3.3 GREENHOUSE GAS EMISSIONS

The certified 2008 Campus Master Plan Update EIR did not address potential impacts to greenhouse gas (GHG) emissions because it was prepared prior to the 2010 amendment to the State CEQA Guidelines requiring the evaluation of environmental impacts related to GHG emissions. Therefore, this section provides a comprehensive analysis of GHG emissions associated with the proposed Housing Administration and Commons Building project.

3.3.1 Environmental Setting

GHG emissions refer to a group of emissions that are generally accepted to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the natural greenhouse effect, the Earth's surface would be about 61°F cooler (California Environmental Protection Agency 2006).

In addition to CO_2 , CH_4 , and N_2O , GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), black carbon (the most strongly light-absorbing component of particulate matter emitted from burning fuels such as coal, diesel, and biomass), and water vapor. CO_2 is the most abundant pollutant that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant but have higher global warming potential than CO_2 . To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO_2 , denoted as CO_2e . CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Table 3.3-1 shows the GWP for various GHGs.

GHG emissions result from both natural and human-influenced activities. Volcanic activity, forest fires, decomposition, industrial processes, landfills, consumption of fossil fuels for power generation, transportation, heating, and cooling are the primary sources of GHG emissions. Without human activity, the Earth would maintain an approximate, but varied, balance between the emission of GHGs into the atmosphere and the storage of GHG in oceans and terrestrial ecosystems. Increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.) has contributed to a rapid increase in atmospheric levels of GHGs over the last 150 years.

Pollutant	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide (CO ₂)		1	1
Methane (CH ₄)	12	21	25
Nitrous Oxide (N ₂ O)	114	310	298
Nitrogen Trifluoride	740	Unknown	17,200
Sulfur Hexafluoride (SF ₆)	3,200	23,900	22,800
Perfluorocarbons (PFCs)	2,600-50,000	6,500-9,200	7,390-12,200
Hydrofluorocarbons (HFCs)	1-270	140-11,700	124-14,800

Table 3.3-1Global Warming Potential for Various Greenhouse Gases

/a/ Lifetime refers to the approximate amount of time it would take for the anthropogenic increment to an atmospheric pollutant concentration to return to its natural level as a result of either being converted to another chemical compound or being taken out of the atmosphere via a sink.

/b/ The United States primarily uses the 100-year GWP as a measure of the relative impact of different GHGs. However, the scientific community has developed a number of other metrics that could be used for comparing one GHG to another. These metrics may differ based on timeframe, the climate endpoint measured, or the method of calculation. For example, the 20-year GWP is sometimes used as an alternative to the 100-year GWP. Just like the 100-year GWP is based on the energy absorbed by a gas over 100 years, the 20-year GWP is based on the energy absorbed over 20 years. This 20-year GWP prioritizes gases with shorter lifetimes, because it does not consider impacts that happen more than 20 years after the emissions occur. Because all GWPs are calculated relative to CO₂, GWPs based on a shorter timeframe will be larger for gases with lifetimes shorter than that of CO₂, and smaller for gases with lifetimes longer than CO₂.

Source: CARB n.d.

State

The primary effect of rising global concentrations of atmospheric GHGs is an increase in the average global temperature of approximately 0.2 degrees Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming is likely to occur over the next century given the expected increase in global atmospheric GHG concentrations from innumerable sources of GHG emissions worldwide (including from economically developed and developing countries and deforestation (USEPA 2009).

Adverse impacts from global climate change worldwide and in California could include:

- Declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in atmospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (USEPA 2009);
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets (Intergovernmental Panel on Climate Change 2013);
- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones (Intergovernmental Panel on Climate Change 2013);

- Declining Sierra Mountains snowpack levels, which account for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years (California Environmental Protection Agency 2006);
- Increasing the number of days conducive to ozone formation (e.g., clear days with intense sun light) by 25 percent to 85 percent (depending on the future temperature scenario) in high ozone areas located in the Southern California area and the San Joaquin Valley by the end of the 21st Century (California Environmental Protection Agency 2006); and
- Increasing the potential for erosion of California's coastlines and seawater intrusion into the Sacramento Delta and associated levee systems due to the rise in sea level (California Environmental Protection Agency 2006).

Table 3.3-2 shows GHG emissions from 2008 to 2017 in California. California's GHG emissions have declined since 2008. In 2017, statewide emissions from routine emitting activities were 63 million metric tons of CO₂e (MMTCO₂e) lower than 2007 levels. Transportation emissions declined due to increased engine efficiency as the aging vehicle fleet turns over, as well as in response to new and updated GHG rules and regulations implemented by the State. Emissions from the electricity sector dropped due to increases in the availability of renewable energy. For the first time since California started to track GHG emissions, California used more electricity from zero-GHG sources (for the purpose of the GHG inventory, these include hydro, solar, wind, and nuclear energy) than from GHG-emitting sources for both in-state generation and total (in-state plus imports) generation in 2017 (California Air Resources Board 2019a). Of note, between October 23, 2015 and February 18, 2016, an exceptional natural gas leak event occurred at the Aliso Canyon natural gas storage facility that resulted in unexpected GHG emissions of considerable magnitude. The exceptional incident released approximately 109,000 metric tons of CH₄, which equated to approximately 1.96 MMTCO₂e of unanticipated emissions in 2015 and an additional 0.52 MMTCO₂e in 2016. According to the California Air Resources Board (CARB), these emissions will be mitigated in the future through projects funded by the Southern California Gas Company based on legal settlement and are presented alongside, but tracked separately from, routine inventory emissions (CARB 2016).

	CO ₂ e Emissions (Million Metric Tons)									
Sector	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Electricity Generation (In State)	55	54	47	41	51	50	52	50	42	39
Electricity Generation (Imports)	66	48	44	47	45	40	37	34	26	24
Transportation	182	175	170	167	166	166	167	171	173	174
Industrial	100	98	102	101	102	104	105	103	101	101
Commercial	18	19	20	21	21	22	21	22	23	23
Residential	31	31	32	33	31	32	27	28	29	30
Agriculture and Forestry	35	33	34	34	35	34	35	34	34	32
Emissions Total	487	457	449	444	451	448	445	441	429	424

 Table 3.3-2

 California Greenhouse Gas Emissions Inventory Trend

Source: CARB 2019b

Local

CSULB developed and published a Climate Action Plan in 2014 that estimated emissions associated with students, faculty, and staff commuting in 2010. Table 3.3-3 shows that commuting accounted for the majority of GHG emissions in 2010, followed by purchased electricity and natural gas combustion.

Table 3.3-3 CSULB GHG Emission Source Quantities and Percentages, 2010

CSULB GHG Sources	CO₂e (Metric Tons)	Percentage of Total
Student Commuting	31,580	53%
Purchased Electricity	13,340	22%
Natural Gas Combustion	6,050	10%
Faculty and Staff Commuting	4,460	7%
Landfill Waste	1,480	2%
Refrigerant Emissions	1,360	2%
Air Travel	1,270	2%
Fleet Fuels	390	1%
Total 2010 GHG Emissions	59,930	100%

Source: CSULB 2014.

3.3.2 Regulatory Setting

There are many federal, state, regional, and local regulations and policies related to climate change and GHG emissions. The following list is not designed to be a comprehensive list of regulations and policies, and is focused on select regulations and policies that are pertinent to CSULB and the proposed project.

Federal

Supreme Court Ruling

The U.S. Supreme Court ruled in *Massachusetts vs. Environmental Protection Agency, 127 S. Ct. 1438 (2007)*, that CO₂ and other GHGs are pollutants under the Clean Air Act (CAA), which the United States Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare. On December 7, 2009, the USEPA Administrator made two distinct findings: 1) the current and projected concentrations of the six key GHGs in the atmosphere (i.e., CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) threaten the public health and welfare of current and future generations; and 2) the combined emissions of these GHGs from motor vehicle engines contribute to GHG pollution which threatens public health and welfare.

On June 23, 2014, the U.S. Supreme Court ruled in *Utility Air Regulatory Group. vs. EPA* that the USEPA exceeded its statutory authority under the CAA when it determined that stationary source emissions of GHGs would trigger permitting obligations under the Prevention of Significant Deterioration (PSD) program and Title V of the CAA. The Court, however, upheld those portions of USEPA's rulemaking that require a source to apply best available control technology (BACT) to GHG emissions where the source would otherwise trigger PSD permitting on account of its emissions of other pollutants. The Supreme Court's decision was limited to USEPA's regulation of GHG emissions under the PSD and Title V provisions of the CAA, and it left unanswered other questions regarding USEPA's permitting and BACT authority under the PSD program, and the USEPA's efforts to regulate GHG emissions from stationary sources.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 includes several key provisions that focus on increasing energy efficiency and the availability of renewable energy, which in turn reduce GHG emissions. First, this Act sets a Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel by 2022.¹⁴ Second, this Act increases Corporate Average Fuel Economy Standards to require a minimum average fuel economy of 35 miles per gallon for the combined fleet of cars and light trucks by 2020. Third, this Act includes a variety of new standards for lighting and for residential and commercial appliance equipment. The equipment includes residential refrigerators, freezers, refrigerator-freezers, metal halide lamps, and commercial walk-in coolers and freezers.

¹⁴ According to the United States Energy Information Administration, 36 billion gallons of fuel represents approximately 26 percent of current gasoline consumption.

State

Energy Efficiency Standards for Residential and Nonresidential Buildings

Located in Title 24, Part 6 of the California Code of Regulations and commonly referred to as "Title 24," these energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods (California Energy Commission 2015). The California Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards to respond to the mandates of Assembly Bill (AB) 32 and to pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs. The most recent update to Title 24 is the 2016 Standards which improve upon the 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards went into effect on January 1, 2017. The Standards are updated on an approximately three-year cycle.

Senate Bill 1078, Senate Bill 107, and Executive Order S-14-08 (Renewables Portfolio Standard)

Signed on September 12, 2002, Senate Bill (SB) 1078 required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107, signed on September 26, 2006, changed the due date for this goal from 2017 to 2010, which was achieved by the state. Signed on November 17, 2008, Executive Order (E.O.) S-14-08 established a Renewables Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

Executive Order S-3-05

On June 1, 2005, E.O. S-3-05 set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

E.O. S-3-05 calls for the Secretary of California Environmental Protection Agency to be responsible for coordination of state agencies and progress reporting. A recent California Energy Commission report concludes, however, that the primary strategies to achieve this target should be major "decarbonization" of electricity supplies and fuels, and major improvements in energy efficiency (California Energy Commission 2011).

In response to E.O. S-3-05, the Secretary of California Environmental Protection Agency created the Climate Action Team (CAT). California's CAT originated as a coordinating council and included the Secretaries of the Natural Resources Agency and the Department of Food and Agriculture, and the Chairs of the CARB, Energy Commission, and Public Utilities Commission. The original council was an informal collaboration between the agencies to develop potential mechanisms for reductions in GHG emissions in the State of California.

Senate Bill 1 and Senate Bill 1017 (Million Solar Roofs)

SB 1 and SB 1017, enacted in August 2006, set a goal to install 3,000 megawatts of new solar capacity by 2017 – moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time. It provides up to \$3.3 billion in financial incentives that decline over time.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

In September 2006, the California Global Warming Solutions Act of 2006, also known as AB 32, was signed into law. AB 32 focuses on reducing GHG emissions in California and requires CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. CARB initially determined that the total statewide aggregated GHG 1990 emissions level and 2020 emissions limit was 427 MMTCO₂e. The 2020 target reduction was estimated to be 174 MMTCO₂e.

To achieve the goal, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. Because the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, it is expected that the regulations would affect many existing sources of GHG emissions and not just new general development projects. SB 1368, a companion bill to AB 32, requires the California Public Utilities Commission and the California Energy Commission to establish GHG emission performance standards for the generation of electricity. These standards will also apply to power that is generated outside of California and imported into the state.

AB 32 charges CARB with the responsibility of monitoring and regulating sources of GHG emissions in order to reduce those emissions. On June 1, 2007, CARB adopted three discrete early action measures to reduce GHG emissions. These measures involved complying with a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills (CARB 2007). On October 25, 2007, CARB tripled the set of previously approved early action measures. The approved measures include improving truck efficiency (i.e., reducing aerodynamic drag), electrifying port equipment, reducing PFCs emissions from the semiconductor industry, reducing SF₆ emissions from the non-electricity sector.

The CARB AB 32 Scoping Plan (Scoping Plan) contains the main strategies to achieve the 2020 emissions cap. The Scoping Plan was developed by CARB with input from CAT and proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce oil dependency, diversify energy sources, and enhance public health while creating new jobs and improving the state economy. The GHG reduction strategies contained in the Scoping Plan include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. Key approaches for reducing GHG emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable electricity standard of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout the state, and pursuing policies and incentives to achieve those targets; and

• Adopting and implementing measures to reduce transportation sector emissions.

CARB adopted the First Update to the AB 32 Scoping Plan in 2014 (CARB 2014). The Update describes progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. It also frames activities and issues facing the state as it develops an integrated framework for achieving both air quality and climate goals in California beyond 2020. Specifically, the Update covers the following:

- An update of the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants.
- A review of progress-to-date, including an update of Scoping Plan measures and other state, federal, and local efforts to reduce GHG emissions in California.
- Potential technologically feasible and cost-effective actions to further reduce GHG emissions by 2020.
- Recommendations for establishing a mid-term emissions limit that aligns with the state's long-term goal of an emissions limit 80 percent below 1990 levels by 2050.
- Sector-specific discussions covering issues, technologies, needs, and ongoing state activities to significantly reduce emissions throughout California's economy through 2050.

As discussed above, in December 2007, CARB approved a total statewide GHG 1990 emissions level and 2020 emissions limit of 427 MMTCO₂e. As part of the Update, CARB revised the 2020 statewide limit to 431 MMTCO₂e, an approximately 1 percent increase from the original estimate. The revised estimate includes incorporation of the Pavley standards (AB 1493, Clean Car Standards) in the business-as-usual forecast. The 2020 business-as-usual forecast in the Update is 509 MMTCO₂e. The state would need to reduce those emissions by 15 percent to meet the 431 MMTCO₂e 2020 limit.

Senate Bill 375 (Sustainable Communities and Climate Protection Act of 2008)

SB 375, adopted in September 30, 2008, provides a means for achieving AB 32 goals through the reduction in emissions by cars and light trucks. SB 375 requires Regional Transportation Plans (RTPs) prepared by Metropolitan Planning Organizations (MPOs) to include Sustainable Communities Strategies (SCSs). In adopting SB 375, the Legislature found that improved coordination between land use planning and transportation planning is needed in order to achieve the GHG emissions reduction target of AB 32. Furthermore, the staff analysis for the bill prepared for the Senate Transportation and Housing Committee's August 29, 2008 hearing on SB 375 began with the following statement: "According to the author, this bill will help implement AB 32 by aligning planning for housing, land use, transportation and greenhouse gas emissions for the 17 MPOs in the state." Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. CARB has set the following reduction targets for the Southern California Association of Governments (SCAG): reduce per capita 8 percent of GHG emissions below 2005 levels by 2020 and 13 percent below 2005 levels by 2035.

Senate Bill 743

SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT), which contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for certain urban infill projects and eliminating the measurement of auto delay, including Level of Service (LOS), as a metric that can be used for measuring traffic impacts in transit priority areas. SB 743 requires the Governor's Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines by July 2020 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the "...reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also allows the Governor's Office of Planning and Research to develop alternative metrics outside of transit priority areas.

California Green Building Standard Code (CalGreen)

The California Green Building Standard Code, referred to as CalGreen, is the first statewide Green Building Code. It was developed to provide a consistent approach for green building within California and took effect January 2011. CalGreen lays out minimum requirements for newly constructed buildings in California, which will reduce GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors. CalGreen is updated every three years.

Senate Bills 1078/107/X 1-2 (Renewables Portfolio Standard and Renewable Energy Resources Act)

SB 1078 and 107, California's Renewables Portfolio Standard, obligated investor-owned energy service providers and Community Choice Aggregations to procure an additional 1 percent of retail sales per year from eligible renewable sources until 20 percent was reached (by 2010). The California Public Utilities Commission and California Energy Commission are jointly responsible for implementing the program. SB X 1-2, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33 percent of their energy from renewable resources by 2020.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued E.O. B-30-15, stating a new statewide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. The Executive Order establishes GHG emissions reduction targets to reduce emissions to 80 percent below 1990 levels by 2050 and sets an interim target of emissions reductions for 2030 as being necessary to guide regulatory policy and investments in California and put California on the most cost-effective path for long-term emissions reductions. The Executive Order orders "all state agencies with jurisdiction over sources of [GHG] emissions [to] ... implement measures, pursuant to statutory authority, to achieve reductions of [GHG] emissions to meet the 2030 and 2050 [GHG] emissions reductions targets."

E.O. B-30-15 directs CARB to "update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." It directs the Natural Resources Agency to update "Safeguarding California" (the state's climate adaptation strategy) every three years, as specified; directs state agencies to "take climate change into account in their planning

and investment decisions, and employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives;" and orders the "State's Five-Year Infrastructure Plan [to] take current and future climate change impacts into account in all infrastructure projects." Among its other directives, the Executive Order provides that "state agencies' planning and investment shall be guided by the ... principle that priority should be given to actions that both build climate preparedness and reduce GHG emissions."

Senate Bill 32

On September 8, 2016, California signed into law SB 32, which adds Section 38566 to the Health and Safety Code and requires a commitment to reducing statewide GHG emissions by 2020 to 1990 levels and by 2030 to 40 percent less than 1990 levels. SB 32 was passed with companion legislation AB 197, which provides additional direction for developing the Scoping Plan. Recently, CARB released The Proposed 2017 Climate Change Scoping Plan Update (Proposed 2017 Update), which outlines the proposed framework of action for achieving California's new SB 32 2030 GHG target: a 40 percent reduction in GHG emissions by 2030 relative to 1990 levels (CARB 2017). The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by E.O. B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels. The Proposed 2017 Update identifies key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water.

Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO2e, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO2e beyond current policies and programs. Key elements of the Proposed 2017 Update include a proposed 20 percent reduction in GHG emissions from refineries and an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2050 limit set forth by E.O. B-30-15. The Proposed 2017 Update indicates that stronger SB 375 reduction targets are needed to meet the state's 2030 and 2050 goals and that, "[m]ore needs to be done to fully exploit synergies with emerging mobility solutions like ridesourcing and more effective infrastructure planning to anticipate and guide the necessary changes in travel behavior, especially among millennials." Stronger SB 375 reduction targets will likely encourage further densification around transit infrastructure.

Local

CSULB Climate Action Plan

In May 2014, the CSU Board of Trustees adopted the first systemwide Sustainability Policy, which applies sustainable principles across all areas of university operations, including facility sustainability improvements, energy and water efficiency retrofits, and incorporation of green building practices into new facility design. In addition, current CSU policy requires all new construction and major renovations to be achieve the equivalent of a silver level of certification under the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system. The LEED rating system assesses buildings in accordance with sustainability criteria across many areas, including location and transportation, energy and water efficiency, materials, indoor environmental quality, integration of the site with its natural environment, and innovation. In addition to adhering to LEED green building standards, CSULB is committed to pursuing the principles of NZE (Net Zero Energy) to all new campus buildings. Buildings will be designed to not only minimize consumption of energy and other natural resources, but also to use

only as much energy as they can generate from renewable energy sources such as solar photovoltaic systems. Specifically, in 2016, CSULB President Conoley signed the Climate Commitment to integrate carbon neutrality with climate resilience and established the President's Commission on Sustainability in 2018, with the mission of integrating sustainability--defined as the intentional and simultaneous focus on environmental, social, and economic health--into all aspects of the university (CSULB 2016).

In December 2014, the CSULB Climate Action Plan was released (CSULB 2014). The plan sets the path for the University to achieve the goal of carbon neutrality by the year 2030. The plan's emission reduction strategies are broken out into four categories (transportation, energy operation, and carbon offsets) that will advance the University's goals towards carbon neutrality in 2030. However, the CSULB Climate Action Plan did not undergo environmental review or formal adoption by the CSU and is not a qualified GHG reduction plan under CEQA Guidelines Section 15183.5. Thus, it cannot be used in a cumulative impacts analysis to determine impact significance.

SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the MPO for the six-county region that includes Los Angeles, Orange, Riverside, Ventura, San Bernardino and Imperial counties. The 2016–2040 RTP/SCS includes commitments to reduce emissions from transportation sources to comply with SB 375. Goals and policies included in the 2016–2040 RTP/SCS to reduce GHG emissions consist of adding density in proximity to transit stations, mixed-use development and encouraging active transportation (i.e., non-motorized transportation such as bicycling). SCAG promotes the following policies and actions related to active transportation to help the region confront congestion and mobility issues and consequently reduce emissions:

- Implement Transportation Demand Management (TDM) strategies including integrating bicycling through folding bikes on buses programs, triple racks on buses, and dedicated racks on light and heavy rail vehicles;
- Encourage and support local jurisdictions to develop "Active Transportation Plans" for their jurisdiction if they do not already have one;
- Expand Compass Blueprint program to support member cities in the development of bicycle plans;
- Expand the Toolbox Tuesday's program to encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts;
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public;
- Encourage children, including those with disabilities, to walk and bicycle to school;
- Encourage local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network; and
- Support local jurisdictions to connect all of the cities within the SCAG region via bicycle facilities.

SB 375 requires CARB to develop regional CO₂ emission reduction targets, compared to 2005 emissions, for cars and light trucks only for 2020 and 2035 for each MPO. SB 375 also requires that each MPO prepare an SCS as part of the RTP to reduce CO₂ by better aligning transportation, land use, and housing. For SCAG, the targets are to reduce per capita emissions 8 percent below 2005 levels by 2020 and 13 percent below 2005 levels by 2035 (SCAG 2016). The 2016–2040 RTP/SCS states that the region will meet or exceed the SB 375 per capita targets. The 2016–2040 RTP/SCS also states that regional 2040 per capita emissions would be reduced by 22 percent, although CARB has not established a 2040 per capita emissions target.

3.3.3 Environmental Impact Analysis

3.3.3.1 Methodology

GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod), as recommended by the South Coast Air Quality Management District (SCAQMD). CalEEMod quantifies GHG emissions from construction activities and future operation of projects. Sources of GHG emissions during project construction would include heavy-duty off-road diesel equipment and vehicular travel to and from the project site. The construction emissions analysis was based on a combination of detailed information provided by the CSULB project team and CalEEMod default assumptions related to typical construction activities. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over the operational life of the project to represent long-term impacts, which for this project is assumed to be 30 years.

Sources of GHG emissions during project operation would include landscaping equipment, water use, and waste generation.

Emissions related to solid waste were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the waste generated by applicable emissions factors, provided in Section 2.4 of USEPA's AP-42, Compilation of Air Pollutant Emission Factors. CalEEMod solid waste generation rates for each applicable land use were selected for this analysis.

Emissions related to water usage and wastewater generation were calculated using CalEEMod emission inventory model which multiplies an estimate of the water usage by the applicable energy intensity factor to determine the embodied energy necessary to supply potable water. GHG emissions are related to the energy used to convey, treat, and distribute water and wastewater. Thus, the emissions are generally indirect emissions from the production of electricity to power these systems. GHG emissions are then calculated based on the amount of electricity consumed multiplied by the GHG intensity factors for the utility provider. In this case, embodied energy for southern California supplied water and GHG intensity factors for Southern California Edison were selected in CalEEMod.

3.3.3.2 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the project would normally have a significant impact with respect to greenhouse gas emissions if it would:

• Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,

• Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

3.3.3.3 Impact Analysis

GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant. Implementation of the proposed project would generate both direct and indirect GHG emissions; however, the magnitude of emissions would be minimized through the incorporation of robust project design and sustainability features that enhance energy efficiency and reduce resource consumption. Temporary direct GHG emissions would be generated from the use of off-road equipment and truck/worker vehicle trips during construction activities. Mandatory compliance with SCAQMD regulations that restrict vehicle idling and ensure optimal equipment operating conditions would prevent the occurrence of excessive GHG emissions from these sources. The SCAQMD recommends that temporary GHG emissions associated with construction of CEQA projects be amortized over the operational life of the project to reflect the cumulative nature of climate change implications, which for this project is assumed to be 30 years. The amortized construction emissions are estimated at 20.6 metric tons of CO₂e per year, which is well below the threshold of 3,500 metric tons of CO₂e per year, as shown in Table 3.3-4

Scenario and Emission Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Construction Emissions (Buildings) Amortized (Direct) /a/	9.5
Construction Emissions (Roadway) Amortized (Direct) /a/	3.5
Area Source Emissions (Direct)	<0.1
Energy Source Emissions (Indirect)	0.0
Mobile Source Emissions (Direct)	0.0
Waste Disposal Emissions (Indirect)	5.1
Water Distribution Emissions (Indirect)	2.5
TOTAL	20.6
SCAQMD Draft Interim Significance Threshold	3,500
Exceed Threshold?	Νο

Table 3.3-4Estimated Annual GHG Emissions

/a/ Construction emissions are amortized over 30 years per SCAQMD guidance. Source: Terry A. Hayes Associates Inc. 2019.

Typically, during operations the majority of permanent GHG emissions associated with land use development are related to vehicle trips and energy consumption. However, the proposed project would not generate new vehicle trips as the proposed project would not result in an increase in enrollment. Rather, the two proposed buildings would serve a similar purpose to the existing Hillside Office/Commons building by providing HRL services as well as study and recreational areas for existing students on-campus. Additionally, the proposed HRL office building and proposed commons building envelope would be designed to achieve NZE by supplying 100 percent of energy needs on a net annual basis from on-site renewables and would meet LEED Platinum certification criteria. The proposed HRL office and commons buildings would be all electric, including heating, cooling, and hot water systems. The proposed project would not require natural gas consumption. While it is not anticipated that the proposed project would

generate more solid waste or use more potable water than the existing condition, the emissions analysis conservatively accounts for emissions related to solid waste disposal and electricity consumption associated with water supply, treatment, and distribution. Therefore, the proposed project would result in a less than significant impact related to generating GHG emissions.

GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. All local, regional, and State GHG reduction plans, policies, and regulations are written to reduce energy consumption, both from power generation and fuel use. The proposed project would seek to achieve a LEED Platinum Rating and, as previously stated, the NZE design would supply 100 percent of energy needs on a net annual basis from on-site renewables. Project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy. The proposed project would also include the following sustainability features in the design as described:

Utilize reclaimed water to save 4,332 gallons of potable water per day (1,577,527 gallons annually).

Utilize materials with high solar reflectance to reduce the heat island effect.

Reduce single-commuter vehicular traffic through installation of bicycle racks.

Install walk-off matts to reduce the entrance of particulate matter into interiors.

Divert the following construction debris from landfills:

- 99 percent of metal, paper, cardboard,
- 100 percent of soil and biomass,
- o 95 percent rigid foam, carpet, and insulation,
- 90 percent of all other materials,
- Reuse existing brick materials.
- Employ water and energy submeters to optimize building technology and inform ongoing operations and maintenance demands.
- Install operable windows that provides direct access to fresh outdoor air, as well as access to natural daylight. Operable windows also allow for passive ventilation strategies, while a canopy-covered courtyard provides shade, a host for photovoltaics, and supports and activates the space between the proposed HRL office building and commons building.
- Utilize mechanical systems that optimize energy efficiency and solar zones to increase level of individual controllability of thermal comfort and air speed.
- Manage 100 percent of stormwater on site via capture and/or infiltration with ground water recharge.

- Utilize construction materials that are vetted for compliance with the Red List, prohibiting the use of any materials which may have chemicals of concern. In addition, wood materials will be certified by the Forest Stewardship Council.
- Use a lighting strategy that includes specifying 75 percent of the total connected lighting load as indirect fixtures, which supports an ambient lighting design. Additionally, utilize materials with high reflectivity to allow light to reflect naturally throughout the space.
- Utilize materials with low to no volatile organic compounds.
- Test materials for presence of particulate matter, formaldehyde, smoke, volatile organic compounds and other chemicals of concern prior to occupancy.
- Use enhanced filtration media at all mechanical systems to enhance air quality throughout occupancy.

As previously discussed, there are a number of plans GHG reduction plans, policies, and regulations relevant to the proposed project. Importantly, the CSULB Climate Action Plan and related Sustainability Policy applies sustainable principles across all areas of university operations, including facility sustainability improvements, energy and water efficiency retrofits, and incorporation of green building practices into new facility design. In addition, current CSU policy requires all new construction and major renovations to achieve the equivalent of a silver level of certification under the LEED rating system (CSULB 2016). The proposed project would be consistent with the CSU's Commitment to Sustainability and the CSULB President's Climate Commitment. Importantly, the proposed project would seek to achieve a LEED Platinum Rating and the NZE design would supply 100 percent of energy needs on a net annual basis by on-site renewables. These two features ensure that the proposed project would not interfere with the CSULB Climate Action Plan and Sustainability Policy. In addition, Tables 3.3-5 and 3.3-6 demonstrate the proposed project's consistency with the SCAG RTP/SCS and State Scoping Plan GHG Reduction Strategies. Finally, the proposed project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in E.O. S-03-05 and SB 32, or the carbon neutrality goal for 2045 identified in E.O. B-55-18. As discussed in Section 3.3.2 above, E.O. S-03-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. SB 32 establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and for cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by December 31, 2030. E.O. B-55-18 establishes an additional statewide policy goal to achieve carbon neutrality as soon as possible and no later than 2045, and to achieve and maintain net negative emissions thereafter. The LEED Platinum Rating and the NZE design for the proposed buildings ensure consistency with all relevant GHG reduction plan, policy, or regulation. Therefore, the proposed project would result in a less than significant impact related to conflict with GHG reduction plans.

Table 3.3-5
Project Consistency with the SCAG 2016 RTP/SCS

RTP/SCS Measure	Project Consistency			
Preserve the Transportation System We Already Have	Does not apply. The project would not inhibit SCAG from preserving the existing transportation system.			
Expand Our Regional Transit System to Give People More Alternatives to Driving Alone	Does not apply. The project would not inhibit SCAG from expanding the regional transportation system.			
Expand Passenger Rail	Does not apply. The project would not inhibit SCAG from expanding the passenger rail system.			
Improve Highway and Arterial Capacity	Does not apply. The project would not inhibit SCAG from improving highway and arterial capacity.			
Manage Demands on the Transportation System	Consistent. The project would reduce demand on the transportation system by providing more centralized support services for on-campus residential students.			
Optimize the Performance of the Transportation System	Does not apply. The project would not inhibit SCAG from optimizing the performance of the transportation system.			
Promoting Walking, Biking and Other Forms of Active Transportation	Consistent. The project's location places students in walking and biking distance of classes and support services on CSULB's campus.			
Strengthen the Regional Transportation Network for Goods Movement	Does not apply. The project would not inhibit SCAG from strengthening the regional transportation network for goods movement.			
Leverage Technology	Does not apply. The project would not inhibit SCAG from leveraging technology for the transportation system.			
Improve Airport Access	Does not apply. The project would not inhibit SCAG from improving airport access.			
Focus New Growth Around Transit	Consistent. The project would build new residential structures near existing transit corridors.			
Improve Air Quality and GHG	Consistent. The project, as with all construction projects, would generate short-term construction emissions but these emissions would not exceed significance thresholds. More importantly, the LEED and NZE design ensures that long-term operational emissions from energy, water, waste, and area sources would be negligible and not significant. The project would not generate new mobile source emissions.			
Preserve Natural Lands	Consistent. The project would not impact natural lands during construction or operation.			

Source: SCAG 2016.

Table 3.3-6 Project Consistency with Scoping Plan GHG Reduction Strategies

RTP/SCS Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	Not applicable. The project would not prevent CARB from implementing this measure.
Low-Carbon Fuel Standard	T-2	Not applicable. The project would not prevent CARB from implementing this measure.
Regional Transportation-Related GHG Targets	T-3	Not applicable. The project would not prevent CARB from implementing this measure.
Advanced Clean Transit	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.
Last-Mile Delivery	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.
Reduction in VMT	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Not applicable. The project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable. The project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti- Idling, Hybrid, Electrification 4. Goods Movement System-wide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	Not applicable. The project would not prevent CARB from implementing this measure.
 Heavy-Duty Vehicle GHG Emission Reduction Tractor-Trailer GHG Regulation Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I) 	T-7	Not applicable. The project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	Not applicable. The project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.

Table 3.3-6 Project Consistency with Scoping Plan GHG Reduction Strategies

RTP/SCS Measure	Measure Number	Project Consistency
High-Speed Rail	T-9	Not applicable. The project would not prevent CARB from implementing this measure.
Electricity and Natural Gas Sector		-
Energy Efficiency Measures (Electricity)	E-1	Consistent. The project would exceed Title 24, Part 6, of the California Code of Regulations through meeting the LEED certification criteria and NZE design.
Energy Efficiency (Natural Gas)	CR-1	Consistent. The project would not require natural gas consumption.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Consistent. The project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy. This energy would be used to heat water, among other energy needs.
Combined Heat and Power	E-2	Not applicable. The project would not prevent CARB from implementing this measure.
Renewable Portfolios Standard (33% by 2020)	E-3	Consistent. The project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy.
Renewable Portfolios Standard (50% by 2050)	Proposed	Consistent. The project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Consistent. The project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy.
Water Sector	r	1
Water Use Efficiency	W-1	Consistent. The project would include water efficient landscaping and the proposed buildings would seek to achieve LEED Platinum Rating certification.
Water Recycling	W-2	Consistent. The project would utilize reclaimed water to save 4,332 gallons of potable water per day (1,577,527 gallons annually).
Water-System Energy Efficiency	W-3	Consistent. The project would employ water and energy submeters to optimize building technology and inform ongoing operations and maintenance demands.

Table 3.3-6
Project Consistency with Scoping Plan GHG Reduction Strategies

RTP/SCS Measure	Measure Number	Project Consistency		
Reuse Urban Runoff	W-4	Consistent. The project would manage 100 percent of stormwater on site via capture and/or infiltration with ground water recharge.		
Renewable Energy Production	W-5	Consistent. The project design includes a total of 400 solar photovoltaic panels on the roofs of the two buildings and the central courtyard canopy that would generate approximately 89 kilowatts of energy.		
Green Buildings				
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Consistent. The project would exceed Title 24, Part 6, of the California Code of Regulations through meeting LEED certification criteria and NZE design.		
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The project would exceed Title 24, Part 6, of the California Code of Regulations through meeting LEED certification criteria and NZE design.		
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The project would exceed Title 24, Part 6, of the California Code of Regulations through meeting LEED certification criteria and NZE design.		
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. The project would not prevent CARB from implementing this measure.		
Industry Sector	-			
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable. The project would not prevent CARB from implementing this measure.		
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable. The project would not prevent CARB from implementing this measure.		
Reduce GHG Emissions by 20% in Oil Refinery Sector	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.		
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable. The project would not prevent CARB from implementing this measure.		
Refinery Flare Recovery Process Improvements	I-4	Not applicable. The project would not prevent CARB from implementing this measure.		
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable. The project would not prevent CARB from implementing this measure.		
Recycling and Waste Management Sector				
Landfill Methane Control Measure	RW-1	Not applicable. The project would not prevent CARB from implementing this measure.		
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable. The project would not prevent CARB from implementing this measure.		

Table 3.3-6
Project Consistency with Scoping Plan GHG Reduction Strategies

RTP/SCS Measure	Measure Number	Project Consistency
Mandatory Commercial Recycling	RW-3	Consistent. The project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, the project would divert the following construction debris from landfills: 99% of metal, paper, cardboard; 100% of soil and biomass; 95% rigid foam, carpet, and insulation; 90% of all other materials; and reuse existing brick materials.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable. The project would not prevent CARB from implementing this measure.
Anaerobic/Aerobic Digestion	RW-3	Not applicable. The project would not prevent CARB from implementing this measure.
Extended Producer Responsibility	RW-3	Not applicable. The project would not prevent CARB from implementing this measure.
Environmentally Preferable Purchasing	RW-3	Not applicable. The project would not prevent CARB from implementing this measure.
Forests Sector		
Sustainable Forest Target	F-1	Not applicable. The project would not prevent CARB from implementing this measure.
High-GWP Gases Sector	-	
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	Not applicable. The project would not prevent CARB from implementing this measure.
SF6 Limits in Non-Utility and Non- Semiconductor Applications	H-2	Not applicable. The project would not prevent CARB from implementing this measure.
Reduction of Perfluorocarbons (PFCs in Semiconductor Manufacturing	H-3	Not applicable. The project would not prevent CARB from implementing this measure.
Limit High GWP Use in Consumer Products	H-4	Not applicable. The project would not prevent CARB from implementing this measure.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Not applicable. The project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable. The project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable. The project would not prevent CARB from implementing this measure.
SF6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable. The project would not prevent CARB from implementing this measure.

Table 3.3-6
Project Consistency with Scoping Plan GHG Reduction Strategies

RTP/SCS Measure	Measure Number	Project Consistency	
40% reduction in methane and hydrofluorocarbon (HFC) emissions	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.	
50% reduction in black carbon emissions	Proposed	Not applicable. The project would not prevent CARB from implementing this measure.	
Agriculture Sector			
Methane Capture at Large Diaries	A-1	Not applicable. The project would not prevent CARB from implementing this measure.	

Source: CARB 2008; 2017.

3.3.4 Mitigation Measures

No mitigation measures are required.

3.3.5 Level of Significance after Mitigation

No mitigation measures are required. The proposed project would result in less than significant impacts without mitigation.

3.3.6 Cumulative Impacts

The State of California, through AB 32, has acknowledged that GHG emissions are a statewide impact. Emissions generated by the proposed project combined with past, present, and reasonably probable future projects could contribute to this impact. The CEQA Guidelines emphasize that the effects of GHG emissions are cumulative in nature and should be analyzed in the context of CEQA's existing cumulative impacts analysis. The California Governor's Office of Planning and Research acknowledges that although climate change is cumulative in nature, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment. CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.

As discussed above, the proposed project would not generate significant GHG emissions and would be consistent with GHG reduction plans. Therefore, the proposed project's incremental contribution would not be cumulatively considerable.