

## **19 ENERGY CONSERVATION**

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This section describes the existing energy resources of the project site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Placer County Government Center Master Plan Update Project (PCGC Master Plan Update or proposed project), including the multifamily residential project in the northeast corner of the site, and the Health and Human Services building near the center of the site. Specifically, this section discusses the regulatory framework and discloses estimated energy use during the construction and operational phases of the proposed project. This analysis considers the electricity, natural gas, and transportation fuel (petroleum) demand of the proposed project, as well as potential service delivery impacts.

Information in this section is based on the proposed project's Greenhouse Gas Emissions analysis presented in Chapter 13 of this Environmental Impact Report (EIR) and the CalEEMod modeling provided in Appendix F.

### **19.1 EXISTING CONDITIONS**

The environmental setting for the proposed project related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed below. In summary, in 2016 (the latest calendar year for which data is uniformly available for all three types of energy sources), California's estimated annual energy use included the following:

- Approximately 256,846 gigawatt hours of electricity (EIA 2018a)
- Approximately 22 billion therms of natural gas (approximately 6 billion cubic feet of natural gas per day) (EIA 2018b)
- Approximately 16 billion gallons of gasoline (CEC 2017a)

#### **Electricity**

Electricity usage in California varies substantially by the types of uses in a building, types of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, and the national average has steadily increased (CEC 2015a).

Pacific Gas & Electric (PG&E) is the utility provider for Placer County. PG&E provides electric services to 5.4 million customers including 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines over a 70,000-square-mile service area that includes in northern and central California (PG&E 2016). As presented in Table 19-1, according to

PG&E, customers consumed approximately 83 million kilowatt-hours (kWh) of electricity in 2016 (CEC 2018).

**Table 19-1  
PG&E 2016 Electricity Consumption**

Sector	Total Electricity (in millions of kWh)
Agricultural and Water Pump	6,691.57
Commercial Buildings	30,661.45
Commercial Other	4,545.69
Industry	10,619.50
Mining and Construction	1,909.03
Residential	28,625.01
Streetlight	355.28
<b>Total Consumption</b>	<b>83,407.53</b>

Source: CEC 2017c.

PG&E receives electric power from a variety of sources. According to CPUC’s 2016 Biennial Renewable Portfolio Standard (RPS) Program Update, 32.9% of PG&E’s power came from eligible renewable energy sources in 2016, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (CPUC 2017a). This is an improvement from the 28.0% that PG&E maintained in 2014.

Based on recent energy supply and demand projections in California, statewide annual peak electricity demand is projected to grow an average of 890 megawatts per year for the next decade, or 1.4% annually, and consumption per capita is expected to remain relatively constant at 7,200–7,800 kWh per person (CEC 2015).

In Placer County, PG&E reported an annual electrical consumption of approximately 84.1 million kWh in 2016, with 27.0 million kWh for non-residential use and 57.1 million kWh for residential use (CEC 2017d).

### **Natural Gas**

The California Public Utilities Commission (CPUC) regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from Pacific Gas & Electric (PG&E), Southern California Gas (SoCalGas), SDG&E, Southwest Gas, and several smaller natural gas utilities. CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage (CPUC 2017b). PG&E provides natural gas service to most of northern California and would provide natural gas to

the proposed project. According to PG&E, customers consumed approximately or approximately 4,560 million therms of natural gas, in 2016 (CEC 2017d).

**Table 19-2**  
**PG&E 2016 Natural Gas Consumption**

Sector	Total Natural Gas (in millions of therms)
Agricultural and Water Pump	36.09
Commercial Buildings	854.57
Commercial Other	56.28
Industry	1,797.55
Mining and Construction	69.71
Residential	1,745.53
<b>Total Consumption</b>	<b>4,559.73</b>

Source: CEC 2017e.

Natural gas is used for cooking and space heating to generating electricity and as an alternative transportation fuel. The majority of California’s natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 30% of the natural gas delivered by California utilities in 2016. Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 70% of the natural gas delivered by California utilities in 2016 (EIA 2017).

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2017b).

In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California (CPUC 2017b). Natural gas from out-of-state production basins is delivered into California through the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Southern Trails, and Mojave Pipeline. The North Baja–Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers it through California into Mexico. The Federal Energy Regulatory Commission regulates the transportation of natural gas on interstate pipelines, and CPUC often participates in Federal Energy Regulatory Commission regulatory proceedings to represent the interests of California natural gas consumers (CPUC 2017b).

Most of the natural gas transported through interstate pipelines, as well as some California-produced natural gas, is delivered through the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California’s “backbone” natural gas pipeline system). Natural gas on the backbone pipeline system is then delivered into local transmission and distribution pipeline systems or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline system, and some core customers and other noncore customers take natural gas off the utilities’ distribution pipeline systems. CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the natural gas delivered to California’s gas consumers in 2012 (CPUC 2017b).

PG&E and SoCalGas own and operate several natural gas storage fields that are located in Northern and Southern California. These storage fields and four independently owned storage utilities—Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage—help meet peak-season natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently (CPUC 2017b).

California’s regulated utilities do not own any natural gas production facilities. All natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the Federal Energy Regulatory Commission in the mid-1980s and is determined by market forces. However, CPUC decides whether California’s utilities have taken reasonable steps to minimize the cost of natural gas purchased on behalf of its core customers (CPUC 2017b).

As indicated in the preceding discussion, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available through existing delivery systems, thereby increasing the availability and reliability of resources.

Placer County, including the project site, is served by PG&E. In 2016 (the most recent year for which data is available), PG&E had delivered 84 millions of therms, with the majority going to residential uses (57 millions of therms) (CEC 2017f).

Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy efficiency programs, and the availability of alternative renewable energy sources. As previously indicated, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available through existing delivery systems, thereby increasing the availability and reliability of resources.

## Petroleum

There are more than 35 million registered vehicles in California, and those vehicles consume an estimated 18 billion gallons of fuel each year (CEC 2017b; DMV 2017). Gasoline and other vehicle fuels are commercially provided commodities and would be available to the proposed project through commercial outlets.

Petroleum currently accounts for approximately 92% of California’s transportation energy consumption (CEC 2017b). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate (CEC 2017b). Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state.

## 19.2 REGULATORY FRAMEWORK

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, CPUC and CEC are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized below.

### Federal Regulations

#### *Federal Energy Policy and Conservation Act*

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light

trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer’s average fuel economy for the fleet of vehicles available for sale in the United States.

### ***Intermodal Surface Transportation Efficiency Act of 1991***

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

### ***Transportation Equity Act for the 21st Century***

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (discussed above). The act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

### ***Energy Independence and Security Act of 2007***

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2013, 2015). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United

States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as “RFS2” and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel, and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green” jobs.

### **State Regulations**

The discussion below focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Also refer to Chapter 13, Greenhouse Gas Emissions, which addresses various policies, regulations, and laws targeted to the reduction of GHG emissions that are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

#### ***Warren-Alquist Act***

The California Legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act was created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation’s first energy conservation standards for both buildings constructed and appliances sold in California.

- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

### ***Senate Bill 1078 (2002)***

Senate Bill (SB) 1078 (2002) established the California RPS Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

### ***Senate Bills 107 (2006), X1-2 (2011), and 350 (2015)***

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% shall come from renewables; by December 31, 2016, 25% shall come from renewables; and by December 31, 2020, 33% shall come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the 33% RPS in 2020 and the 50% RPS in 2030. Therefore, the proposed project's reliance on non-renewable energy sources would also be reduced.

### ***Assembly Bill 1007 (2005)***

Assembly Bill (AB) 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with the other state, federal, and local agencies. The plan assessed various alternative fuels and developed fuel

portfolios to meet California’s goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

### ***Assembly Bill 32 (2006) and Senate Bill 32 (2016)***

In 2006, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state’s codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focus on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state’s GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.8 of this EIR.

### ***California Building Standards***

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California’s building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. The 2016 Title 24 building energy efficiency standards, which became effective on January 1, 2017, further reduce energy used in the state. In general, single-family homes built to the 2016 standards are anticipated to use approximately 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and non-residential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a).

Title 24 also includes Part 11, the California’s Green Building Standards (CALGreen). CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The 2016 CALGreen standards became effective on January 1, 2017. The mandatory standards require the following:

- 20% mandatory reduction in indoor water use
- 50% diversion of construction and demolition waste from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency

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### ***Integrated Energy Policy Report***

CEC is responsible for preparing integrated energy policy reports, which identify emerging trends related to energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The CEC’s 2015 Integrated Energy Policy Report discusses the state’s policy goal to require that new residential construction be designed to achieve zero net energy (ZNE) standards by 2020 and that new non-residential construction be designed to achieve ZNE standards by 2030, which is relevant to this EIR. Refer to Section 4.8 of this EIR for additional information on the state’s ZNE objectives and how the state’s achievement of its objectives would serve to beneficially reduce the proposed project’s GHG emissions profile and energy consumption.

### ***State Vehicle Standards***

In a response to the transportation sector accounting for more than half of California’s carbon dioxide (CO<sub>2</sub>) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program 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 called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global warming gases and 75% fewer smog-forming emissions (CARB 2011).

Although the focus of the state’s vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

### ***Sustainable Communities Strategy***

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code, Section 65080, SB 375 requires metropolitan planning organizations (Sacramento Area Council of Governments) to include a sustainable communities strategy in its regional transportation plan. The main focus of the sustainable communities strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also a part of a bigger effort to address

other development issues within the general vicinity, including transit and VMT, which influence the consumption of petroleum-based fuels.

## **Local Regulations**

### ***Sacramento Area Council of Governments***

In February 2016, Sacramento Area Council of Governments (SACOG), the designated metropolitan planning organization (MPO) for the Sacramento region adopted the 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2016). The MTP/SCS is a long-range plan for transportation projects within the planning area and focuses on cost-effective operational improvements to preserve the existing and expanded regional transportation system through 2035. The 2016 update to the MTP/SCS focused on refinement of and addressing implementation challenges to the previous (2012) plan. The SACOG Board of Directors has adopted five guiding policy themes including, land use forecast, transportation funding, investment strategy, investment timing, and plan effects which provide direction for the plan update.

### ***Sacramento Region Blueprint***

In 2007 SACOG adopted the Preferred Blueprint Scenario for 2050 (Blueprint). The Blueprint depicts a way for the region to grow through 2050 in a manner consistent with the seven smart growth principals: (1) transportation choices; (2) mixed-use developments; (3) compact development; (4) housing choice and diversity; (5) use of existing assets; (6) quality design, and (7) natural resources conservation. The seven smart growth principals provide guidance for land use planners which, when implemented, would ultimately result in an overall reduction in vehicle miles traveled (VMT), emissions of criteria pollutants, and greenhouse gas emissions.

### ***Auburn/Bowman Community Plan***

The *Auburn/Bowman Community Plan's* Air Quality section of the Environmental Resources Management Element provides guidance in land use and development policies for implementation by the PCAPCD. The following *Auburn/Bowman Community Plan* policies are applicable to the proposed project:

**Goals III.A.2.b** Promote safe innovative, and energy efficient residential development.

**Policy A.3.a** Encourage residential development in areas which provide an adequate and accessible transportation network and which reduce commuting distances to areas of employment.

**Policy A.3.b** Discourage proposals which are not part of a cohesive transportation network and which do not make possible a diversity of transportation systems (pedestrian, bicycle, equestrian, public, private vehicle, etc.).

**Policy A.3.i** Encourage the use of passive and direct solar collection and incorporate home design innovations which limit energy consumption.

**Policy A.3.p** Pedestrian walkways should be incorporated into multifamily and urban residential subdivisions to provide access to adjoining neighborhoods and adjacent commercial areas.

**Goals III.B.2** a. Provide residential densities and development patterns which maximize transportation opportunities.

**Policy B.3.d** Promote energy and resource conservation in any future land development project especially through consideration of alternative energy sources (i.e. passive solar collection) or state of the air energy and water conservation measures.

**Goals III.C.2** f. Provide for residential densities and development patterns which maximize the potential for pedestrian interface opportunities and non-auto transportation alternatives.

1. Take advantage of the best energy technology to maximize the energy efficiency of all buildings and structures.

**Policy C.2.5** Commercial and residential site layouts should be designed with the intent to encourage human interaction, and to be compatible with the surrounding environment, versus designs which solely accommodate automobile usage; pedestrian walkways should be provided between commercial and residential areas.

**Policy C.2.c** Resource conservation shall be incorporated into project design. These measures include, but are not limited to, energy and water conservation measures.

**Goals IV.B.6.a**

2. Protect and improve air quality in the Auburn area.
3. Assure Placer County’s compliance with state and federal air quality standards.

**Policy 6.B.5** Use Indirect Source Control Program strategies for all subsequent, new or revised land uses within the Plan area to reduce emissions. These are to be developed in the EIR for the Plan area and applied through individual land use performance standards.

**Policy 6.B.6** Use Direct Source Review as outlined in the EIR for the Plan to reduce emissions from existing land uses.

**Policy 6.B.7** Produce mitigations for air quality impacts associated with adoption of the Community Plan and include them in the monitoring plan.

***Placer County General Plan***

The *Placer County General Plan* Transportation Element, Public facilities Element, and Air Quality section of the Natural Resources Element provides guidance in land use and development policies for implementation by the PCAPCD. The following General Plan policies are applicable to the proposed project:

**Goal 3.C** To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County’s roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

**Policy 3.C.1** The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.

**Policy 3.C.2** The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.

**Policy 3.C.3** The County shall work with other responsible agencies to develop other measures to reduce vehicular travel demand and meet air quality goals.

**Policy 3.C.4** During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.

**Goal 3.D** To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

**Policy 3.D.1** The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the County's major employment and housing areas and between its existing and planned bikeways.

**Policy 3.D.3** The County shall pursue all available sources of funding for the development and improvement of trails for non-motorized transportation (bikeways, pedestrian, and equestrian).

**Policy 3.D.4** The County shall promote non-motorized travel (bikeways, pedestrian, and equestrian) through appropriate facilities, programs, and information.

**Policy 3.D.5** The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

**Policy 3.D.7** The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.

**Policy 3.D.10** Consider the accessibility and accommodation of cycle and pedestrian traffic, where appropriate, on and across major thoroughfares.

**Policy 3.D.12** Provide safe and comfortable routes for walking, cycling, and where feasible, public transportation, to encourage use of these modes of transportation, enable convenient and active travel as part of daily activities, reduce pollution, and meet the needs of all users of the roadway system.

**Goal 4.C** To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

**Policy 4.C.6** The County shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction;

- b. Encouraging water-conserving landscaping and other conservation measures;
- c. Encouraging retrofitting existing development with water-conserving devices; and,
- d. Encouraging water-conserving agricultural irrigation practices.

**Policy 4.C.7** The County shall promote the use of reclaimed wastewater to offset the demand for new water supplies.

**Goal 4.G** To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

**Policy 4.G.1** The County shall require all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.

**Policy 4.G.2** The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

**Policy 4.G.12** The County shall ensure that solid waste collection service is available to all residential, commercial, and industrial areas within the current boundaries of Franchise Areas.

**Goal 6.F** To protect and improve air quality in Placer County.

**Policy 6.F.5** The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of countywide indirect and area wide source programs and transportation control measures (TCM) programs. Project review shall also address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.

**Policy 6.F.6** The County shall require project level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.

**Policy 6.F.8** The County shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.

**Goal 6.G** To integrate air quality planning with the land use and transportation planning process.

**Policy 6.G.1** The County shall require new development to be planned to result in smooth flowing traffic conditions for major roadways. This includes traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.

**Policy 6.G.3** The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

### 19.3 PROJECT IMPACTS

#### Significance Criteria

The CEQA Guidelines provide no specific thresholds for impacts associated with energy consumption. However, Appendix F of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts with regard to energy. Based on Appendix F of the CEQA Guidelines, a project could have a significant impact on energy conservation if the project would:

1. Result in wasteful, inefficient, or unnecessary consumption of energy.
2. Conflict with existing energy standards and regulations.

## Impact Analysis

### Impact 19-1

	Would the project result in wasteful, inefficient, or unnecessary consumption of energy?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
<b>Level of Significance:</b>	Less than Significant	Less than Significant	Less than Significant
<b>Mitigation Measure:</b>	None required	None required	None required
<b>Significance after Mitigation:</b>	Less than Significant	Less than Significant	Less than Significant

## PCGC Master Plan Update

### Electricity Use

#### *Construction*

Construction of the proposed project would require the use of electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers and heating, ventilation, and air conditioning). The amount of electricity used during construction would be minimal because typical energy demand stems from the use of several construction trailers in addition to electrically powered hand tools. The majority of the energy used during construction would be from petroleum. The electricity used for construction activities would be temporary and minimal; therefore, impacts would be **less than significant**.

#### *Operational*

At full build-out, the proposed project's operational phase would require electricity for operating the various buildings (appliances, lighting, etc) and for operating equipment. The proposed project would also be required to comply with the 2016 Title 24 standards or the most recent standards at the time of building issuance. The new 2019 Title 24 standards will go into effect January 1, 2020, therefore, using the 2016 Title 24 standards as provided in CalEEMod 2016.3.2 as a basis for energy modeling would be conservative.

The estimated operational electricity consumption associated with the proposed project at full build-out in 2036 is shown in Table 19-3. The estimated existing operational electricity consumption in 2017 was subtracted from the proposed project electricity consumption to present the net change in electricity consumption. Details of the calculations are provided in Appendix F.

**Table 19-3  
Estimated Electrical Demand – Operation**

<b>Land Use Type<sup>a</sup></b>	<b>Estimated Electrical Demand (kWh per year)<sup>b</sup></b>
Residential Component (includes Multifamily Residential project)	2,430,000
Government Facilities (includes Health and Human Services)	4,790,000
Hotel	400,510
Parking Lots	300,041
Retail Shops	606,006
<b>Total</b>	<b>8,526,557</b>
<i>Existing Electrical Demand</i>	<i>3,490,000</i>
<b>Net Project Electrical Demand (project build-out minus existing facilities)</b>	<b>5,036,557</b>

**Source:** Appendix F.

Health and Human Services = Health and Human Services building; kWh = kilowatt-hour; Multifamily Residential project = multifamily residential.

<sup>a</sup> Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the proposed project.

<sup>b</sup> Estimated electrical demand is based on CalEEMod modeling for both the proposed project and existing facilities.

As shown in Table 19-3, the proposed project is estimated to have a total electrical demand of approximately 8,526,557 kWh per year, which is based on CalEEMod (Appendix F). The net increase in electricity associated with the proposed project is estimated to be 5,036,557 kWh per year. Notably, the PCGC has four solar PV rays installed including an 82kW array on the 400 ramp, a 132 kW array on building 100/110, a 45 kW array on the Finance Administration Building, and a 325 kW ground mounted array adjacent to the Juvenile Detention Center. While these solar arrays would help offset some of the proposed project's electricity demand, existing solar energy production accounted for a small percentage (13 percent) of the total existing electricity demand of the PCGC in 2015. The proposed PCGC Master Plan Update Design Guidelines (County of Placer 2018a) encourage all new construction within the PCGC campus to include roof-top, carport and ground-mount solar generation as well as energy efficient building design. This would include LED lighting for interiors and exteriors and water saving features such as bioretention and vegetated swales, native/drought tolerant plant material, and high efficiency irrigation systems. These water saving features would reduce the consumption of indirect electricity consumption.

Therefore, because the proposed project would implement sustainability features in order to reduce direct and indirect electricity demand, the proposed project would not result in a wasteful use of electricity. Impacts related to operational electricity use would be **less than significant**.

## Natural Gas Use

### *Construction*

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the following subsection, Petroleum. Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, impacts would be **less than significant**.

### *Operational*

Natural gas would be directly consumed throughout operation of the proposed project, primarily through building heating. As previously described and consistent with electricity use, the proposed project’s natural gas use was estimated using CalEEMod.

Table 19-4 shows the estimated natural gas use (in therms per year) for the proposed project during operation.

**Table 19-4**  
**Estimated Natural Gas Demand – Operation**

Land Use Type <sup>a</sup>	Estimated Natural Gas Demand (therms per year) <sup>b</sup>
Residential Component (includes Multifamily Residential project)	63,600
Government Facilities (includes Health and Human Services)	78,700
Hotel	16,200
Parking Lots	0
Retail Shops	6,014
<b>Total</b>	<b>164,514</b>
<i>Existing Natural Gas Demand</i>	<i>59,800</i>
<b>Net Project Natural Gas Demand (project build-out minus existing facilities)</b>	<b>104,714</b>

**Source:** Appendix F.

Health and Human Services = Health and Human Services building; kWh = kilowatt-hour; Multifamily Residential project = multifamily residential.

<sup>a</sup> Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the proposed project.

<sup>b</sup> Estimated electrical demand is based on CalEEMod modeling for both the proposed project and existing facilities.

As presented in Table 19-4, the proposed project is estimated to use approximately 164,514 therms of natural gas per year. The net increase in natural gas consumption associated with the proposed project is estimated to be 104,714 therms per year. By comparison, in 2016, PG&E supplied 4.6 billion therms of natural gas to customers (CEC 2017c). The proposed project’s

energy efficiency design features would not result in a wasteful use of energy. Therefore, natural gas consumption impacts would be **less than significant**.

## Petroleum Use

### *Construction*

Petroleum would be consumed throughout construction of the proposed project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, and haul trucks involved in moving dirt around the project site, would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during each phase of construction. CalEEMod was used to estimate construction equipment usage, and results are included in Appendix F. Based on that analysis, over all phases of construction, diesel-fueled construction equipment would operate for an estimated 139,570 hours, as summarized in Table 19-5.

**Table 19-5  
Hours of Operation for Construction Equipment**

Phase	Hours of Equipment Use
Phase 1	40,760
Phase 2	30,580
Phase 3	46,620
Phase 4	21,610
<b>Total</b>	<b>139,570</b>

Source: Appendix F

Fuel consumption from construction equipment was estimated by converting the total CO<sub>2</sub> emissions from each construction phase to gallons using conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. The conversion factor for gasoline is 9.13 kilograms per metric ton CO<sub>2</sub> per gallon, and the conversion factor for diesel is 10.35 kilograms per metric ton CO<sub>2</sub> per gallon (The Climate Registry 2016). The estimated diesel fuel use from construction equipment is shown in Table 19-6.

**Table 19-6  
Construction Equipment Diesel Demand**

Phase	Pieces of Equipment	Equipment CO <sub>2</sub> (MT)	kg CO <sub>2</sub> /Gallon	Gallons
Phase 1	49	830.55	10.35	80,246.60
Phase 2	38	653.01	10.35	63,092.46
Phase 3	38	992.30	10.35	95,874.23
Phase 4	36	473.49	10.35	45,747.68
<b>Total</b>				<b>284,960.97</b>

**Sources:** Appendix F (pieces of equipment and equipment CO<sub>2</sub>); The Climate Registry 2016 (kg/CO<sub>2</sub>/gallon).  
CO<sub>2</sub> = carbon dioxide; kg = kilogram; MT = metric ton

Fuel consumption from worker and vendor trips is estimated by converting the total CO<sub>2</sub> emissions from each construction phase to gallons using the conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled. Calculations for total worker, vendor, and hauler fuel consumption are provided in Tables 19-7, 19-8, and 19-9, respectively.

**Table 19-7  
Construction Worker Vehicle Gasoline Demand**

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg CO <sub>2</sub> /Gallon	Gallons
Phase 1	73,960	384.72	9.13	42,138.13
Phase 2	63,740	278.97	9.13	30,555.09
Phase 3	128,800	474.11	9.13	51,928.66
Phase 4	30,120	102.42	9.13	11,217.51
<b>Total</b>				<b>135,839.39</b>

**Sources:** Appendix F (construction worker CO<sub>2</sub>); The Climate Registry 2016 (kg/CO<sub>2</sub>/gallon).  
CO<sub>2</sub> = carbon dioxide; kg = kilogram; MT = metric ton

**Table 19-8  
Construction Vendor Truck Diesel Demand**

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg/CO <sub>2</sub> /Gallon	Gallons
Phase 1	24,240	311.08	10.35	30,055.69
Phase 2	24,900	305.52	10.35	29,518.73
Phase 3	38,000	455.25	10.35	43,985.63
Phase 4	10,580	126.07	10.35	12,181.00
<b>Total</b>				<b>115,741.05</b>

**Sources:** Appendix F (construction worker CO<sub>2</sub>); The Climate Registry 2016 (kg/CO<sub>2</sub>/gallon).  
CO<sub>2</sub> = carbon dioxide; kg = kilogram; MT = metric ton

**Table 19-9  
Construction Haul Truck Diesel Demand**

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg CO <sub>2</sub> /Gallon	Gallons
Phase 1	144	5.67	10.35	547.63
Phase 2	764	28.12	10.35	2,716.55
Phase 3	124	4.46	10.35	430.98
Phase 4	204	7.24	10.35	699.74
<b>Total</b>				<b>547.33</b>

**Sources:** Appendix F (construction worker CO<sub>2</sub>); The Climate Registry 2016 (kg/CO<sub>2</sub>/gallon).  
CO<sub>2</sub> = carbon dioxide; kg = kilogram; MT = metric ton

As shown in Tables 19-6 through 19-9, the proposed project is estimated to consume 537,089 gallons of petroleum during the construction phase. By comparison, approximately 309 billion gallons of petroleum would be consumed in California over the course of the proposed project's construction period (16 years) based on the California daily petroleum consumption estimate of approximately 52.9 million gallons per day (CEC 2016). The proposed project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Therefore, because petroleum use during construction, including construction of the proposed project, would be temporary and minimal and would not be wasteful or inefficient, impacts would be **less than significant**.

### ***Operational***

The majority of fuel consumption resulting from the proposed project's operational phase would be attributable to the use of resident, visitor, and employee motor vehicles traveling to and from the project area, as well as fuels used for alternative modes of transportation that may be used by residents, visitors, and employees.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project area is a function of VMT as a result of proposed project operation. As shown in Appendix F, the daily VMT attributable to the proposed project (excluding the Health and Human Services building [Health and Human Services] and multifamily residential [Multifamily Residential project]) is expected to be approximately 72,014 VMT per day (Appendix E). The daily VMT estimated for the Health and Human Services and Multifamily Residential project are 16,134 and 2,016 VMT per day respectively. Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO<sub>2</sub> emissions from each land use type to gallons using the conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 92.9% of the fleet range from light-duty to medium-duty vehicles and motorcycles were assumed to run on gasoline. The remaining 7.1% of vehicles represent medium-heavy duty to heavy-duty vehicles and buses/recreational vehicles, which were assumed to run on diesel.

Calculations for annual mobile-source fuel consumption are provided in Table 19-10.

**Table 19-10**  
**Mobile Source Fuel Consumption – Operation**

Fuel	Vehicle MT CO <sub>2</sub>	kg CO <sub>2</sub> /Gallon	Gallons
Gasoline	15,237.67	9.13	1,668,967.67
Diesel	1,166.08	10.35	112,664.45
<b>Total</b>			<b>1,781,632.12</b>

**Sources:** Appendix F (mobile source CO<sub>2</sub>); The Climate Registry 2016 (kg/CO<sub>2</sub>/gallon).  
CO<sub>2</sub> = carbon dioxide; kg = kilogram; MT = metric ton

As shown in Table 19-10, mobile sources from the proposed project would result in approximately 1,668,968 gallons of gasoline per year and 112,664 gallons of diesel consumed per year beginning in 2036. By comparison, California as a whole consumed approximately 16 billion gallons of petroleum in 2016 (CEC 2017a).

Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by residents, visitors, and employees is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project Area during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California (CARB 2016). Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by the year 2020 and 13% by the year 2035 for light-duty passenger vehicles in the planning area for the Sacramento Area Council of Governments. This reduction would occur by reducing VMT through the integration of land use and transportation planning (SACOG 2016). The proposed project would include multi-modal design features, traffic-calming measures, and integrated walking and bicycling trails which would help support the goals of SB 375 to reduce VMT. As such, operation of the proposed project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy. Further, the inclusion of electric-vehicle charging outlets within residential uses and government facilities would result in the potential for reduced petroleum use during operation because residents would have the option of charging their electric vehicles.

In summary, although the proposed project would increase petroleum use during operation, the use would be a small fraction of the statewide use and, due to efficiency increases, diminish over time. Additionally, the inclusion of on-site walking/bicycling trails and other resident-serving amenities would help ensure that petroleum-based fuels are efficiently consumed. Given these

considerations, petroleum consumption associated with the proposed project would not be considered inefficient or wasteful and impacts would be **less than significant**.

### Health and Human Services Project

The energy consumption of the proposed Health and Human Services building was included in the Master Plan Update Analysis above. Compliance with all applicable regulations and policies will ensure that the contribution of the Health and Human Services building to energy conservation will be consistent with the previous PCGC Master Plan Update analysis and the impact would remain **less than significant**.

### Multifamily Residential Project

The energy consumption of the proposed Multifamily Residential project was included in the Master Plan Update Analysis above. Compliance with all applicable regulations and policies will ensure that the contribution of the Multifamily Residential project to energy conservation will be consistent with the previous PCGC Master Plan Update analysis and the impact would remain **less than significant**.

Impact 19-2	Would the project conflict with existing energy standards and regulations?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
<b>Level of Significance:</b>	Less than Significant	Less than Significant	Less than Significant
<b>Mitigation Measure:</b>	None required	None required	None required
<b>Significance after Mitigation:</b>	Less than Significant	Less than Significant	Less than Significant

### PCGC Master Plan Update

The proposed project would follow applicable energy standards and regulations during the construction phases. The proposed PCGC Master Plan Update Design Guidelines (County of Placer 2018a) and PCGC Master Plan Update Development Standards (County of Placer 2018b) require incorporating high-performance or sustainable design features into residential and nonresidential building design, including the possibility of roof-top, carport and ground-mount solar generation as well as energy efficient building design. This would include LED lighting for interiors and exteriors and water saving features such as bioretention and vegetated swales, native/drought tolerant plant material, and high efficiency irrigation systems. These water saving features would reduce the consumption of indirect electricity consumption. The proposed project would be built and operated in accordance with all existing, applicable regulations at the time of

construction. For the reasons stated, the proposed project would not conflict with existing energy standards or regulations, and impacts would be **less than significant**.

### Health and Human Services Building

The energy consumption of the proposed Health and Human Services building was included in the previous PCGC Master Plan Update analysis. Compliance with all existing, applicable regulations at the time of construction will ensure that Health and Human Services building would not conflict with existing energy standards or regulations, and impacts would be **less than significant**.

### Multifamily Residential Project

The energy consumption of the proposed Multifamily Residential project was included in the previous PCGC Master Plan Update analysis. Compliance with all existing, applicable regulations at the time of construction will ensure that Multifamily Residential project would not conflict with existing energy standards or regulations, and impacts would be **less than significant**.

<b>Impact 19-3</b>	<b>Would the project result in a considerable contribution to energy consumption impacts in the cumulative scenario?</b>		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
<b>Level of Significance:</b>	No impact	No impact	No impact
<b>Mitigation Measure:</b>	None required	None required	None required
<b>Significance after Mitigation:</b>	No impact	No impact	No impact

### PCGC Master Plan Update

Potential cumulative impacts on energy would result if the proposed project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation.

As previously described, the proposed project would not result in wasteful, inefficient, or unnecessary use of energy due to various design features. The proposed project would include various sustainable design features such as installing LED lighting for interiors and exteriors of buildings. In addition, water saving features would also be installed such as bioretention and

vegetated swales, native/drought tolerant plant material, and high efficiency irrigation systems. Therefore the proposed project would not contribute to a cumulative impact to the wasteful, unnecessary consumption, or inefficient use of energy resources.

The projects anticipated in the cumulative scenario within the areas serviced by the energy service providers could increase the use of energy resources. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use. Other development projects within the region would result in incremental increases in long-term energy consumption similar to the proposed project through the introduction of new population to the region. Each of these projects, however, would be required to comply with local and state regulations for reducing energy consumption and increasing energy efficiency during operation. Similar to the proposed project, the cumulative projects would be subject to CALGreen, which provides energy efficiency standards for commercial and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the proposed project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set in the AB 32 Scoping Plan (CARB 2017), which would seek to make all newly constructed residential homes zero net energy consumers by 2020, and all new commercial buildings ZNE consumers by 2030. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects.

In summary, with adherence to the increasingly stringent building and vehicle efficiency standards, and with implementation of the proposed project's design features that would reduce energy consumption, the proposed project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the proposed PCGC Master Plan Update would not result in a cumulatively considerable contribution to a potential cumulative impact.

### **Health and Human Services Building**

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The proposed Health and Human Services building would be subject to the same local and state regulations for increasing energy efficiency as the other projects in the cumulative scenario and to the specific energy efficiency requirements of the proposed PCGC Master Plan Update. The

Health and Human Services building would not contribute to a cumulative impact to the wasteful or inefficient use of energy.

### **Multifamily Residential Project**

The proposed Multifamily Residential project would be subject to the same local and state regulations for increasing energy efficiency as the other projects in the cumulative scenario and to the specific energy efficiency requirements of the proposed PCGC Master Plan Update. The Multifamily Residential project would not contribute to a cumulative impact to the wasteful or inefficient use of energy.

#### **19.4 MITIGATION MEASURES**

None required.

#### **19.5 REFERENCES CITED**

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