

4.6.1 Overview

This section describes the existing setting for energy and the applicable regulations that govern energy use, supply and distribution, and performance. This section also discusses the project's potential to result in impacts associated with energy use. Impacts related to energy would be significant if the project were to (1) result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or (2) conflict with or obstruct a sState or local plan for renewable energy or energy efficiency.

4.6.2 Existing Conditions

Energy use includes direct and indirect consumption of energy, including electricity and natural gas, and fuel associated with transportation-related energy, during project construction and operation. San Diego Gas and Electric (SDG&E) provides electricity and natural gas to the project site.

4.6.2.1 State Energy Resources and Use

California has a diverse portfolio of energy resources that produced 2,408 trillion British thermal units (BTUs)¹ in 2018 (U.S. Energy Information Administration 2019).² Excluding offshore areas, the sState ranked third in the nation in crude oil production in 2018, producing the equivalent of 965.3 trillion BTUs. The sState also ranked first in the nation for energy production from renewable resources. Other energy sources in the sState include natural gas (228.9 trillion BTUs), nuclear (190.4 trillion BTUs), and biofuels (30 trillion BTUs) (U.S. Energy Information Administration 2019).³

According to the U.S. Energy Information Administration, California consumed approximately 7,967 trillion BTUs of energy in 2018. Per capita energy consumption (i.e., total energy consumption divided by the population) in California is among the lowest in the country, with 202 million BTU in 2018, which ranked 48th among all states. Natural gas accounted for the majority of energy consumption (28%), followed by motor gasoline (22%); renewable energy, including nuclear electric power, hydroelectric power, biomass, and other renewables (17%); distillate and jet fuel (15%); and interstate electricity (11%); with the remaining 7% coming from a variety of other sources (U.S. Energy Information Administration 2019). The transportation sector consumed the

¹ One BTU is the amount of energy required to heat 1 pound of water by 1°F at sea level. BTU is a standard unit of energy that is used in the United States and is on the English system of units (foot-pound-second system).

² Note that 2018 data are the most recent available.

³ No coal production occurs in California; however, imported coal made up approximately 4% of California's energy mix as of 2018. SDG&E, the energy provider for the San Diego region, does not have any coal in its energy mix as of 2018 (California Energy Commission 2021b).

highest quantity of energy (39%), followed by the industrial (24%), commercial (19%), and residential (18%) sectors (U.S. Energy Information Administration 2019).

Per capita energy consumption, in general, is declining due to improvements in energy efficiency and design. However, despite this reduction in per capita energy use, the sState's total overall energy consumption (i.e., non-per capita energy consumption) is expected to increase over the next several decades due to overall growth in population, jobs, and vehicle travel.

4.6.2.2 Regional Energy Resources and Use

SDG&E provides energy service to over 3.6 million customers (i.e., 1.4 million accounts) in San Diego County and portions of southern Orange County. The utility has a diverse power production portfolio, composed of a variety of renewable and non-renewable sources. Energy production typically varies by season and by year. Regional electricity loads also tend to be higher in the summer because the higher summer temperatures drive increased demand for air-conditioning. In contrast, natural gas loads are higher in the winter because the colder temperatures drive increased demand for natural gas heating.

In 2018, which reflects the most recent year that California Renewables Portfolio Standard (RPS) data is available, over 31% of the electricity SDG&E supplied was from renewable sources, compared to less than 1% in 2002 (CPUC 2019a). Table 4.6-1 outlines the SDG&E power mix in 2019 compared to the power mix for the sState (CEC 2021a). In 2019, SDG&E customers used 20,481 gigawatt hours of electricity and 534 million therms of natural gas (CEC 2021b). Table 4.6-2 outlines the breakdown of electricity and natural gas usage by sector in the SDG&E service area. Residential and commercial uses account for 89% of electricity use and 94% of natural gas use within the SDG&E service area.

Table 4.6-1. SDG&E and the State of California Power Mix in 2019

Energy Resources	SDG&E Power Mix (percent)	California-Wide Power Mix (percent)
Eligible Renewables	31	32
Biomass and Waste	2	2
Geothermal	0	5
Small hydroelectric	0	2
Solar	17	12
Wind	13	10
Coal	0	3
Large Hydroelectric	0	15
Natural Gas	24	34
Nuclear	0	9
Other	0	0
Unspecified Sources of Power ¹	44	7
Total	100	100

Source: CEC 2021a.

¹ Electricity from transactions that are not traceable to specific generation sources.

Table 4.6-2. Electricity and Natural Consumption in the SDG&E Service Area in 2019

Sector	Electricity (GWh)	Natural Gas (million therms)
Agriculture and Water Pump	355	5
Commercial	10,865	200
Industry	1,342	21
Mining and Construction	395	4
Residential	7,435	304
Streetlight	90	--
Total	20,481	534

Source: CEC 2021b.
GWh = gigawatt hours

4.6.3 Applicable Laws and Regulations

4.6.3.1 State

Clean Energy and Pollution Reduction Act of 2015

Senate Bill (SB) 350 (De Leon, also known as the “Clean Energy and Pollution Reduction Act of 2015”) was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions are to require the following by 2030: (1) an RPS of 50% and (2) a doubling of efficiency for existing buildings.

Energy Building Regulations and Energy Conservation Standards

New buildings constructed in California must comply with the standards contained in California Code of Regulations (CCR) Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards. Title 20 contains standards ranging from power plant procedures and siting to energy efficiency standards for appliances to ensuring reliable energy sources are provided and diversified through energy efficiency and renewable energy resources.

Energy Conservation Standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and most recently revised in 2008 (24 CCR 6). Title 24 requires the design of building shells and building components that conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code (24 CCR). Part 11 establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

California Energy Code

Title 24, Part 6 of the CCR describes California's energy efficiency standards for residential and nonresidential buildings. These standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption and have been updated periodically to include new energy efficiency technologies and methods. The California Energy Code requires compliance with energy efficient standards for all new construction, including new buildings, additions, alterations, and, in nonresidential buildings, repairs.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Code (2011), Title 24 Updates (2013, 2015)

The Green Building Standards Code (CALGreen) applies to the planning, design, operation, construction, use, and occupancy of newly constructed buildings and requires the installation of energy- and water-efficient indoor infrastructure for all new projects permitted after January 1, 2011. CALGreen also requires newly constructed buildings to develop a waste management plan and divert at least 50% of the construction materials generated during project construction.

Administrative regulations to CALGreen Part 11 and the California Building Energy Efficiency Standards were adopted in 2013 and took effect on January 1, 2014. The 2013 Building Energy Efficiency Standards are 30% more efficient than previous standards for commercial construction. Part 11 also established voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency, water conservation, material conservation, and internal air contaminants.

The 2016 Building Energy Efficiency Standards were adopted in 2015 and took effect on January 1, 2017. While the 2016 standards do not require zero net energy buildings, the 2019 standards, which took effect January 1, 2020, are expected to take the final step toward achieving zero net energy for newly constructed residential buildings throughout California with requirements such as solar voltaic systems for new homes and encouraging demand responsive technologies (e.g., battery storage, heat pump water heaters, etc.) to improve energy savings. Later standards are expected to require zero net energy for newly constructed commercial buildings.

California Renewable Resources Act and the Clean Energy and Pollution Reduction Act of 2015

SB X1-2 (also known as the "California Renewable Resources Act") was signed by Governor Brown in April 2011 and revised California's RPS to a goal of 33% by 2020. SB 350 increased the renewable procurement goal from 33% by 2020 to 50% by 2030 and also requires the state to double energy efficiency savings.

Climate Change Scoping Plan of 2017

Executive Order B-30-15 and SB 32 extended the goals of AB 32 and set a 2030 goal of reducing emissions 40% from 2020 levels. The Scoping Plan established a proposed framework to implement programs to meet greenhouse gas (GHG) reduction goals.

The 2017 Scoping Plan proposes meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels, including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate

pollutants (e.g., methane, black carbon, fluorinated gases), further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car, continuing the cap-and-trade program, and ensuring that natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target.

The 2017 Scoping Plan recommends that local governments aim to achieve community-wide efficiency of 6 metric tons of carbon dioxide-equivalent (MTCO_{2e}) per capita by 2030 and 2 MTCO_{2e} per capita by 2050 to be used in local climate action planning. These efficiency targets would replace the “15% from 2008 levels by 2020” approach recommended in the initial Scoping Plan, which would allow for local governments to grow in a sustainable manner.

The 2017 Scoping Plan also emphasizes the importance of reducing vehicle miles traveled (VMT) by on-road vehicles in the sState, with recommendations for 15% reduction in total light-duty VMT from the business-as-usual scenario in 2050. In January 2019, the California Air Resources Board (CARB) published more specific guidance about VMT in its document titled *2017 Scoping Plan– Identified VMT Reductions and Relationship to the State Climate Goals* (CARB 2019). Recognizing VMT as a proxy for mobile-source GHG emissions, this document includes information about the level of statewide VMT reduction that would promote achievement of statewide GHG emissions reduction targets. CARB found that to be consistent with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 sState climate goals, VMT per capita would need to be approximately 14.3% lower than existing conditions, and light-duty VMT per capita would need to be approximately 16.8% lower than existing conditions.

Senate Bill 100 (2018)

SB 100 (De Leon, also known as the “California Renewables Portfolio Standard Program: emissions of greenhouse gases”) was approved by the California legislature and signed by Governor Brown in September 2018. The bill builds on SB 350 by increasing the renewable procurement target set in SB 350 to 60% by 2030 and requires 100% zero-carbon energy production and consumption by 2045.

~~State~~ CEQA Guidelines, Appendix F

Appendix F of the ~~State~~ CEQA Guidelines contains energy conservation measures that promote the efficient use of energy for projects. ~~In order to~~To ensure that energy impacts are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

The goal outlined in Appendix F of the ~~State~~ CEQA Guidelines is to conserve energy through the wise and efficient use of energy. The means of achieving this goal include the following.

- Decreasing the overall per capita energy consumption.
- Decreasing reliance on natural gas and oil.
- Increasing reliance on renewable energy sources.

4.6.3.2 Local

San Diego Association of Governments

San Diego Association of Governments' (SANDAG) San Diego Forward: The Regional Plan, which incorporates the 2050 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), was adopted in ~~2011~~2011 and provides a planned vision for the region's transportation system through 2050. The plan also incorporates a sustainable communities strategy as required by SB 375, which includes implementation of a Transportation Demand Management (TDM) strategy to help local governments reduce energy consumption.

SANDAG's Energy and Climate Change program supports local efforts to reduce GHG emissions in alignment with statewide goals to prepare for the impacts of climate change. Projects include climate action planning and energy engineering services for local jurisdictions, electric vehicle charging, and climate adaptation (SANDAG 2019).

Through its Energy Roadmap Program, SANDAG provides energy efficiency and engineering support to qualifying local jurisdictions (i.e., cities), which includes free energy assessments and energy management plans, or "Energy Roadmaps," to SANDAG member agencies that do not have Local Government Partnerships with SDG&E.

In July 2015, SANDAG launched Plug-in San Diego (Plug-in SD) through a 2-year California Energy Commission (CEC) grant. Plug-in SD implemented recommendations from SANDAG's Electric Vehicle (EV) Readiness Plan through a combination of resource development, training, technical assistance through an EV Expert, and outreach. SANDAG has provided various reports and documents to assist property owners in acquiring EV charging infrastructure and better understanding of the technologies, incentives, and installation options available.

SANDAG Regional Energy Strategy

The Regional Energy Strategy (RES) will serve as an energy policy blueprint for the region through 2050 (SANDAG 2021). The RES establishes long-term goals in 11 topic areas, including energy efficiency, renewable energy, distributed generation, transportation fuels, land use and transportation planning, border energy issues, and the green economy. Priority early actions of the RES include the following.

1. Pursue a comprehensive building retrofit program to improve efficiency and install renewable energy systems.
2. Create financing programs to pay for projects and improvements that save energy.
3. Use the SANDAG-SDG&E Local Government Partnership to help local governments identify opportunities and implement energy savings, both at government facilities and throughout the communities.
4. Support land use and transportation planning strategies that reduce energy use and GHG emissions.
5. Support planning for electric-charging and alternative-fuel infrastructure.
6. Support the use of existing unused reclaimed water to decrease the amount of energy needed to meet the water needs of the San Diego region.

In the RES, SANDAG acknowledges the sState’s “preferred loading order” for meeting the goals pertaining to the sState’s growing electricity demand. The preferred loading order is as follows.

1. Increase energy efficiency.
2. Increase demand response (e.g., through a temporary reduction or shift in energy use during peak hours).
3. Meet generation needs with renewable and distributed generation resources.
4. Meet new generation needs with clean fossil-fueled generation and infrastructure improvements.

The RES contains a suite of goals as well as measures for achieving the goals. For example, the RES includes an energy efficiency and conservation goal for reducing per capita electricity consumption by 20% by 2030 to compensate for population growth. Other regional goals are associated with developing renewable energy, encouraging distributed generation, reducing water consumption and diversifying water sources, reducing peak demand, relying on smart energy, replacing inefficient power plants, supporting alternative fuels for transportation, and ensuring appropriate land use planning, among others. To accomplish the goals, SANDAG recommends various measures, which local jurisdictions can implement to achieve the goals of the RES, including pursuing a comprehensive building retrofit program and identifying, securing, or developing funding mechanisms to pay for energy-related projects and programs. The RES will be updated periodically to reflect progress toward the RES goals, account for changes in energy and climate change policy, and make recommendations for continued progress.

County of San Diego General Plan

The General Plan includes goals and policies applicable to energy within the Conservation and Open Space element.

COS-6.5 Best Management Practices. Encourage best management practices in agriculture and animal operations to protect watersheds, reduce GHG emissions, conserve energy and water, and utilize alternative energy sources, including wind and solar power.

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.

COS-14.3 Sustainable Development. Require design of residential subdivisions and nonresidential development through “green” and sustainable land development practices to conserve energy, water, open space, and natural resources.

COS-14.7 Alternative Energy Sources for Development Projects. Encourage development projects that use energy recovery, photovoltaic, and wind energy.

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.

COS-15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with “green building” programs that incorporate techniques and

materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.

COS-15.2 Upgrade of Existing Buildings. Promote and, as appropriate, develop standards for the retrofit of existing buildings to incorporate design elements, heating and cooling, water, energy, and other elements that improve their environmental sustainability and reduce GHG.

COS-15.3 Green Building Programs. Require all new County facilities and the renovation and expansion of existing County buildings to meet identified “green building” programs that demonstrate energy efficiency, energy conservation, and renewable technologies.

COS-15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.

COS-15.5 Energy Efficiency Audits. Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits.

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.

COS-18.1 Alternate Energy Systems Design. Work with San Diego Gas and Electric and non-utility developers to facilitate the development of alternative energy systems that are located and designed to maintain the character of their setting.

County of San Diego Climate Action Plan

The County adopted the 2018 County of San Diego Climate Action Plan (CAP) on February 14, 2018. The CAP outlined strategies and measures to reduce the County’s contribution to GHG emissions and to meet the State’s 2020 and 2030 emissions targets, as well as ensure progress towards the 2050 reduction goal. The CAP identifies 11 strategies and 26 measures plus numerous supporting efforts to reduce GHG emissions in the largely rural, unincorporated ~~county area~~ county area as well as within County-government operations (County of San Diego 2021). These strategies and measures would focus on energy efficiency, developing renewable sources of energy, improving waste recycling, and improving access to sustainable transportation. Measures relevant to energy use from the proposed County-sponsored project include the following:

- Measure T-2.3: Reduce County Employee Vehicle Miles Traveled
- Measure T-3.2: Use Alternative Fuels in County Projects
- Measure T-3.4: Reduce the County’s Fleet Emissions
- Measure E-1.4: Reduce Energy Use Intensity at County Facilities
- Measure E-2.4: Increase Use of On-Site Renewable Electricity Generation for County Operations
- Measure W-1.3: Reduce Potable Water Consumption at County Facilities

On September 30, 2020, the County of San Diego Board of Supervisors voted to set aside the approval of the CAP because a portion of the Supplemental EIR was found to be out of compliance with CEQA. The County is currently preparing a CAP Update to revise the 2018 CAP and associated EIR in response to the court’s direction. In accordance with the ~~State~~ CEQA Guidelines, consistency

with the 2018 CAP cannot be relied upon for determination of project-related GHG emissions impact significance until it is reapproved in compliance with CEQA.

Although the court ruling struck down part of the 2018 CAP EIR, the court did not find fault with its 26 GHG reduction measures. Therefore, while the 2018 CAP may not be used for project impact significance determination, the relevant GHG reducing measures may be used to mitigate project-specific GHG impacts (County of San Diego 2021).

4.6.4 Project Impact Analysis

4.6.4.1 Methodology

Energy impacts would occur if the project would result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Energy impacts would also occur if the project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The energy analysis for the project evaluates the following sources of energy consumption associated with existing conditions and the project.

Energy Use During Construction

Implementation of the project would result in energy use from construction activities. Energy use associated with construction activities includes the consumption of transportation fuels (i.e., gasoline and diesel) for equipment use and employee, delivery, and haul truck vehicle travel. Diesel fuel would be required for operation of heavy-duty off-road construction equipment (e.g., cranes, forklifts, loaders) that would be used for a variety of activities, including construction of buildings and infrastructure; and grading and laying foundations. It was assumed that all off-road equipment used at the project site would be diesel-powered. Both diesel and gasoline fuel would also be required for the operation of on-road vehicles (e.g., pickup trucks, flatbed trucks, passenger cars) that would be used for material and equipment hauling, crew and material movement, employee commuting, and material disposal.

Energy use during construction was estimated using a combination of methods and energy factors from published best available documentation. Energy usage associated with fuel consumption was calculated using fuel consumption factors and activity data for offroad equipment and employee, delivery, and hauling vehicles. Construction energy consumption is consistent with the activity data and assumptions used in the air quality and GHG analyses for the project.

- **Off-Road Equipment:** Fuel consumption for diesel-powered off-road equipment was estimated using the equipment's total horsepower-hours (hp-hr) over the construction duration. Total hp-hr for equipment was estimated using the number of equipment, daily usage (hours per day), equipment size (horsepower), load factor (unitless), and total workdays. Brake specific fuel consumption (BSFC) factors with units of pounds per horsepower-hour (lb/hp-hr) for off-road construction equipment were obtained from CARB's *2017 Off-Road Diesel Engine Emission Factors* (CARB 2017). For equipment less than 100 hp, the BSFC was 0.408 lb/hp-hr and 0.367 lb/hp-hr for equipment greater than or equal to 100 hp. To convert the BSFC into units of gallons per horsepower-hour (gal/hp-hr), the BSFC was divided by the density of diesel fuel, which is 7.11 pounds per gallon (lb/gal) (CARB 2017). Total fuel consumption was estimated by

multiplying the total hp-hr by the appropriate BSFC for equipment less than 100 hp and equipment greater than or equal to 100 hp. Detailed calculations are provided in Appendix C.

- On-Road Vehicles:** Fuel consumption for employee vehicles, delivery trucks, and hauling trucks were based on the total miles traveled during construction, total idling hours, and fuel consumption factors in gallons per mile (gal/mile) for on-road travel and gallons per hour (gal/hr) for truck idling. It was assumed that employee vehicles were primarily gasoline-powered, and vendor and haul trucks were primarily diesel-powered. Fuel consumption factors were generated from CARB's Emission FACtor model (EMFAC). Fuel consumption factors for haul trucks are based on EMFAC's heavy-heavy duty truck (HHDT) vehicle category. The HHDT category had a fuel consumption factor of 0.18 gal/mile. Fuel consumption factors for water and vendor trucks are based on a weighted average of EMFAC's HHDT and medium heavy-duty trucks (MHDT) vehicle categories with a fleet mix consisting of 50% MHDT and 50% HHDT. The MHDT and HHDT categories had a weighted fuel consumption factor of 0.16 gal/mi. Fuel consumption factors for employee commute vehicles are based on a weighted average of EMFAC's light-duty automobile/light-duty truck vehicle categories (LDA, LDT1, and LDT2).⁴ The employee commute vehicles consisted of a fleet mix of 50% LDA, 25% LDT1, and 25% LDT2. The weighted fuel consumption factor for employee vehicles was 0.04 gal/mile. For idling events, it was assumed that each delivery and haul truck would idle for five minutes per trip. Idling fuel consumption factors were obtained from the Department of Energy (Department of Energy 2015). Detailed calculations are provided in Appendix C.

Energy Use During Operation

Operation of the project would also result in the consumption of transportation fuels (diesel and gasoline) from park visitors traveling to and from the project site, as well as electricity during operation of project components such as the Administration building, restroom facilities, multi-purpose room, volunteer pad, and security lighting. The project would not consume natural gas. During operation, solar panels that would be installed on site would produce energy for use on the project site. Annual electricity consumption from the project's components were estimated using CalEEMod. Annual transportation fuel consumption was based on the project's annual VMT and weighted gasoline- and diesel-fuel consumption factors for all vehicle category types in EMFAC. Operations energy consumption is consistent with the activity data and assumptions used in the air quality and GHG analyses for the project (see Sections 4.3 and 4.8, respectively). Detailed calculations are provided in Appendix C.

4.6.4.2 Thresholds of Significance

Appendix G of the ~~State~~ CEQA Guidelines

The following significance criteria are based on Appendix G of the ~~State~~ CEQA Guidelines and provide the basis for determining the significance of impacts associated with the demand placed on, and expansions associated with, energy use resulting from the implementation of the project. The determination of whether an energy use impact would be significant is based on the professional

⁴ LDA = Passenger Cars, LDT1 = light-duty trucks with equivalent weight test of less than or equal to 3,750 pounds, LDT2 = Light-duty trucks with equivalent weight test of 3,751 to 5,750 pounds.

judgment of the County DPR as Lead Agency, supported by the evidence in the administrative record.

Impacts are considered significant if the project would result in any of the following:

1. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
2. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Appendix F of the State CEQA Guidelines is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis under Threshold 1 (see below) relies on Appendix F of the State CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- Criterion 1: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- Criterion 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- Criterion 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Criterion 4: The degree to which the project complies with existing energy standards.
- Criterion 5: The effects of the project on energy resources.
- Criterion 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

County of San Diego Guidelines for Determining Significance

The County of San Diego does not have specific guidelines for determining significance for energy impacts.

The State CEQA Guidelines do not indicate an amount of energy use that constitutes a significant impact on the environment. Instead, they authorize the lead agency to 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 (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)).

As described in Section 4.8, *Greenhouse Gas Emissions and Climate Change*, in the absence of an adopted numerical threshold for the project region, the significance of the project-related GHG emissions can be determined by evaluating the project's compliance with regulations or requirements adopted to implement statewide, regional, or local plans for the reduction or mitigation of GHG emissions. Statewide, regional, or local plans for the reduction or mitigation of GHG emissions are applicable to energy impacts as GHG emission reduction measures can also reduce energy consumption. The State's 2030 target (reduce GHG emissions to 40% below 1990 levels by 2030) has been codified in law through SB 32, and the 2017 Scoping Plan (CARB 2017). Therefore, 2030 marks the next statutory statewide milestone target applicable to the project.

The County's 2018 CAP quantified baseline and projected future GHG emissions from activities within the ~~county~~unincorporated area (where the project is located), and proposed County-specific measures and strategies to reduce GHG emissions in accordance with the 2030 statewide GHG reduction target adopted in SB 32. However, as previously discussed under Section 4.6.3.2, *Local*, given the County of San Diego Board of Supervisors' vote to rescind the 2018 CAP, it is no longer a "CEQA-qualified" document as defined by Sections 15183.5(b) and 15064.4 of the ~~State~~ CEQA Guidelines and cannot be used to determine significance of project-related energy impacts.

In this case, significance of impacts related to project-generated energy use can be determined through an assessment of compliance with statewide regulations and requirements adopted to implement plans that align with the SB 32 2030 target, such as CARB's 2017 Scoping Plan. The specific threshold approach used to assess the significance of the project's energy impacts is informed by the guidance summarized here and is discussed in further detail in the following section.

4.6.4.3 Project Impacts and Mitigation Measures

Threshold 1: Implementation of the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

County Park and Trails

Impact Discussion

Construction

Project construction would require energy in the form of gasoline and diesel fuel for transportation of employees and haul trucks to and from the project site, and diesel fuel for operation of off-road equipment. Table 4.6-3 outlines the construction energy use by source. The project's construction diesel and gasoline fuel consumption would increase the County's consumption by 0.038% and 0.0004%, respectively (CEQA Appendix F - Criterion 1).

Table 4.6-3. Project and San Diego County Energy Consumption During Construction

Energy Type	Project Annual Energy Consumption	San Diego County Annual Energy Consumption	Percentage of Countywide
Diesel Consumption	87,956 gallons	229,166,667 gallons	0.038%
Gasoline Consumption	5,509 gallons	1,325,000,000 gallons	0.0004%

Source: CEC 2021c.

Note: Diesel is adjusted to account for retail (48%) and non-retail (52%) diesel sales.

The majority of energy use during construction would be attributed to the use of diesel-powered construction equipment, followed by the use of diesel-powered trucks for material hauling and vendor trips. Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading and construction of project components within the proposed active park. Construction equipment would be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly

efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption (CEQA Appendix F - Criterion 4). As indicated in Table 4.6-3, the average diesel fuel consumption during project construction would be 87,956 gallons per year and result in a nominal increase (0.038%) in fuel use. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (CEQA Appendix F - Criterion 2).

Energy use associated with construction of the project would be temporary and would cease upon completion of construction activities. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (CEQA Appendix F - Criterion 5).

As shown, total energy consumed during the construction period represents a small demand on local and regional energy supplies.

Operation

Operation of the project that would involve the use of energy resources include park ranger/volunteer and visitor vehicle trips, and utility-related consumption (e.g., electricity, water consumption, wastewater and solid waste generation). Once operational, the project would require more energy than currently required at the project site under existing conditions. As shown in Table 4.6-4, annual project operation is estimated to require 0.29 gigawatt hour (GWh) of energy. Operational energy consumption of the project would represent an approximately 0.002% increase in electricity consumption over the current countywide usage, which would be a minimal increase compared to San Diego County's annual consumption. Energy requirements for gasoline would ~~be reduced~~ go down over time due to improved motor vehicle fuel economy standards. The project includes the operation of an active park that would not result in unique or more intensive peak or base period electricity demand (CEQA Appendix F - Criterion 2 and Criterion 3).

Table 4.6-4. Estimated San Diego County Energy Consumption During Operation

Energy Type	Project Annual Energy Consumption ¹	San Diego County Annual Energy Consumption ²	Percentage of Countywide
Electricity Consumption	0.29 GWh	17,880 GWh	0.002%
Diesel Fuel Consumption	5,982 gallons	229,166,667 gallons	0.003%
Gasoline Consumption	42,038 gallons	1,325,000,000 gallons	0.003%

¹ Trip data provided in the Transportation Impact Study (TIS) prepared for the project (Chen Ryan 2020).

² SDG&E 2019 Electricity Sales.

The project would be required to comply with the 2019 Title 24 Building Energy Efficiency Standards, which ~~prescribe~~ provide minimum efficiency standards related to various structure features. Implementation of the 2019 Title 24 standards significantly reduces energy usage (30% compared to the 2016 standards). The Title 24 Building Energy Efficiency Standards are updated every 3 years and become more stringent between each update; therefore, complying with the latest 2019 Title 24 standards would make the project more energy efficient than existing facilities built under the earlier versions of the Title 24 standards (CEQA Appendix F - Criterion 4).

Furthermore, the electricity provider, SDG&E, is subject to California's RPS, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60% of total procurement by 2030 and to

100% of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that the project would not result in the waste of the finite energy resources (CEQA Appendix F - Criterion 5).

As shown in Table 4.6-4, project operations are estimated to consume approximately 42,038 gallons of gasoline fuel per year, which would increase countywide automotive fuel consumption by 0.003%. Visitors using gasoline to travel to and from the project would require energy use associated with transportation. Energy requirements for fuel use associated with vehicles used for maintenance would ~~be reduced~~ go down over time due to improved motor vehicle fuel economy standards. The project does not include any features that would result in excessive long-term operational fuel consumption (CEQA Appendix F - Criterion 6). Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary.

Total energy consumed during operation represents a small demand on local and regional energy supplies.

Impact Determination

The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Open Space/~~Preserve~~

Impact Discussion

No construction activities would occur as a result of the open space/~~preserve~~ component of the project. During operation, the current undeveloped area would remain similar to existing conditions.

Impact Determination

The open space/~~preserve~~ component would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction. No impact would occur.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact would occur.

Threshold 2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

County Park and Trails and Open Space/~~Preserve~~

Impact Discussion

State and local renewable energy and energy efficiency plans that are applicable to the project are discussed in Section 4.6.3, *Applicable Laws and Regulations*. State plans, California Title 24 energy efficiency standards, SB 350, and SB 100 contain required standards related to energy efficiency and renewable energy development. The project is required to comply with the state and local plans and regulations, all of which are aimed at increasing energy efficiency and renewable energy development. Some plans and regulations are statewide and do not require local or project action to implement. Table 4.6-5 provides a consistency analysis with state and local energy plans and regulations.

Table 4.6-5. Project Consistency with State and Local Energy Plans and Regulations

Regulation, Plan, or Policy	Project Applicability and Consistency
Clean Energy and Pollution Reduction Act of 2015 (SB 350)	Consistent. The Clean Energy and Pollution Reduction Act of 2015 requires the following by 2030: (1) an RPS of 50% and (2) a doubling of efficiency for existing buildings. The RPS is dependent on the utility provider and the project does not impede reaching a goal of 50%.
Energy Building Regulations and Energy Conservation Standards (Title 20, Energy Building Regulations; Title 24, Energy Conservation Standards)	Consistent. The project would result in the construction of energy efficient buildings that would comply with existing building codes. At a minimum, new construction occurring under the project would be required to comply with the current Title 24 building standards, which include a broad set of requirements for energy conservation and green design. Given that this is a <u>s</u> tate regulation, the project is required to comply, and would therefore be consistent.
Senate Bill 100	Consistent. SB 100 increases the RPS target set in SB 350 to 60% by 2030. It also requires all retail sales of electricity to California end-users and electricity procured to serve <u>s</u> tate agencies to be provided by zero-carbon resources by 2045. Building energy efficiency is expected to increase as a result of compliance with Title 24 building codes, which are expected to move toward zero net energy for newly constructed buildings. The project is required to comply with these standards, and therefore would not hinder implementation of SB 100.
CARB's 2017 Scoping Plan	Consistent. Many of the programs included in the 2017 Scoping Plan would result in the reduction of project-related energy use with no action required at the project level. These programs include SB 350, Low-Carbon Fuel Standard, and the Mobile Source Strategy. These programs would

Regulation, Plan, or Policy	Project Applicability and Consistency
	benefit GHG emission reductions through increased energy efficiency and renewable energy production, reduction in carbon intensity of transportation fuels, and the accelerated efficiency and electrification of the statewide vehicle fleet, respectively. Implementation of these statewide programs would result in a reduction of operational GHG emissions over the 30-year project lifetime. Because reducing energy use is one of the overarching strategies of the 2017 Scoping Plan, operation of the project would not conflict with this plan.
SB 375 and SANDAG's San Diego Forward: The Regional Plan	Consistent. SANDAG's Regional Plan established a long-range blueprint for the San Diego region's growth and development through the year 2050. Because the project would not include any components that would result in population growth, unplanned or otherwise, it would be consistent with the 2050 RTP.
SANDAG Regional Energy Strategy	Consistent. SANDAG's RES established long-term goals related to energy efficiency, renewable energy, distributed generation, and transportation fuel, among others. The strategies and goals found in the RES were used as guidance for development of the energy components of the 2050 RTP/SCS. Solar panels would be installed in the project's parking lot, which would be used to power outdoor lighting on site. These components support strategies that reduce energy use and GHG emissions.
County of San Diego General Plan (Policy COS-6.5, Policy COS-14.3, Policy COS-14.7, Policy COS-15.1 through COS-15.5, and Policy COS-18.1).	Consistent. The County of San Diego's General Plan includes policies from the Conservation and Open Space Element designed to reduce impacts related to energy. Energy efficiency policies such as Policy COS-15.1, which requires that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials; Policy COS-15.3, which requires all new County facilities and the renovation and expansion of existing County buildings to meet identified "green building" programs that demonstrate energy efficiency, energy conservation, and renewable technologies; and Policy COS-18.1, which is consistent with the California Public Utilities Commission's (CPUC) California Long Term Energy Efficiency Strategic Plan, strive to achieve zero net energy use for new development by 2030. The project would be consistent with these policies.

As shown in Table 4.6-5, the project would be consistent with statewide and local renewable energy or energy efficiency plans and regulations.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

4.6.5 Summary of Significant Impacts

There would be no significant impacts related to energy.

