5. Environmental Analysis

5.5 ENERGY

This section evaluates the potential for energy-related impacts associated with the project and ways in which the project would reduce unnecessary energy consumption, consistent with the suggestions contained in Appendix F of the CEQA Guidelines. Energy service providers to the site include Southern California Edison (SCE) for electrical service and Southern California Gas Company (SoCalGas) for natural gas.

5.5.1 Environmental Setting

Section 21100(b)(3) of CEQA requires that an EIR include a detailed statement setting forth mitigation measures proposed to minimize significant effects on the environment, including but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F of the State CEQA Guidelines states that, in order to ensure that energy implications are considered in project decisions, the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the Project Description, Environmental Setting and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives.

In accordance with Appendix F and G of the State CEQA Guidelines, this EIR includes relevant information and analyses that address the energy implications of the proposed project. This section represents a summary of the proposed project's anticipated energy needs, impacts, and conservation measures. Information found herein, as well as other aspects of the proposed project's energy implications, are discussed in greater detail elsewhere in this EIR, including Chapter 3, *Project Description*, and Sections 5.3, *Air Quality*, 5.8, *Greenhouse Gas Emissions*, and 5.15, *Transportation*.

5.5.1.1 REGULATORY BACKGROUND

Federal Regulations

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The Act sets increased Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2019).

State Regulations

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006, 2011 and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2016 report, the three largest retail energy utilities provided an average of 27.6 percent of its supplies from renewable energy sources. Since 2003, 15,565 megawatts (MW) of renewable energy projects have started operations (CPUC 2016). SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. Senate Bill 100 (de Leon) passed in 2018 puts California on the path to 100% fossil-fuel free electricity by the year 2045 (CEC 2017a).

State Alternative Fuels Plan

Assembly Bill 1007 requires the California Energy Commission (CEC) to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with the California Air Resources Board (CARB) and in consultation with other federal, state, and local agencies to reduce petroleum consumption; increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen); reduce greenhouse gas (GHG) emissions; and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels; result in significant improvements in the energy efficiency of vehicles; and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CEC 2007).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (CCR Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2017b).

Title 24, Part 6, Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and

most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, go into effect starting January 1, 2020.

The 2016 Standards improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings (CBSC 2015). Under the 2016 Standards, residential and nonresidential buildings are generally 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Although the 2016 standards do not achieve zero net energy, they get very close to the state's goal and take important steps toward changing residential building practices in California.

The 2019 standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less (CBSC 2019a). The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011 and were last updated in 2016. The 2016 Standards became effective on January 1, 2017. On October 3, 2018, the CEC adopted the voluntary standards of the 2019 CALGreen, which become effective January 1, 2020.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019b).

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal*, above). In January 2012, CARB approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions (CARB 2017).

Local

City of Ontario Policy Plan

As part of the City of Ontario's Policy Plan, the Environmental Resources Element includes Goal ER3 which focuses on creating a cost-effective and reliable energy system sustained through low-impact construction, site and neighborhood energy conservation, and diverse sources of energy generation that collectively help to minimize the region's carbon footprint. Goal ER3 includes the following six policies:

- ER3-1 **Conservation Strategy.** Require conservation as the first strategy to be employed to meet applicable energy-saving standards.
- ER3-2 Green Development Communities. Require the use of best practices identified in green community rating systems to guide the planning and development of all new communities.
- ER3-3 **Building and Site Design.** Require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar and natural ventilation.
- ER3-4 **Green Development Public Buildings.** We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.
- ER3-5 Fuel Efficient and Alternative Energy Vehicles and Equipment. Purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.
- ER3-6 Generation Renewable Sources. Promote the use of renewable energy sources to serve public and private sector development.

5.5.1.2 EXISTING CONDITIONS

Electricity

The project site is in SCE's service area, which spans much of southern California from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north (CEC 2015b). Total electricity consumption in SCE's service area in gigawatt-hours (GWh) was 102,521 GWh in 2018 (CEC 2019).¹ Sources of electricity sold by SCE in 2017, the latest year for which data are available, were:

- 32 percent renewable, consisting mostly of solar and wind
- 8 percent large hydroelectric
- 20 percent natural gas
- 6 percent nuclear
- 34 percent unspecified sources that is, not traceable to specific sources (SCE 2018)²

The project site generates electricity demand for the day-to-day operations of the dairy farm and residences onsite. Existing use of electricity onsite includes lighting, heating and cooling, ventilation, and milking equipment, such as pumps and cooling systems. Based on billing statements for November 2018 to October 2019, the existing onsite operations resulted in a total electricity demand of 746,948 kWh for this period.

Gas

Southern California Gas Company provides gas service in the City of Ontario and has facilities throughout the City, including the project site. The service area of SoCalGas spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest to part of Fresno County on the north to Riverside County and most of San Bernardino County on the east (CEC 2015c). Total natural gas supplies available to SoCalGas for years 2018 and 2019 are 3,055 million cubic feet per day (MMcf/day) and 3,385 MMcf/day, respectively (CGEU 2018). Total natural gas consumption in SoCalGas's service area was 719,423 MMcf for 2018, which is equivalent to 1,971 MMcf/day (CEC 2019).

The project site generates natural gas demand for the day-to-day operations of the dairy farm and residences onsite. Estimated annual natural gas demand for the existing onsite operations is 387,510 kilo-British thermal units per year (kBTU/year) or 3,876 therms.³ Natural gas demands onsite mainly stem from the use of space and water heaters, cooking appliances, and laundry and water appliances.

5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

¹ One GWh is equivalent to one million kilowatt-hours

² The electricity sources listed above reflect changes after the 2013 closure of the San Onofre Nuclear Generating Station, which is owned by SCE.

³ Based on the reported natural gas usage for October 2019 of 323 therms and multiplied by 12 months

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

5.5.3 Plans, Programs, and Policies

Plans, Programs, and Policies

- PPP E-1 New buildings are required to achieve the current California Building Energy Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building Energy Efficiency Standards were effective starting January 1, 2017. The 2019 Building Energy Efficiency Standards will become effective on January 1, 2020. The Building Energy Efficiency Standards and CALGreen are updated triannually with a goal to achieve zero net energy for residential buildings by 2020 and nonresidential buildings by 2030.
- PPP E-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide bicycle parking for new non-residential buildings, or meet local bicycle parking ordinances, whichever is stricter (CALGreen Sections 5.106.4.1, 14.106.4.1, and 5.106.4.1.2).
- PPP E-3 California's Green Building Standards Code (CALGreen) requires the recycling and/or salvaging for reuse at minimum of 65 percent of the nonhazardous construction and demolition waste generated during most "new construction" projects (CALGreen Sections 4.408 and 5.408). Construction contractors are required to submit a construction waste management plan that identifies the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project, or salvaged for future use or sale and the amount (by weight or volume).
- PPP E-4 Construction activities are required to adhere to Title 13 California Code of Regulations Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.
- PPP E-5 New buildings are required to adhere to the California Green Building Standards Code and Water Efficient Landscape Ordinance requirements to increase water efficiency and reduce urban per capita water demand.
- PPP E-6 CARB's Renewable Portfolio Standard (RPS) is a foundational element of the State's emissions reduction plan. These mandates apply directly to investor-owned utilities, which in the case of the proposed project is Southern California Edison. On September 10, 2018, Senate Bill 100 was signed into law and established the following RPS targets: 50 percent renewable resources target by December 31, 2026, and 60 percent target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure

a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030.

- PPP E-7 The 2007 Energy Bill creates new federal requirements for increases in fleetwide fuel economy for passenger vehicles and light trucks under the Federal Corporate Average Fuel Economy Standards. The federal legislation requires a fleetwide average of 35 miles per gallon (mpg) to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase in requirements to achieve this goal. Analysis by CARB suggests that this will require an annual improvement of approximately 3.4 percent between 2008 and 2020.
- PPP E-8 SB 375 requires the reduction of GHG emissions from light trucks and automobiles through land use and transportation efforts that will reduce vehicle miles traveled. In essence, SB 375's goal is to control GHGs by curbing urban sprawl and through better land use planning. SB 375 essentially becomes the land use contribution to the GHG reduction requirements of AB 32, California's global warming bill enacted in 2006, and SB 32.

Project Design Features

- PDF E-1 The tilt-up concrete warehouse buildings would have rooftops that can support tenant improvements for solar panels (i.e., solar ready).
- PDF E-2 All outdoor water demands would be served with recycled water.
- PDF E-3 The project will include installation of electric vehicles charging stations to service 71 parking stalls for electric vehicles and 101 clean air/vanpool parking spaces.
- PDF E-4 The proposed project includes use of energy efficient LEDs, implementation of passive design such as skylights, building orientation, landscaping, and strategic colors to improve building energy performance, use of high performance dual pane window glazing in office storefronts, and incorporation of skylights into at least two percent of warehousing/distribution building roof area to provide natural light and to reduce electric lighting demand.

5.5.4 Environmental Impacts

5.5.4.1 METHODOLOGY

Based on CEQA Guidelines Appendix F, Energy Conservation, in order to ensure energy implications are considered in project decisions, CEQA identifies that EIRs include a discussion of the potential impacts of proposed projects, with particular emphasis on avoiding or reducing wasteful, unnecessary, or inefficient use of energy resources as applicable. Environmental effects may include the proposed project's energy requirements and its energy use efficiencies by amount and fuel type during demolition, construction, and operation; the effects of the proposed project on local and regional energy supplies; the effects of the

proposed project on peak and base period demands for electricity and other forms of energy; the degree to which the proposed project complies with existing energy standards; the effects of the proposed project on energy resources; and the proposed project's projected transportation energy use requirements and its overall use of efficient transportation alternatives, if applicable. The provided energy and fuel usage information provided in this section are based on the following:

- Building Energy: Electricity and natural gas usage associated with building energy that would be generated by land uses accommodated under the proposed project are based on CalEEMod default electricity and natural gas rates. New buildings are modeled to comply with the 2019 Building Energy Efficiency Standards, which are 30 percent more energy efficient for non-residential buildings than the 2016 Building Energy Efficiency Standards.
- On-Road Vehicle Fuel Usage: Fuel usage associated with operation-related vehicle trips in addition to construction-related vehicle trips (i.e., worker and vendor trips) are based on fuel usage data obtained from EMFAC2017, Version 1.0.2, and on vehicle trip generation and VMT data provided Urban Crossroads (see Appendix L2).
- Off-Road Equipment Fuel Usage: Fuel usage for construction-related off-road equipment are based on fuel usage data obtained from OFFROAD2017, Version 1.0.1, and on the equipment mix and operations anticipated for the proposed project (see Table 5.3-9, *Construction Activities, Phasing, and Equipment*, for details regarding the anticipated construction schedule and equipment).

5.5.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: The proposed project would not result in significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation. [Threshold E-1]

Impact Analysis: Implementation of the proposed project would result in energy consumption from construction and long-term operational activities associated with the proposed land uses.

Short-Term Construction Impacts

Construction of the proposed project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions and would result in short-term transportation-related energy use. Energy consumption during construction (2020 through 2022) was calculated using the CalEEMod, Version 2016.3.2 computer model, and the results are shown in Table 5.5-1.

	Gas		Diesel		Electricity	
Project Component	VMT	Gallons	VMT	Gallons	VMT	kWh
Construction Worker Commute	822,405	29,140	5,012	107	7,434	2,453
Construction Vendor Trips	2,526	496	63,122	7,838	0	0
Construction Truck Haul Trips	16	4	58,270	8,936	0	0
Construction Off-Road Equipment	N/A	1,711	N/A	123,877	0	0
Total	824,947	31,351	126,404	140,758	7,434	2,453
Source: CalEEMod Version 2016.3.2; EMF	AC2017 Version 1.0.	1; OFFROAD2017	Version 1.0.1			

 Table 5.5-1
 Construction-Related Fuel Usage

Electrical Energy

Construction activities associated with the land uses accommodated under the proposed project would require electricity use to power the construction equipment. The electricity use during construction would vary during different phases of construction, where the majority of construction equipment during demolition and grading would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered, such as interior construction and architectural coatings. Overall, the use of electricity would be temporary in nature and would fluctuate according to the phase of construction. Additionally, it is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities. Therefore, project-related construction activities would not result in wasteful or unnecessary electricity demands and impacts would be less than significant.

Natural Gas Energy

It is not anticipated that construction equipment used for the proposed project would be powered by natural gas and no natural gas demand is anticipated during construction. Therefore, impacts would be less than significant with respect to natural gas usage.

Transportation Energy

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy used during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading activities, would be gas-powered or diesel-powered.

The use of energy resources by vehicles and equipment would fluctuate according to the phase of construction. To limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize non-essential idling of construction equipment during construction in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. In addition, electrical energy would be available for use during construction from existing power lines and connection, which could minimize or avoid the use of generators that are less efficient than tying into existing SCE

infrastructure. Furthermore, construction trips would not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems (e.g., I-10, I-15, and I-60) that provides the most direct and shortest routes from various areas of the region. Moreover, all construction-equipment would cease upon completion of project construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Overall, it is expected that construction fuel associated with land use developments accommodated under the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects. Therefore, impacts would be less than significant with respect to transportation energy.

Long-Term Impacts during Operation

Operation of the proposed project would create additional demands for electricity and natural gas compared to existing conditions and would result in increased transportation energy use. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, use of on-site equipment and appliances; and indoor, outdoor, perimeter, and parking lot lighting.

Electrical Energy

Operation of the existing facility consumes electricity for various purposes, including, but not limited to heating, cooling, and ventilation of buildings, water heating, operation of electrical systems, security and control center functions, lighting, and use of onsite equipment and appliances. The proposed electricity consumption for the business park, warehouses, and associated parking lot are shown in Table 5.5-2.

Land Use	Electricity (kWh/year) ¹			
Warehouse & High-Cube Fulfillment (Unrefrigerated)	3,097,220			
High-Cube Cold Storage Warehouse (Refrigerated)	7,926,400			
Business Park	2,947,260			
Surface Parking Lot	123,818			
Proposed Project Total	14,094,698			
Existing Use Electricity Consumption ¹	756,948			
Net Change	13,337,750			

Table 5.5-2 Electricity Consumption

¹ Based on electricity usage between November 2018 and October 2019.

Electrical service to the proposed project would be provided by SCE through connections to existing offsite electrical lines and new onsite infrastructure. As shown in the table, the proposed project would have an annual electricity demand of 14,094,698 kWh/year and result in an overall net increase of 13,337,750 kWh/year compared to existing conditions. While the proposed project would increase energy demand at the site compared to existing conditions, it would be required to comply with the applicable Building Energy Efficiency Standards and CALGreen. Because the proposed project would be consistent with the

requirements of these energy-related regulations, it would not result in wasteful or unnecessary electricity demands. In addition, it is projected that 100 percent of the total outdoor water demand would be served by recycled water, which would contribute in minimizing the energy associated with the distribution and treatment of water. Therefore, the proposed project would not result in a significant impact related to electricity.

Natural Gas Energy

The proposed natural gas consumption for the project site is shown in Table 5.5-3. As seen in the table, natural gas demand would total 12,796,504 kBTU/year with the proposed project due to consumption from the proposed office building and warehouses. Overall, implementation of the proposed project would result in a net increase in natural gas demand by 12,408,994 kBTU/year. Because the proposed project would be built to meet the Building Energy Efficiency Standards, it would not result in wasteful or unnecessary natural gas demands. Therefore, operation of the proposed project would result in less than significant impacts with respect to natural gas usage.

Land Use	Natural Gas (kBTU/year)		
Warehouse & High-Cube Fulfillment (Unrefrigerated)	1,969,330		
High-Cube Cold Storage Warehouse (Refrigerated)	10,157,000		
Business Park	670,174		
Surface Parking Lot	0		
Proposed Project Total	12,796,504		
Existing Use Natural Gas Consumption ¹	387,510		
Net Change	12,408,994		

Table 5.5-3Natural Gas Consumption

Source: CalEEMod Version 2016.3.2 Notes: kBTU = kilo-British thermal unit

¹ Based on natural gas use reported for October 2019 multiplied by 12 months.

Transportation Energy

The proposed project would consume transportation energy during operations from the use of motor vehicles. Because the efficiency of the motor vehicles in use, such as the average miles per gallon for motor vehicles involved with the proposed project are unknown, estimates of transportation energy use is assessed based on the overall vehicle miles traveled (VMT) and related transportation energy use. The proposed project related VMT would primarily come from future employees. As seen in Table 5.5-4, the VMT for the proposed project is estimated to be 31,467,861 miles. However, the proposed project would involve the construction of an industrial and business park that would provide more opportunities for employment for residents of the City and would be within an urbanized area with nearby amenities and public transit options. Furthermore, the proposed project includes a Circulation Plan to provide connectivity to the trails and bikeway corridors identified in the Ontario Multipurpose Trails and Bikeway Corridor Plan. Specifically, the proposed project includes and identifies installation of a Class II bikeway along Merrill Avenue and multipurpose trails along Euclid, Eucalyptus, and Merrill Avenues. The City is also coordinating with regional

transit agencies to implement BRT service that would include the segment of Euclid Avenue along the western boundary of the project area. In addition, in compliance with CALGreen, the proposed project would include bicycle racks and storage for employee use. These features and aspects of the proposed project would contribute in minimizing VMT and transportation-related fuel usage. Overall, it is expected that operation-related fuel usage associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

	Gas		Diesel		Natural Gas		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
Passenger Vehicles	19,900,629	729,634	342,063	12,406	0	0	183,401	60,307
Transport Trucks	628,023	91,846	10,244,875	1,272,396	168,870	78,307	0	0
Operation Off-Road Equipment	0	0	N/A	14,685	N/A	22,222	0	0
Total	20,528,652	821,481	10,586,938	1,299,487	168,870	100,529	183,401	60,307
Source: CalEEMod Version 2016.3.2; EMFAC2017 Version 1.0.2; OFFROAD2017 Version 1.0.1								

Table 5.5-4Operation-Related Fuel Usage

Level of Significance Before Mitigation: Less than significant.

Impact 5.5-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. [Threshold E-2]

Impact Analysis: The following evaluates consistency of the proposed project to the energy-related policies and measures of the City of Ontario Policy Plan and Community Climate Action Plan (CAP).

City of Ontario Community Climate Action Plan

The City's CAP incudes measures related to building energy. However, as discussed in Table 5.8-8, *Consistency with the Community Climate Action Plan*, these measures would generally not be applicable to the proposed project. For example, Measures Energy 3 through Energy 5 pertain to the retrofit of existing residential and non-residential buildings only. Implementation of the proposed project would result in the development and operation of new buildings only. Therefore, the proposed project would not be inconsistent with the energy efficiency and renewable energy measures of the City's Community CAP.

City on Ontario Policy Plan

Table 5.5-5 evaluates the consistency of the proposed project to the applicable policies of the City of Ontario Policy Plan. As shown in the table, the proposed project would generally be consistent with the applicable policies of the City of Ontario Policy Plan. For example, the sustainable design strategies in Chapter 5.8 of the proposed Specific Plan includes use of energy efficient LEDs, implementation of passive design such as skylights, building orientation, landscaping, and strategic colors to improve building energy performance, use of high performance dual pane window glazing in office storefronts, and incorporation of skylights into at least two percent of warehousing/distribution building roof area to provide natural light and

to reduce electric lighting demand (see PDF E-4). Therefore, overall, the proposed project would be consistent and would not interfere with the City on Ontario Policy Plan.

Goal/Policy No.	Goal/Policy	Consistency
Policy ER3-1	Conservation Strategy: Require conservation as the first strategy to be employed to meet applicable energy-saving standards.	Consistent: The proposed Specific Plan incorporates energy-saving conservation strategies into its design guidelines by addressing lighting, bicycle parking, sustainable landscaping, and energy efficiency. Sustainable design strategies include design and construction of energy efficient buildings to reduce air, water, and land pollution and environmental impacts from energy production and consumption.
Policy ER3-2	Green Development – Communities: Require the use of best practices identified in green community rating systems to guide the planning and development of all new communities.	Consistent: Development of land uses accommodated under the proposed project would be in compliance with CALGreen.
Policy ER3-3	Building and Site Design: Require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar and natural ventilation.	Consistent: The proposed Specific Plan's Sustainable Design Strategies include the use of passive design to improve building energy performance through skylights, building orientation, landscaping, and use of select colors. Additionally, the development of land uses accommodated under the proposed Specific Plan would also be designed in compliance with CALGreen.
Policy ER3-4	Green Development – Public Buildings: We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	Not Applicable: This policy is applicable to City-owned buildings.
Policy ER3-5	Fuel Efficient and Alternative Energy Vehicles and Equipment: We purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	Consistent : Up to 71 parking stalls for electric vehicles and 101 clean air/vanpool parking spaces would be installed in the Specific Plan Area under the proposed project (see PDF E-3).
Policy ER3-6 Source: Ontario 2009	Generation – Renewable Sources: Promote the use of renewable energy sources to serve public and private sector development.	Consistent: There are no current plans to install a photovoltaic (PV) system under the proposed project. However, buildings developed under the proposed project would be built to comply with solar ready requirements of the Building Energy Efficiency Standards, which would enable future tenants to install a PV system.

Table 5.5-5Consistency with the Ontario Policy Plan

Level of Significance Before Mitigation: Less than significant.

5.5.5 Cumulative Impacts

The areas considered for cumulative impacts to electricity and natural gas supplies are the service areas of SCE and SoCalGas, respectively, described above in Section 5.5.1. Other projects would generate increased electricity and natural gas demands. However, all projects within the SCE and SoCalGas service areas would be required to comply with the Building Energy Efficiency Standards and CALGreen, which would

contribute in minimizing wasteful energy consumption. Therefore, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.5.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.5-1 and 5.5-2.

5.5.7 Mitigation Measures

No mitigation measures are necessary because there were no significant impacts identified under the applicable thresholds.

5.5.8 Level of Significance After Mitigation

Because no mitigation measures are required, impacts are the same as described in Section 5.5.6.

5.5.9 References

- California Air Resources Board. 2017, January 11 (reviewed). Clean Car Standards Pavley, Assembly Bill 1493. https://ww3.arb.ca.gov/cc/ccms/ccms.htm.
- California Energy Commission (CEC). 2007, December. State Alternative Fuels Plan. https://ww2.energy.ca.gov/2007publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF.
- ------. 2015a. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/ June 10.
- ———. 2015b, February 24. California Energy Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf.
- ———. 2015c, February 24. California Natural Gas Detailed Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/natural_gas_detailed_service_areas.pdf.
- 2017a, January. California Energy Commission Renewables Portfolio Standard Eligibility Commission Guidebook, Ninth Edition (revised). https://efiling.energy.ca.gov/getdocument.aspx?tn=217317.
- 2017b, January. 2016 Appliance Efficiency Regulations. https://ww2.energy.ca.gov/2017publications/CEC-400-2017-002/CEC-400-2017-002.pdf.
 - —. 2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html.
- ———. 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standa rds_FAQ.pdf.

—. 2019, July 16 (accessed). Electricity Consumption by Planning Area. http://www.ecdms.energy.ca.gov/elecbyplan.aspx.

- California Building Standards Commission (CBSC). 2015, June. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6). https://ww2.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf.
- ———. 2019b. 2019 California Code of Regulations Title 24, Part 11. https://www.ladbs.org/docs/default-source/publications/code-amendments/2013-california-green-building-standards-code.pdf?sfvrsn=5.
- California Gas and Electric Utilities (CGEU). 2018, July. 2018 California Gas Report. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.
- California Public Utilities Commission (CPUC). 2016. Renewables Portfolio Standard Quarterly Report: 4th Quarter 2016. https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy /Reports_and_White_Papers/Q4_2016_RPS_Report_to_the_Legislature_FINAL.pdf.

Ontario, City of. 2009. The Ontario Plan - Policy Plan. http://www.ontarioplan.org/policy-plan/.

Southern California Edison (SCE). 2018, July. Power Content Label: 2017. http://www.energy.ca.gov/pcl/labels/2016_labels/Southern_California_Edison-Default.pdf. https://www1.sce.com/wps/wcm/connect/5a573c93-08ba-4221-b8ffff69d041f934/2017_PCL_SCE.pdf?MOD=AJPERES.

Urban Crossroads. 2019, December 5. Ontario Ranch Business Park Traffic Impact Analysis.

. 2019, November 26. Ontario Ranch Business Park Vehicle Miles Travelled (VMT) Assessment.

United States Environmental Protection Agency (USEPA). 2019, May 6 (updated). Summary of the Energy Independence and Security Act Public Law 110-140 (2007). https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act.

This page intentionally left blank.