

4.6 ENERGY

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.6.1 Environmental Setting

Natural gas and electricity are currently provided to the project area by PG&E. A number of regulations exist associated with reducing energy usage, one of the most prevalent being Parts 6 and 11 of CBC (CCR, Title 24). Part 6, the 2019 Building Energy Efficiency Standards, focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and includes requirements that will enable both demand reductions and future solar electric and thermal system installations. The 2019 Building Energy Efficiency Standards also include updates to the energy efficiency divisions of Part 11, the 2019 California Green Building Standards (otherwise known as the CALGreen Code). A set of prerequisites has been established for both the residential and nonresidential standards, which include efficiency measures that should be installed in any building project striving to meet advanced levels of energy efficiency. The California Energy Commission estimates that implementation of the 2019 Building Energy Efficiency Standards may reduce statewide annual electricity consumption by approximately 53 percent less energy than those under the 2016 standards and may reduce greenhouse gas emissions by 70,000 metric tons over three years (California Energy Commission 2019).

In addition, the City of Daly City has developed its Climate Action Plan (CAP), which identifies how the City and the broader community could reduce Daly City’s GHG emissions and includes reduction targets, strategies, and specific actions.

The proposed project would be required to comply with all applicable regulations associated with energy efficiency, as well as the applicable Daly City General Plan policies.

4.6.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.6 of the General Plan EIR discusses impacts related to energy. Energy use under the General Plan would be moderated by applicable state regulations, and therefore would ensure that energy use will not be wasteful, inefficient, or unnecessary. The General Plan EIR also determined there would be a slight reduction in energy use per service population, indicating implementation of the General Plan would have a less than significant impact on energy use.

The following General Plan policies would be applicable to the proposed project:

- Policy HE-24: Gradually increase energy and water efficiency standards for all new and existing housing while minimizing the costs of such standards.
- Policy HE-25: Mandate the inclusion of green building techniques into most new construction.
- Policy HE-29: Promote alternative sources of energy in all homes.

Plan Bay Area EIR Summary

Chapter 2.4 of the Plan Bay Area EIR discusses potential impacts related to energy consumption. Implementation of the Plan Bay Area would result in the densification of land use, increased energy efficiency from residential land uses, and a net reduction in the consumption of automotive fuel. Additionally, future land use projects would be required to comply with the Title 24 Standards Building Code and incorporate feasible measures to reduce wasteful, inefficient, or unnecessary consumption of energy during construction or operation, and would increase reliance on renewable energy sources. Therefore, the Plan Bay Area EIR determined that impacts related to energy consumption would be less than significant, and no mitigation measures were identified.

4.6.3 Project-Specific Analysis

Impact EN-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Impact Analysis

Construction
Off-Road Equipment

The proposed project is anticipated to be constructed in four phases, with Phase 1 breaking ground January 1, 2021 and Phase 4 completed in October 2026. Table 4.6-1 provides estimates of the project’s construction fuel consumption from off-road construction equipment.

Table 4.6-1: Construction Off-Road Fuel Consumption

Phase	Construction Activity	Fuel Consumption (Gallons)
Phase 1	Demolition	2,242
	Site Preparation	3,763
	Grading	3,161
	Building Construction	19,287
	Paving	2,114
	Architectural Coating	420
Phase 2	Demolition	4,671
	Site Preparation	3,404
	Grading	2,654
	Building Construction	16,528
	Paving	3,052
	Architectural Coating	456

Phase	Construction Activity	Fuel Consumption (Gallons)
Phase 3	Demolition	7,474
	Site Preparation	6,586
	Grading	14,678
	Building Construction	19,287
	Paving	4,413
	Architectural Coating	420
Phase 4	Demolition	7,474
	Site Preparation	6,586
	Grading	5,268
	Building Construction	19,287
	Paving	5,441
	Architectural Coating	420
Phase 4 (Offsite Road Improvements)	Site Preparation	48
	Grading	107
	Paving	1,448
Total		160,691

Notes:

Totals may appear not to sum exactly due to rounding. All calculations were completed using unrounded values.

Source: Stantec 2020, Appendix D

As shown in Table 4.6-1, construction activities associated with the proposed project would be estimated to consume 160,691 gallons of diesel fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 4.6-2 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 4.6-2: Construction On-Road Fuel Consumption

Project Phase	Total Annual Fuel Consumption (gallons)
Phase 1	14,722
Phase 2	17,912
Phase 3	14,575
Phase 4	25,537
Phase 4 – Offsite Road Improvements	320

Project Phase	Total Annual Fuel Consumption (gallons)
Total Construction On-Road Fuel Consumption	73,065

Notes:

Totals may appear not to sum exactly due to rounding. All calculations were completed using unrounded values.

Source: Stantec 2020, Appendix D

Long-Term Operations

Transportation Energy Demand

Table 4.6-3 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the project site. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project.

Table 4.6-3: Long-Term Operational Vehicle Fuel Consumption

Project Component	Trips per Day	Annual VMT	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Apartments	4,518	9,399,075	34.2	274,827
Day Care	511	974,085	34.2	28,482
Total				303,309

Notes:

Percent of vehicle trips and VMT provided by CalEEMod.

Average fuel economy is provided by United States Department of Transportation, Bureau of Transportation Statistics and reflects fuel economy of overall fleet, not just new vehicles.

CalEEMod = California Emissions Estimator Model

VMT = vehicle miles traveled

Source: Stantec 2020, Appendix D

As shown in Table 4.6-3, annual vehicular fuel consumption is estimated to be 303,309 gallons of both gasoline and diesel fuel. In terms of land use planning decisions, the proposed project would constitute development within an established community and would not be opening up a new geographical area for development such that it would draw mostly new trips or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce VMT. For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region.

Building Energy Demand

As shown in Tables 4.6-4 and 4.6-5, the proposed project is estimated to demand 2,340,535 kilowatt hours of electricity and 11,296,973 100-thousands of British Thermal Units of natural gas, respectively, on an annual basis.

Table 4.6-4: Long-Term Electricity Usage

Land Use	Size (ksf)	Title 24 Electricity Energy Intensity (kWh/size/year)	Nontitle 24 Electricity Energy Intensity (kWh/size/year)	Lighting Energy Intensity (kWh/size/year)	Total Electricity Energy Demand (kWh/size/year)	Total Electricity Demand (kWh/year)
Apartments	555	233.06	3172.76	810.36	4216.18	2,339,980
Day Care Center	125	0.66	1.27	2.51	4.44	555
Total						2,340,535

Notes:

The proposed project could potentially include a variety of uses consistent with the development standards; however, the land use selections above were based on estimating the “worst-case” scenario demand for electricity.

ksf = 1,000 square feet

kWh = kilowatt hour

Source: Stantec 2020, Appendix D

Table 4.6-5: Long-Term Natural Gas Usage

Land Use	Dwelling Units (ksf)	Title 24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle 24 Natural Gas Energy Intensity (KBTU/size/year)	Total Natural Gas Energy Demand (KBTU/size/year)	Total Natural Gas Demand (KBTU/year)
Apartments	555	17734.5	2615	20349.5	11,293,973
Day Care Center	125	14.85	1.62	16.47	2,059
Total					11,296,031

Notes:

The proposed project could potentially include a variety of uses consistent with the development standards; however, the land use selections above were based on estimating the “worst-case” scenario demand for electricity.

ksf = 1,000 square feet

KBTU= 1,000 British Thermal Units

Source: Stantec 2020, Appendix D

Buildings and infrastructure constructed pursuant to the proposed project would comply with the versions of CCR Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued. In addition, the City’s General Plan includes policies and programs that seek to reduce energy consumption.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2019 CALGreen and Title 24 would increase energy efficiency and reduce energy demand in comparison to existing residential structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact EN-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

The City's General Plan and Plan Bay Area include energy goals and policies to reduce the reliance on nonrenewable energy sources in existing and new commercial, industrial, and public structures. The City's CAP also includes strategies focused on green building, renewable energy, transportation and land use, education and waste management.

The proposed project would not conflict with the energy objectives of the General Plan, Plan Bay Area, nor the strategies in its CAP. The proposed project would constitute development within an established community and would not be opening up a new geographical area for development such that it would draw mostly new trips, or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce VMT. The proposed project would not impede the City's bicycle and pedestrian network, would include onsite and offsite improvements of pedestrian infrastructure (sidewalks), and would provide bicycle parking in accordance with the City's Municipal Code.

The proposed project would comply with the versions of CCR Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued and are in accordance with all applicable City measures.

For the above reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact is less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.