ability of SANDAG to set aside and restore more open space.
Regional Economic Prosperity	Invest in transportation projects that provide access for all communities to a variety of jobs with competitive wages.	Not applicable. The Project would not impair the ability of SANDAG to invest in transportation projects available to all members of the Community.

Table 3.1.4-98
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Regional Economic Prosperity	Build infrastructure that makes the movement of freight in our community more efficient and environmentally friendly.	Not applicable. The Project does not propose regional freight movement, nor would it impair SANDAG's ability to preserve and expand options for regional freight movement.
Partnerships/Collaboration	Collaborate with Native American tribes, Mexico, military bases, neighboring counties, infrastructure providers, the private sector, and local communities to design a transportation system that connects to the mega-region and national network, works for everyone, and fosters a high quality of life for all.	Not applicable. The Project would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico, neighboring counties, and tribal nations.
Partnerships/Collaboration	As we plan for our region, recognize the vital economic, environmental, cultural, and community linkages between the San Diego region and Baja California.	Not applicable. The Project would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico.
Healthy and Complete Communities	Create great places for everyone to live, work, and play.	Not applicable. The Project would not impair the ability of SANDAG to create great places for everyone to live, work, and play.
Healthy and Complete Communities	Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.	Not applicable. The Project would not impair the ability of SANDAG to connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.
Environmental Stewardship	Make transportation investments that result in cleaner air, environmental protection, conservation, efficiency, and sustainable living.	Consistent. The Project would support the goal of producing clean energy for sustainable living.
Environmental Stewardship	Support energy programs that promote sustainability.	Consistent. The Project would support the goal of producing clean sustainable energy.
<i>Sustainable Communities Strategy – Strategies</i>		
Strategy #1	Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.	Not applicable. The Project would not include housing or job growth in urbanized areas.
Strategy #2	Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat, open space, cultural resources, and farmland.	Not applicable. The Project would not impair the ability of SANDAG to set aside and restore more open space.
Strategy #3	Invest in a transportation network that gives people transportation choices and reduces greenhouse gas emissions.	Consistent. The Project would help reduce greenhouse gas emissions through the production of clean renewable energy.
Strategy #4	Address the housing needs of all economic segments of the population.	Not applicable. The Project would not impair the ability of SANDAG to address the housing needs of all economic segments of the population.

Table 3.1.4-98
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Strategy #5	Implement the Regional Plan through incentives and collaboration.	Not applicable. The Project would not impair the ability of SANDAG to implement the Regional Transportation Plan through incentives and collaborations.

Source: SANDAG 2015.

Note: SANDAG = San Diego Association of Governments.

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