

4.6 GLOBAL CLIMATE CHANGE

4.6.1 INTRODUCTION

This section provides a discussion of global climate change (GCC), existing regulations pertaining to global climate change, and an analysis of greenhouse gas (GHG) emissions associated with the proposed project located in the City of West Hollywood (City), Los Angeles County (County). This analysis is based on the *Revised Air Quality Impact Analysis* (LSA Associates, Inc., November 2013) prepared for the proposed project and included in Appendix C of this EIR. This section examines the short-term construction and long-term operational impacts and evaluates the effectiveness of measures incorporated as part of the project design.

4.6.2 METHODOLOGY

The recommended approach for GHG analysis included in the State of California Governor's Office of Planning and Research's (OPR) June 2008 Technical Advisory is to: (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance.¹ The June 2008 Technical Advisory provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation.... For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews" (June 2008 Technical Advisory, pages 7-8).

Revisions to Appendix G of the CEQA Guidelines suggest that the project be evaluated for the following impacts:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The California Air Resources Board (ARB) and the South Coast Air Quality Management District (SCAQMD) have not adopted a significance threshold for analyzing GHG emissions associated with land use development projects such as the proposed project. The methodology used in this EIR to

¹ State of California Governor's Office of Planning and Research, Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review (June 19, 2008).

analyze the project's contribution to global climate change includes a quantification of GHG emissions. The purpose of calculating the project's GHG emissions is for informational and comparative purposes, as neither ARB nor SCAQMD has adopted a quantifiable threshold for evaluating whether project-generated GHGs would be considered a significant impact. The determination of significance is focused on project consistency with the City's Climate Action Plan (CAP), which is the blueprint for managing GHG emissions within the City.

4.6.3 EXISTING ENVIRONMENTAL SETTING

Global climate change refers to alterations in weather features which occur across the Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. Global climate change attributable to anthropogenic (human) emissions of greenhouse gases (primarily CO₂, CH₄, and N₂O) is currently one of the most important and widely debated scientific, economic, and political issues in the United States.

Gases that trap heat in the atmosphere are often referred to as greenhouse gases, analogous to a greenhouse effect. Greenhouse gases are emitted by both natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the Earth's temperature. Without these natural greenhouse gases, the Earth's temperature would be about 61 degrees Fahrenheit cooler. Emissions from human activities, such as vehicle, natural gas, electricity usage, and water usage have elevated the concentration of these gases in the atmosphere. The gases that are widely seen as the principal contributors to human-induced GCC are:¹

- CO₂
- CH₄
- N₂O
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)

Greenhouse gases have varying global warming potential (GWP) which is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale which compares the gas in question (e.g., N₂O and CH₄) to that of the same mass of carbon dioxide. CO₂ is considered to be a reference gas with a GWP of 1 and is the baseline unit with which all other greenhouse gases are compared. The carbon dioxide equivalent (CO₂e) is most appropriate method of assessing emissions because it gives weight to the GWP of the gas. Table 4.6.A presents a summary of the atmospheric lifetime and GWP of selected gases. The other main greenhouse gases that have

¹ The greenhouse gases listed are consistent with the definition in Assembly Bill (AB) 32 (Government Code 38505), as discussed later in this section.

been attributed to human activity—methane and nitrous oxides—have GWPs of 21 and 310 million metric tons (MMT)¹ of carbon dioxide equivalent (MMTCO₂e), respectively.

Inventory

This section summarizes the latest information on global, United States, California, and local GHG emission inventories.

Table 4.6.A: Global Warming Potential of Selected Gases

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	21
Nitrous Oxide	120	310
HFC-23	264	11700
HFC-134a	14.6	1300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CF ₄)	50000	6500
PFC: Hexafluoromethane (C ₂ F ₆)	10000	9200
Sulfur Hexafluoride (SF ₆)	3200	23900

Source: Environmental Protection Agency, 2008.

Global Emissions. Worldwide emissions of CO₂e totaled 25 billion metric tons in 2011². Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).

United States Emissions. In 2011, the United States emitted approximately 6.7 billion MT of CO₂e. Total U.S. emissions have increased by 8.4 percent from 1990 to 2011, and emissions decreased from 2010 to 2011 by 1.6 percent (108.0 Tg CO₂e). The decrease from 2010 to 2011 was due to a decrease in the carbon intensity of fuels consumed to generate electricity due to a decrease in coal consumption, with increased natural gas consumption and a significant increase in hydropower used. Additionally, relatively mild winter conditions, especially in the South Atlantic Region of the United States where electricity is an important heating fuel, resulted in an overall decrease in electricity

¹ One teragram (Tg) is equal to one million metric tons (A metric ton is approximately 1.1 tons).

² Combined total of Annex I and Non-Annex I Country CO₂e emissions. UNFCCC, 2013. *Greenhouse Gas Inventory Data*. http://unfccc.int/ghg_data/ghg_data_unfccc/time_series_annex_i/items/3814.php and http://maindb.unfccc.int/library/view_pdf.pl?url=http://unfccc.int/resource/docs/2005/sbi/eng/18a02.pdf.

demand in most sectors. Since 1990, U.S. emissions have increased at an average annual rate of 0.4 percent.¹

State of California Emissions.

California's gross emissions of GHGs decreased by 6 percent from 478.4 MMTCO₂e in 2001 to 448.1 million in 2011, with a maximum of 489.2 MMTCO₂e in 2004. During the same period, California's population grew by 9 percent from 34.5 to 37.6 million people. As a result, California's per capita GHG emissions have decreased over the last 11 years from 13.9 to 11.9 tons of CO₂e per person. In 2011, emissions continued to decrease for the transportation and electric power sectors. Emissions from all other sectors remained relatively flat or increased slightly from 2010.²

The ARB estimates that transportation was the source of approximately 38 percent of the State's GHG emissions in 2011, followed by electricity generation (both in-State and out-of-State) at 19 percent, and industrial sources at 21 percent. The remaining sources of GHG emissions are residential and commercial activities at 10 percent, agriculture at 7 percent, high GWP gases at 3 percent, and recycling and waste at 2 percent.³

The ARB staff has projected statewide unregulated GHG emissions for 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, at 506.8 MMTCO₂e. GHG emissions from the transportation and electricity sectors as a whole are expected to be approximately 36 percent and 22 percent of total CO₂e emissions, respectively. The industrial sector consists of large stationary sources of GHG emissions, and the percentage of the total 2020 emissions is projected to be 18 percent of total CO₂e emissions. The remaining sources of GHG emissions in 2020 are high GWP gases at 7 percent, residential and commercial activities at 9 percent, agriculture at 6 percent, and recycling and waste at 2 percent.⁴

West Hollywood Emissions. The City's CAP includes a GHG baseline inventory that identifies sources and levels of GHG emissions produced by residents and businesses within the community and municipal operations. The 2008 inventory addresses the following emission sectors: residential and nonresidential energy use (i.e., commercial and industrial), transportation, solid waste, water use, and wastewater treatment. Government-related GHG emissions, which include energy use in government buildings, vehicle fleets, solid waste, streetlights, and other government-owned/operated facilities, are a subset of the communitywide emissions inventory.

Community-wide GHG emissions were also projected for the years 2020 and 2035 under a business-as-usual scenario. The business-as-usual scenario assumes that historical data and trends are representative of future year consumption rates for energy, water, and waste. A summary of the City's

¹ United States Environmental Protection Agency (EPA). 2013. The U.S. Greenhouse Gas Inventory Report. <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html>, accessed October 2013.

² California Air Resources Board. 2013. California Greenhouse Gas Emissions for 2000 to 2011 – Trends of Emissions and Other Indicators. http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_trends_00-11_2013-10-02.pdf, accessed October 2013.

³ California Air Resources Board. 2013. <http://www.arb.ca.gov/cc/inventory/data/data.htm>, accessed October 2013.

⁴ ARB, 2008. <http://www.climatechange.ca.gov/inventory/index.html>. September.

2008, 2020, and 2035 business-as-usual emissions is provided in Table 4.6.B. Assuming that the same type of current emissions-generating practices continue to occur within the City, GHG emissions are anticipated to increase by 11 percent in 2020 over 2008 levels, and by 22 percent in 2035 over 2008 levels.

Transportation emissions are the largest portion of GHG emissions. The magnitude of GHG emissions increases from 2008 to 2020 and 2035 is due primarily to anticipated future population growth (and related consumption) in the City. Although the trends for each projection show an increase in GHG emissions, emission reductions are anticipated due to programs and regulations applied at the federal and state levels, such as vehicle fuel efficiency standards, low carbon fuel standards, and renewable energy portfolio requirements. These actions at the federal and state levels are not considered in the 2020 and 2035 projections.

Table 4.6.C summarizes municipal baseline emissions from sectors for which data are available. Emissions from the municipal vehicle fleet, solid waste, and water/wastewater are not reported, as data for these sectors were not available at the time of the analysis.

Table 4.6.B: West Hollywood Baseline and Projected GHG Emissions and Percent Contributions

Emissions Sector	Baseline MT CO ₂ e (percent of total emissions)		
	2008	2020	2035
Transportation	361,350 (62%)	412,450 (64%)	456,600 (64%)
Commercial/Industrial Energy Use	116,197 (20%)	116,028 (18%)	127,653 (18%)
Residential Energy Use	70,378 (12%)	77,519 (12%)	84,081 (12%)
Wastewater Treatment	20,981 (4%)	22,768 (4%)	24,974 (4%)
Solid Waste	8,543 (1%)	9,267 (1%)	10,172 (1%)
Water Consumption	5,764 (1%)	8,200 (1%)	8,971 (1%)
Total	583,213 (100%)	646,232 (100%)	712,451 (100%)
Estimated Population	37,348	40,385	44,182
Estimated Employment	22,911	24,934	28,705
GHG Emissions per Service Population ^a	9.7	9.9	9.8

^a Service Population is the sum of population plus employment.
Source: City of West Hollywood, *Climate Action Plan*, September 6, 2011.

Table 4.6.C: West Hollywood Municipal Emissions

Emissions Sector	2008 Baseline MT CO ₂ e
Buildings and Facilities Electricity Use	670
Buildings and Facilities Natural Gas Use	52
Street Lights	2,211
Traffic Control	69

Source: City of West Hollywood, *Climate Action Plan*, September 6, 2011.

Effects of Global Warming

Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative consequences. Global warming may also contribute to air quality problems from increased frequency of smog and particulate air pollution. Table 4.6.D lists greenhouse gases, the effects of each greenhouse gas, and sources for each of the greenhouse gases.

Table 4.6.D: Greenhouse Gas Properties, Effects, and Sources

Constituent	Description and Physical Properties	Health Effects	Sources
Water Vapor	Water vapor (H ₂ O) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization.	There are no health effects from water vapor. When some pollutants come in contact with water vapor, they can dissolve and then the water vapor can be a transport mechanism to enter the human body.	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.
Carbon Dioxide	Carbon dioxide (CO ₂) is an odorless, colorless natural greenhouse gas.	Outdoor levels of carbon dioxide are not high enough to result in negative health effects.	Carbon dioxide is emitted from natural and anthropogenic (human) sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Methane	Methane (CH ₄) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10–12 years) compared to other greenhouse gases.	There are no health effects from methane.	Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropogenic sources include fossil-fuel combustion and biomass burning.
Nitrous Oxide	Nitrous oxide (N ₂ O), also known as laughing gas, is a colorless greenhouse gas.	Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses it is harmless. In some cases, heavy and extended use can cause Olney's Lesions (brain damage).	Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 ppb. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, e.g., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars.

Table 4.6.D: Greenhouse Gas Properties, Effects, and Sources

Constituent	Description and Physical Properties	Health Effects	Sources
Chloro-fluorocarbons	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C ₂ H ₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface).	In confirmed indoor locations, working with CFC-113 or other CFCs is thought to have resulted in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.	CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.
Hydro-fluorocarbons	Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant.	None.	HFCs are man made for applications such as automobile air conditioners and refrigerants.
Per-fluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF ₄) and hexafluoroethane (C ₂ F ₆).	None.	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
Sulfur Hexafluoride	Sulfur hexafluoride (SF ₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated, 23,900. Concentrations in the 1990's were about 4 ppt.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.	Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Aerosols	Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols.	Similar health effects associated with particulate matter.	Sulfate aerosols are emitted when fuel containing sulfur is burned. Another source of aerosols (in the form of black carbon or soot) is the result of incomplete combustion or the incomplete burning of fossil fuels. Although particulate matter regulation has been lowering aerosol concentrations in the United States, global concentrations are likely increasing as a result of other sources around the world.

Source: LSA Associates, November 2011

Additionally, according to the 2006 California Climate Action Team Report,¹ the following climate change effects, which are based on trends established by the United Nations Intergovernmental Panel on Climate Change (IPCC), can be expected in California over the course of the next century:

- A diminishing Sierra snowpack declining by 70 percent to 90 percent, threatening the state's water supply;
- Increasing temperatures from 8 to 10.4 degrees Fahrenheit under the higher emission scenarios, leading to a 25 percent to 35 percent increase in the number of days ozone pollution levels are exceeded in most urban areas;
- Increased vulnerability of forests due to pest infestation and increased temperatures;
- Increased electricity demand, particularly in the hot summer months; and
- Increased ground-level ozone formation due to higher reaction rates of ozone-precursors.

Changes in climate have the potential to impact fire regimes, especially in areas where climate, and not fuel, tends to be the limiting factor. A number of studies have been conducted on the likely effects of climate change on present-day fire regimes. In temperate regions, including the western United States, there is a possibility that increased temperature would extend typical fire seasons, with more fires occurring earlier and later in a given year. There is also a possibility that global warming would foster the creation of faster, hotter fires that would be more difficult to contain and therefore affect larger areas potentially leading to an increase in both the annual area burned and the number of potential catastrophic fires. Although the effects will vary considerably among different ecosystem types, the total area burned will likely increase in some regions. Other factors such as levels of carbon dioxide in the atmosphere may do more than change regimes through weather effects. Greater carbon dioxide availability may also lead to changes in plant growth and decomposition.

However, it is important to realize that a single major fire event can have far greater consequences than small changes in temperature or rainfall over a period of decades. Similarly, the year-to-year and seasonal variations can be far greater than the small gradual changes of long-term climate change. The process of climate change is also thought to lead to a rise in average global temperature, changes in frequency and distribution of precipitation, and variations in the pattern and occurrence of droughts, floods, and sea level rise. Specifically, it is thought that global climate change impacts to the southwest region of the U.S. would result in an increased frequency of intense precipitation events and the increased risk of flash floods. However, no aspect of the current hydrologic practices or modeling is designed to specifically detect climate change or its effects on water resources or flooding.² In addition, many of the existing hydrologic modeling systems have significant data gaps or are designed to achieve specific accounting goals. As a result, many of the modeling procedures and modeling data are fragmented, poorly integrated, and unable to meet the predictive challenges of a rapidly changing climate.

¹ California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

² *Scientific Assessment of the Effects of Global Change on the United States*, Committee on Environment and Natural Resources, National Science and Technology Council, May 2008.

Without reliable data to assess impacts of flooding associated with global climate change to any degree of specificity, it is not possible to discern the extent to which the flooding area would change or the frequency at which flooding would occur. Regardless of the potential for an increase in flood events, development in the existing flood areas are already designed to limit impacts to flood related events. These design features include the use of materials resistant to flood damage, the placement of drainage paths around structures to guide floodwaters around and away from proposed structures, and the placement of the lowest floor of any structure at or above the base flood elevation.

4.6.4 REGULATORY SETTING

Federal Regulations

Federal Regulation of Climate Change. The U.S. Supreme Court ruled in *Massachusetts v Environmental Protection Agency*, 549 U.S. 497, 127 S.Ct.1438 (2007), that carbon dioxide and other GHGs and pollutants must be regulated under the federal Clean Air Act if the federal United States Environmental Protection Agency (EPA) determines they pose an endangerment to public health and welfare. At this time, however, no federal legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. On December 7, 2009, the EPA Administrator signed a final action with two distinct findings regarding greenhouse gases under Section 202(a) of the Clean Air Act:

- The Administrator is proposing to find that the current and projected concentrations of the mix of six key greenhouse gases — CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ — in the atmosphere threatened the public health and welfare of current and future generations. This is referred to as the endangerment finding.
- The Administrator is further proposing to find that the combined emissions of CO₂, CH₄, N₂O, and HFCs from new motor vehicles and motor vehicle engines contributed to the atmospheric concentrations of these key GHGs and hence to the threat of GCC. This is referred to as the cause or contribute finding.

This EPA action does not impose any requirements on industry or other entities. However, these findings are a prerequisite to finalizing the greenhouse gas emission standards for light-duty vehicles mentioned below.

On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a final joint rule to establish a national program consisting of new standards for model year 2012–2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The EPA is finalizing the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 mpg.¹

¹ United States Environmental Protection Agency. *EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks*. Available at: <http://www.epa.gov/otaq/climate/regulations/420f10014.pdf>, last accessed February 2012.

State Regulations

Assembly Bill 1493. In a response to the transportation sector's significant contribution to California's CO₂ emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493, now Health and Safety Code section 43018.5, requires the ARB to set GHG emission standards for passenger vehicles and light-duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. ARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of approximately 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the midterm (2013–2016) standards will result in a reduction of approximately 30 percent.

Senate Bill 1078. Approved by Governor Davis in September 2002, Senate Bill (SB) 1078 established the Renewal Portfolio Standard program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20 percent of their power from renewable sources by 2010 (see SB 107) (see also Executive Order [EO] S-14-08).

Executive Order (EO) S-3-05. In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in EO S-3-05. This EO established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050. The Secretary of Cal/EPA is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. Representatives from several state agencies comprise the Climate Action Team (CAT). The CAT is responsible for implementing global warming emissions reduction programs. The CAT fulfilled its report requirements through the March 2006 CAT Report to Governor Schwarzenegger and the legislature (Cal/EPA 2006). As of the date of this Recirculated Draft EIR, subsequent CAT reports have been released for 2009 and 2010.

Senate Bill 107. Approved by Governor Schwarzenegger on September 26, 2006, SB 107 requires investor-owned utilities, such as Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric, to generate 20 percent of their electricity from renewable sources by 2010. Previously, State law required that this target be achieved by 2017 (see SB 1078).

Assembly Bill 32. California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006." AB 32, now Health and Safety Code section 38500 et seq., required ARB to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions, by January 1, 2008;
- Adopt mandatory reporting rules for significant sources of GHG emissions by January 1, 2008;
- Adopt an emissions reduction plan by January 1, 2009, indicating how emissions reductions will be achieved via regulations, market mechanisms, and other actions;
- Adopt regulations to achieve the maximum technologically feasible and cost-effective reductions of GHGs by January 1, 2011; and
- Prepare a Scoping Plan outlining the State's strategy to achieve the 2020 GHG emissions limit.

The ARB has established that the level of annual GHG emissions in 1990 was 427 MMT of CO₂e.¹ The emissions target of 427 MMT of CO₂e/year requires the reduction of 80 MMT from the State's projected "business-as-usual (BAU)" 2020 emissions of 507 MMT² (i.e., the 1990 levels are approximately 30 percent below BAU). BAU is a forecast of the California economy in 2020 without implementation of any of the GHG reduction measures identified in the Scoping Plan. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.³ More specifically, the Scoping Plan includes aggressive energy efficiency goals and methods for increasing renewable energy use. Meeting the goals in the Scoping Plan will require expanded utility-based energy efficiency programs, more stringent building and appliance standards, green building practices, waste reduction, and innovative strategies that go beyond traditional approaches. The Scoping Plan also relies on expanded efforts by the California Energy Commission (CEC) and California Public Utilities Commission (CPUC). In August 2011, the Scoping Plan was reapproved by the ARB and includes the Final Supplement to the Scoping Plan Functional Equivalent Document (FED). Emission reductions that are projected to result from the recommended measures in the Scoping Plan are sufficient to allow California to attain the emissions goal of 427 MMT of CO₂e by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It is important to note that the Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The ARB rule-making process includes preparation and release of each of the draft measures, public input through workshops, and a public comment period, followed by an ARB Board hearing and rule adoption.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB and the CAT⁴ to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel

¹ ARB. California 1990 Greenhouse Gas Emissions Level and 2020 Limit. Available at: <http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm>, last accessed February 2012.

² ARB. Greenhouse Gas Inventory - 2020 Emissions Forecast. Available at: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>, last accessed February 2012.

³ ARB. 2008. *Climate Change Proposed Scoping Plan: a Framework for Change*. October 2008.

⁴ CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB's jurisdiction.

Standard. This EO sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs ARB to consider the Low Carbon Fuel Standard as a discrete early action measure. ARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to replace 20 percent of the fuel used in motor vehicles with alternative fuels by 2020.

In June 2007, ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted an additional six early action measures in October 2007.¹ These measures relate to truck efficiency, port electrification, reduction of PFCs from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and SF₆ reductions from the nonelectricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.²

Senate Bill 1368. In September 2006, Governor Schwarzenegger signed SB 1368 (now Public Utilities Code § 8340), which requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the CPUC. This effort will help to protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants, by requiring imported electricity to meet GHG performance standards in California and requiring that the standards be developed and adopted in a public process.

Senate Bill 97. To assist public agencies in analyzing the effects of GHGs under CEQA Guidelines, SB 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines on how to minimize and mitigate a project's GHG emissions. On December 30, 2009, the Natural Resources Agency adopted CEQA Guideline Amendments related to climate change. These amendments became effective on March 18, 2010. The amended guidelines establish several new CEQA Guideline requirements concerning the analysis of GHGs, including:

- Requiring a lead agency to “make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project” (Section 15064(a))

¹ ARB. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October 2007.

² ARB. 2007. “ARB approves tripling of early action measures required under AB 32.” News Release 07-46. October 25. Available at: <http://www.arb.ca.gov/newsrel/nr102507.htm>, last accessed February 2012.

- Providing a lead agency with the discretion to determine whether to use quantitative or qualitative analysis or performance standards to determine the significance of GHG emissions resulting from a particular project (Section 15064.4(a))
- Requiring a lead agency to consider the following factors when assessing the significant impacts from GHG emissions on the environment:
 - The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
 - Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
 - The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions. (Section 15064.4(b))
- Allowing lead agencies to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures, including offsets that are not otherwise required (Section 15126.4(c)).

The amended guidelines also establish two new guidance questions regarding GHG emissions in the Environmental Checklist set forth in Appendix G to the CEQA Guidelines:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The adopted amendments do not establish a GHG emission threshold, and instead allow a Lead Agency to develop, adopt, and apply its own thresholds of significance or to apply those developed by other agencies or experts.¹ The Natural Resources Agency also acknowledges that a Lead Agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.²

Senate Bill 375. Senate Bill 375, signed into law on October 1, 2008, is intended to enhance ARB's ability to reach AB 32 goals by directing ARB to develop regional greenhouse gas emission reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. The targets are

¹ The CEQA Guidelines do not establish thresholds of significance for other potential environmental impacts, and SB 97 did not authorize the development of a statement threshold as part of this CEQA Guidelines update. Rather, the proposed amendments recognize a Lead Agency's existing authority to develop, adopt and apply their own thresholds of significance or those developed by other agencies or experts." Final Statement of Reasons for Regulatory Action, Amendments to the CEQA Guidelines, p. 84.

² "A project's compliance with regulations or requirements implementing AB 32 or other laws and policies is not irrelevant. Section 15064.4(b)(3) would allow a Lead Agency to consider compliance with requirements and regulations in the determination of significance of a project's greenhouse gas emissions." Final Statement of Reasons, p. 100.

required to consider the emission reductions associated with vehicle emission standards (see Senate Bill 1493), the composition of fuels (see Executive Order S-1-07), and other ARB-approved measures to reduce GHG emissions. In late September 2010, the ARB announced greenhouse gas reduction goals for implementation by regional land use and transportation agencies. As shown below, the regional emissions reduction goal for Los Angeles/Southern California is 8 percent by 2020 and 13 percent by 2035 compared to 2005 emissions levels.

September 2010 ARB SB 375 Reduction Goals

	By 2020 (percent)	By 2035 (percent)
San Francisco Bay Area	7	15
San Diego	7	13
Sacramento	7	16
Central Valley/San Joaquin	5	10
Los Angeles/Southern California	8	13

ARB = California Air Resources Board
 SB = Senate Bill

ARB will work with California’s 18 metropolitan planning organizations to align their regional transportation, housing, and land use plans and prepare a “Sustainable Communities Strategy” within the Regional Transportation Plan to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region’s ability to attain its greenhouse gas reduction targets. If a Sustainable Communities Strategy is unable to achieve the greenhouse gas reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the greenhouse gas reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. Senate Bill 375 provides incentives for streamlining CEQA Guidelines requirements by substantially reducing the requirements for “transit priority projects,” as specified in Senate Bill 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the Sustainable Communities Strategy or Alternative Planning Strategy.

Senate Bill X1-2. On April 12, 2011, California Gov. Jerry Brown signed Senate Bill X1-2. This bill supersedes the 33 percent by 2020 Renewable Portfolio Standard (RPS), created by Executive Order S-14-08 that Gov. Arnold Schwarzenegger previously signed. The Renewable Portfolio Standard required that all retail suppliers of electricity in California serve 33 percent of their load with renewable energy by 2020. A number of significant changes are made in Senate Bill X1-2:

- Senate Bill X12 extends application of the RPS to all electric retailers in the state, including municipal and public owned utilities, and community choice aggregators.
- Senate Bill X1 2 creates a three-stage compliance period for electricity providers to meet renewable energy goals: 20 percent of retail sales must be renewable energy products by 2013, 25 percent of retail sales must be renewable energy products by 2016, and 33 percent of retail

sales must be renewable energy products by 2020. The 33 percent level must be maintained in the years that follow.

- This three-stage compliance period requires the RPS to be met increasingly with renewable energy that is supplied to the California grid and is located within or directly proximate to California. Senate Bill X1 2 mandates that renewables from this category make up:
 - At least 50 percent for the 2011–2013 compliance period
 - At least 65 percent for the 2014–2016 compliance period
 - At least 75 percent for 2016 and beyond
- Senate Bill X1 2 sets rules for the use of Renewable Energy Credits (RECs):
 - Establishes a cap of no more than 25 percent unbundled RECs going towards the RPS between 2011 and 2013, 15 percent from 2014 to 2016, and 10 percent thereafter
 - Does not allow for the grandfathering of Tradable REC contracts executed before 2010, unless the contract was (or is) approved by the California Public Utilities Commission (CPUC)
 - Allows banking of RECs for three years only
 - Allows Energy Service Providers, CCAs, and IOUs with 60,000 or fewer customers to use 100 percent RECs to meet the RPS

Senate Bill X1 2 also eliminates the Market Price Referent (MPR), which was a benchmark to assess the above-market costs of RPS contracts based on the long-term ownership, operating, and fixed-price fuel costs for a new 500 megawatt (mW) natural gas-fired combined cycle gas turbine. Using the MPR, the CPUC would provide above-market funds to cover contract costs that exceeded the MPR requires the CPUC to establish a cost limit for each IOU, and authorizes IOUs to stop procuring renewable energy beyond the cost limit. It also requires the CPUC to adopt a standard tariff for renewable projects up to 3 MW in size, with a 750 MW statewide cap on eligibility for the tariff.

Executive Order S-21-09. On September 15, 2009, Governor Schwarzenegger issued Executive Order S-21-09. This Executive Order directed ARB to adopt a regulation consistent with the goal of Executive Order S-14-08 by July 31, 2010. On September 23, 2010, the ARB adopted the “Renewable Electricity Standard” (RES) to require a 33 percent by 2020 renewable energy procurement mandate for most retail sellers of electricity in California.¹

California Green Building Code. California Green Buildings Standards Code (CALGreen Code) (California Code of Regulations [CCR], Title 24, part 11) was adopted by the California Building Standards Commission in 2010 and became effective in January 2011. The Code applies to all new constructed residential, nonresidential, commercial, mixed-use, and State-owned facilities, as

¹ California Air Resources Board. *News Release: California commits to more clean, green energy.* Available at: <http://www.arb.ca.gov/newsrel/newsrelease.php?id=155>, last accessed February 2012. Also refer to Title 17, Cal. Code Regs., § 97004(a).

well as schools and hospitals. CALGreen Code is comprised of Mandatory Residential and Nonresidential Measures and more stringent Voluntary Measures (TIERS I and II).

Mandatory Measures are required to be implemented on all new construction projects and consist of a wide array of green measures concerning project site design, water use reduction, improvement of indoor air quality, and conservation of materials and resources. The CALGreen Building Code refers to Title 24, Part 6 compliance with respect to energy efficiency; however, it encourages 15 percent energy use reduction over that required in Part 6. Voluntary Measures are optional. More stringent measures that may to be used by jurisdictions that strive to enhance their commitment towards green and sustainable design and achievement of Assembly Bill 32 goals are listed. Under Tiers I and II, all new construction projects are required to reduce energy consumption by 15 percent and 30 percent, respectively, below the baseline required under the California Energy Commission (CEC), as well as implement more stringent green measures than those required by mandatory code.

Local Regulations

City Climate Actions. The City has adopted numerous policies, programs, and incentives to assist the community in preserving the environment. Existing City programs and policies relevant to reducing communitywide GHG emissions include the following:

- **Environmental Task Force:** The City formed a task force of community members and City staff to examine how the community could reduce its ecological footprint. The recommendations of the task force were outlined in the Environmental Task Force Report released on September 12, 2008.
- **Green Building Ordinance:** On October 1, 2007, the City adopted one of the nation's first mandatory green building ordinances. A key component of the West Hollywood Green Building Program is the Green Building Point System for new construction, which offers incentives for projects that achieve exemplary status across a range of sustainable measures.
- **Green Building Resource Center:** The Green Building Resource Center located on the second floor of City Hall provides samples of building materials and practices that increase energy efficiency, indoor air quality and water conservation. The display provides information for homeowners, renters, businesses and developers to make each new project in West Hollywood more sustainable.
- **Recycling:** In addition to standard household (blue and green cart) recycling for all residents, the City also has a Commercial Recycling Program. The City sends all commercial refuse to a Materials Recovery Facility (MRF) for separation and processing. The City also has a restaurant food waste recycling program, and sponsors drop off sites and events for batteries, cell phones, paper, cardboard and electronic waste.
- **Polystyrene Ban:** The City adopted a polystyrene ban in 1990. The ban prohibits use of polystyrene containers by restaurants, vendors, non-profits, and food packagers and prohibits the sale of polystyrene containers within the City for home use. Enforcing this ban has been a challenge.
- **Plastic Bag Ban:** On August 20, 2012, the City Council approved an ordinance to ban single-use plastic bags from all pharmacy, grocery, and retail stores. Under the phased implementation,

supermarkets and large retail establishments of at least 10,000 square feet in size will be prohibited from supplying plastic bags after February 20, 2013, and retail stores less than 10,000 square feet in size will have until August 20, 2013, to comply with the plastic bag ban.

- **City Vehicle Fleet:** The City's vehicle fleet includes nine hybrid vehicles and six bicycles used for parking enforcement, resulting in fuel savings and reduced CO2 emissions. With the exception of one compact pickup truck, the entire parking enforcement fleet consists of hybrid vehicles. The City also has both gasoline and hybrid vehicles for use by City staff. While not all vehicles are hybrid, the City has a hybrid/alternative vehicle procurement policy that will replace all remaining gasoline powered vehicles at the end of their life.
- **Tree Planting:** For many years, the City has sponsored tree planting programs throughout the community. Additionally, the City operates a Heritage Tree Program to identify, maintain and protect designated Heritage Trees within the City.

While the policies and programs listed above have the potential to reduce GHG emissions, data limitations restrict the City's ability to quantify their reduction capacity. Furthermore, to the extent that these policies and programs were in place in 2008, their GHG reduction potential is accounted for within the baseline emissions inventory.

Climate Action Plan. CEQA Guidelines Section 15183.5 allows jurisdictions to analyze and mitigate the significant effects of GHGs at a programmatic level, by adopting a plan for the reduction of GHG emissions. The City published its CAP on September 6, 2011, "designed to address climate change and reduce the community's greenhouse gas emissions (GHG) emissions at the local level." As stated in the CAP:

"Although climate change is a global problem, the City recognizes that many strategies to adapt to a changing climate and combat its progression are best enacted at the local level. This plan recommends a series of actions West Hollywood can take to reduce its contributions to global climate change by reducing GHG emissions. The CAP includes actions in which every part of the community can participate – residents, property owners, businesses, and City government."

The CAP outlines a course of action to reduce municipal and community-wide GHG emissions that contribute to climate change. The CAP seeks to:

- Provide clear guidance to City staff and decision-makers regarding when and how to implement key actions to reduce GHG emissions;
- Place the City on a path to reduce annual community-wide GHG emissions by 20 to 25 percent below 2008 business-as-usual emission levels by 2035;
- Inspire residents, property owners, and businesses to participate in community efforts to reduce GHG emissions; and
- Demonstrate the City's ability to respond to and comply with California GHG reduction legislation and guidelines.

The CAP includes strategies and performance indicators to reduce GHG emissions from both municipal and communitywide activities within West Hollywood. These strategies address seven major GHG sources and recommend actions to achieve GHG reductions through:

- Community leadership and engagement;
- Land use and community design;
- Transportation and mobility;
- Energy use and efficiency;
- Water use and efficiency;
- Waste reduction and recycling; and
- Green space.

A project-specific environmental document that relies on this CAP for its cumulative impacts analysis must identify the specific CAP measures applicable to the project and how the project incorporates the measures. If the measures are not otherwise binding and enforceable, they must be incorporated as mitigation measures applicable to the project.

4.6.5 THRESHOLDS OF SIGNIFICANCE

The following thresholds are based on Appendix G of the CEQA Guidelines. Based on these thresholds, implementation of the proposed project would have a significant impact related to GCC if it would:

Threshold 4.6.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold 4.6.2: Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither ARB nor the SCAQMD have not adopted a significance threshold for analyzing GHG emissions associated with land use development projects such as the proposed project. The methodology used in this EIR to analyze the project's contribution to global climate change includes a quantification of GHG emissions. The purpose of calculating the project's GHG emissions is for informational and comparative purposes, as neither ARB nor SCAQMD has adopted a quantifiable threshold for evaluating whether project-generated GHGs would be considered a significant impact. The determination of significance is focused on project consistency with the City's CAP, which is the blueprint for managing GHG emissions within the City. The significance analysis used in this EIR is based on the City's CAP and the CEQA Guidelines.

4.6.6 PROJECT IMPACTS

Threshold 4.6.1: Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact

Greenhouse Gas Emissions.

The City adopted a CAP that includes measures intended to reduce GHG emissions within City operations and the community at large. The CAP defines community strategies and GHG reduction measures through text and maps and recommends implementation actions for each quantified GHG reduction measure. As a whole, the measures were designed and benchmarked to specific standards to enable the City to achieve its GHG reduction target of 20 to 25 percent below 2008 levels by 2035, as required by AB 32. As proposed, the CAP exceeds the AB 32 target, with a projected 25.5 percent reduction.

The project site is designated and zoned CC2 (Community Commercial) in the City's General Plan. This designation is intended to provide a wide variety of commercial opportunities to serve local community needs as well as broader market areas. The proposed project is consistent with the General Plan and, thus, is consistent with growth assumptions used to develop the CAP. Therefore, the proposed project would comply with all applicable CAP policies and goals, as described in the *Revised Air Quality Impact Analysis* (Appendix C). Additionally, the proposed project would be required to implement Mitigation Measure 3.15-1 from the City's General Plan EIR (full text in Appendix B of the *Revised Air Quality Impact Analysis* [Appendix C]).

Lastly, the proposed project would be designed and constructed in accordance with the City's Green Building Ordinance, which would include implementing energy efficient systems and appliances, installing energy efficient lighting, and using water-efficient landscaping, irrigation systems and water conserving plumbing and fixtures. As designed, the proposed project would exceed Title 24 energy requirements by 20 percent and would use low-VOC interior paints (approximately 50 grams per liter).

Based on compliance with the CAP, the City's Green Building Ordinance, and implementation of Mitigation Measure 3.15-1 from the General Plan EIR, GHG emissions were quantified for the proposed project. As previously identified, implementation of the proposed project would increase on-site retail space to 45,112 square feet, increase the office space to 137,064 square feet, and add a 16,404 square foot art gallery, a 12,303 square foot design showroom, 8,202 square feet of restaurant uses, and 76 apartments. The proposed project would include a variety of physical attributes and operational programs that would generally contribute to a reduction in operational-source pollutant emissions including GHG emissions. The emission calculations take into account on-road mobile vehicle operations, general electricity consumption, electricity consumption associated with the use and transport of water, natural gas consumption, and solid waste decomposition during construction and operations. GHG emissions were estimated using most recent version of the California Emissions Estimator Model (CalEEMod) Version 2013.2.2.

GHG emissions that could be generated on the proposed project site would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would

also be long-term regional emissions associated with project-related vehicular trips and stationary source emissions, such as natural gas used for heating. Based on SCAQMD guidance, the emissions summary includes construction emissions amortized over a 30-year span, as shown in Table 4.6.E. Calculations and CalEEMod run sheets for GHG emissions are provided in Appendix C.

Table 4.6.E: Proposed Project’s Long-Term Regional GHG Operational Emissions

Construction Phase	Total Regional Pollutant Emissions, MT/year					
	Bio-CO ₂	NBio-CO ₂	Total-CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions Amortized over 30 Years	0	140	140	0.02	0	140
Area Sources	0	18	18	0.0018	0.0003	18
Energy Sources	0	3,000	3,000	0.069	0.019	3,000
Mobile Sources	0	3,700	3,700	0.17	0	3,700
Waste Sources	43	0	43	2.5	0	96
Water Usage	9.8	220	230	1.0	0.025	260
Total Project Emissions	53	6,900	7,000	3.7	0.044	7,100
Existing Site Emissions	15	2,600	2,600	1.1	0.01	2,700
Net Project Emissions	38	4,300	4,400	2.6	0.035	4,400

Source: LSA Associates, Inc., March 2013.

Bio-CO₂ = biologically generated CO₂

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

GHG = greenhouse gas

MT = metric tons

N₂O = nitrous oxide

NBio-CO₂ = non-biologically generated CO₂

As shown in Table 4.6.E, the proposed project would result in 4,400 new metric tons per year of CO₂e, or 8.5 metric tons of CO₂e per year per the service population.¹ By implementing the project features and GHG reducing measures described above, the proposed project would result in a GHG emission profile that is better (lower) than business-as-usual. Project-generated GHG emissions would be less than the 9.7 metric tons of CO₂e per year per service population (see Table 4.6.B) identified in the City’s General Plan EIR and CAP for the entire City. In addition, the estimated emissions of 4,400 metric tons per year would be less than the California Air Pollution Control Officers Association (CAPCOA) 10,000-metric ton emissions standard for capturing 50 percent of new development. Approximately 52 percent of project emissions would be related to mobile sources. Although difficult to quantify, it is anticipated that mobile source emissions would be reduced in the future as regional transit expands (e.g., Regional Connector and Westside Subway Extension) and project-related single-occupancy vehicle trips are reduced. Because project emissions would be lower than the standards in the CAP and the CAPCOA, potential GHG impacts are less than significant and no mitigation is required.

¹ Service population for the project includes 120 residents and 517 new employees minus the 120 existing employees, resulting in a service population increase of 517 (4,400 / 517 = 8.5).

Threshold 4.6.2: **Would the proposed project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Less Than Significant Impact

Greenhouse Gas Plan, Policy, or Regulation Consistency.

The proposed project would comply with the plans and policies in the City's CAP, comply with Mitigation Measure 3.15-1 in the General Plan EIR for the purpose of reducing GHG emissions, and comply with the City's Green Building Ordinance. Based on this analysis, project-related GHG emissions would not conflict with the City of West Hollywood's General Plan and CAP, which is intended to exceed the AB 32 emission reduction targets. The CAP features, General Plan Mitigation Measure, and project design features would reduce project-generated GHG emissions and would ensure that the proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, the proposed project would result in a less than significant impact, and no mitigation measures are required.

4.6.7 MITIGATION MEASURES

Based on compliance with the CAP, the City's Green Building Ordinance, and Mitigation Measure 3.15-1 from the General Plan EIR (see Appendix B to the *Revised Air Quality Impact Analysis* [Appendix C]), impacts related to GHG emissions would be less than significant. No mitigation measures are required.

4.6.8 CUMULATIVE IMPACTS

While the proposed project would not have a significant impact on global warming or climate change, it would contribute to cumulative GHG emissions. However, there are currently no significant thresholds, specific reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative level. The proposed project's GHG emissions would be very small in comparison to State or global GHG emissions; without the necessary science and analytical tools, it is not possible to determine with certainty, whether the project's emissions of GHG would be cumulatively considerable, within the meaning of CEQA Guidelines Sections 15065(a)(3) and 15130. The ARB is currently in the process of designing regulations to monitor, limit, and ultimately reduce California GHG emissions, but there are as yet no clear standards for assessing the significance of cumulative impacts from past, present and future projects. Given the proposed project's consistency with State and local GHG emission reduction goals and objectives, the contribution to the cumulative impact of global climate change would be less than significant and would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Given the findings of AB 32 and the requirements of CEQA, the Lead Agency must determine whether a project will or will not have a cumulatively considerable contribution. Based on compliance with the CAP, the City's Green Building Ordinance, and implementation of Mitigation Measure 3.15-1 from the General Plan EIR, GHG emissions were quantified for the proposed project. By implementing the project features and GHG reducing measures described above, the proposed

project would result in a GHG emission profile that is better (lower) than business-as-usual. Project-generated GHG emissions would be less than the 9.7 metric tons of CO₂e per year per service population identified in the City's General Plan EIR and CAP for the entire City. Additionally, since climate change is a global issue, it is unlikely that the proposed project would generate enough GHG emissions to influence global climate change on its own. Because the proposed project is consistent with the City's CAP and because project's impacts alone would not cause or significantly contribute to GCC, project-related CO₂e emissions and their contribution to GCC impacts in the State of California would not make a significant contribution to cumulatively considerable GHG emission impacts.

4.6.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to GHG emissions would be less than significant. No mitigation measures are required. Therefore, the proposed project's GHG emissions would be less than significant.