

# ATTACHMENT E

# APPENDIX D

## CLIMATE ACTION PLAN

## CONSISTENCY CHECKLIST

# Climate Action Plan Consistency Checklist

## Introduction

The Climate Action Plan Consistency Checklist (Checklist) is intended to be a tool for new development projects to demonstrate consistency with Pasadena’s Climate Action Plan (CAP), which is a qualified greenhouse gas (GHG) emissions reduction plan in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. This Checklist has been developed as part of the CAP implementation and monitoring process and will support the achievement of individual CAP measures as well as Pasadena’s overall GHG reduction goals. In addition, this Checklist will further Pasadena’s sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others.

CEQA Guidelines Section 15183.5 allows lead agencies to analyze the impacts associated with GHG emissions at a programmatic level in plan-level documents such as CAPs, so that project-level environmental documents may tier from the programmatic review. Projects that meet the requirements of this Checklist will be deemed to be consistent with Pasadena’s CAP and will be found to have a less than significant contribution to cumulative GHG (i.e., the project’s incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with Pasadena’s CAP and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible.

## Applicability

This Checklist is only required for discretionary projects<sup>1</sup> that are subject to and not exempt from CEQA. Projects that are exempt from CEQA are deemed to be consistent with Pasadena’s CAP, and no further review is necessary, with the exception of the Class 32 “In-Fill Development Projects” categorical exemption (CEQA Guidelines Section 15332), for which Projects are required to demonstrate consistency with the CAP through this Checklist.

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<sup>1</sup> In this context a project is any action that meets the definition of a “Project” in Section 15378 of the State CEQA Guidelines.

# Climate Action Plan Consistency Checklist Application Form

When required, the Checklist must be included in the project submittal package. The requirements in the Checklist will be included in the project’s conditions of approval. The applicant is required to provide supporting documentation on how the proposed project will implement the measures identified in the Checklist to the satisfaction of the Planning & Community Development Department.

## **Step 1: Complete a Master Land Use Application Form (separate attachment)**

## **Step 2: Demonstrate consistency with the Land Use Element of the General Plan**

The growth projections outlined in the 2015 General Plan Land Use Element were used in Pasadena’s CAP to estimate community-wide GHG emissions over time. Therefore, new development projects must be consistent with the Land Use Element to be consistent with Pasadena’s CAP. In order for City staff to determine a project’s consistency with the Land Use Element, please answer the following question and provide explanation with supporting documentation for each response.

Is the proposed project consistent with the existing land use designation of the Land Use Element?

Yes  No

If “Yes,” proceed and complete Step 3 of the Checklist.

If “No,” the proposed project may not tier from this document and must prepare a comprehensive project-specific analysis of GHG emissions and incorporate the measures in this Checklist to the extent feasible.

### **Step 3: Demonstrate consistency with Pasadena’s CAP**

Proposed projects which complete one of the following three options will be deemed to be consistent with Pasadena’s CAP and will be found to have a less than significant contribution to cumulative GHG emissions (i.e., the project’s incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b).

Please select one of the following options:

- Option A: Sustainable Development Actions – Demonstrate that the proposed project is consistent with the Pasadena CAP by incorporating applicable actions intended to ensure that the project contributes its fair share to the City’s cumulative GHG reduction goals
- Option B: GHG Efficiency - Demonstrate that the proposed project is consistent with Pasadena’s per person GHG efficiency thresholds
- Option C: Net Zero GHG Emissions – Demonstrate that the proposed project would not result in a net increase in GHG emissions

**Option A: Sustainable Development Actions**

In order to complete this option, a proposed project must incorporate applicable Sustainable Development Actions to the satisfaction of the applicable City Departments. Incorporating these actions will ensure that the project is reducing its fair share of GHG emissions and support the achievement of Pasadena’s overall GHG emissions reduction goals. For each action selected, please submit the requested documentation. If a mandatory action is not applicable to the project, please provide a description as to why that action cannot be implemented.

**Mandatory Actions (all of the actions below are required)**

GHG Reduction Strategy (Measure in Pasadena’s CAP)	Sustainable Development Actions	Yes	N/A
		Check the appropriate box and provide explanation	
<b>T-1.2:</b> Continue to improve bicycle and pedestrian safety	<b>Bicycle Storage:</b> Does the project provide bicycle storage lockers, racks, or other bicycle storage facilities for residents/employees?  Check “N/A” only if the project does not include residents or employees.	X	
<b>T-3.1:</b> Decrease annual commuter miles traveled by single occupancy vehicles	<b>Transportation Demand Management (TDM):</b> Does the project include a TDM plan? A TDM plan is required for the following projects: multifamily residential development that are 100 or more units; mixed-use developments with 50 or more residential units or 50,000 square feet or more of non-residential development; or non-residential projects which exceed 75,000 square feet. If applicable, please submit the TDM plan for review.		X
<b>T-4.1:</b> Expand the availability and use of alternative fuel vehicles and fueling infrastructure	<b>Alternative Vehicle Fueling Wiring:</b> For projects with more than three parking spaces, does the project provide wiring for at least one 240V Type II electric car charger? Please include specifications on the project plans.  Check “N/A” only if the project does not include more than three parking spaces.	X	
<b>E-1.2:</b> Encourage the use of energy conservation devices and passive design concepts that make use of the natural climate to increase energy efficiency	<b>Passive Design Features:</b> Does the project utilize passive design techniques such as awnings or overhangs on the east, west, and south facing windows which block the high summer sun but allow in lower winter sun? Please include specifications on the project plans.	X	
<b>WC-1.1:</b> Reduce potable water usage throughout Pasadena	<b>Irrigation Efficiency:</b> Will the project utilize drought tolerant landscaping and/or drip irrigation and/or weather controllers to reduce outdoor water use? Please include specifications on the project plans.  Check “N/A” only if the project does not include any landscaping.	X	
<b>WR-1.1:</b> Continue to reduce solid waste and landfill GHG emissions	<b>Facilitate Recycling:</b> Does the project include a space for separate trash and recycling bins as well as provide informational signage/handouts for residents/employees outlining materials to be recycled? Please include specifications on the project plans.	X	

### Selective Actions

In addition the mandatory actions, the proposed project must implement the following:

- One additional action in the Energy Efficiency and Conservation category
- One additional action in the Sustainable Mobility and Land Use category
- Three additional actions from any category



### Energy Efficiency and Conservation (select a minimum of one action)

GHG Reduction Strategy (Measure in Pasadena’s CAP)	Sustainable Development Actions	Yes	No
<b>E-1.1:</b> Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	<b>Zero-Net Energy (ZNE):</b> Does the project generate 100% of electricity required on site? ZNE calculations must be provided.		
<b>E-1.1:</b> Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	<b>Energy Efficiency (Exceed 2016 Title 24):</b> Does the project exceed the 2016 Title 24 Efficiency Standards by at least 5%? Please include Title 24 energy model.	X	
<b>E-4.1:</b> Increase city-wide use of carbon-neutral energy by encouraging and/or supporting carbon-neutral technologies	<b>Renewable Energy:</b> Does the project generate at least 60% of the building’s projected electricity needs through renewable energy? Please include specifications on the project plans.		



### Sustainable Mobility and Land Use (select a minimum of one action)

GHG Reduction Strategy (Measure in Pasadena’s CAP)	Sustainable Development Action	Yes	No
<b>T-1.1:</b> Continue to expand Pasadena’s bicycle and pedestrian network	<b>End-of-Trip Bicycle Facilities (Commercial Development):</b> Does the project provide at least one shower for every 50 employees? Please include these specifications on the project plans.		X
<b>T-1.1:</b> Continue to expand Pasadena’s bicycle and pedestrian network	<b>Bike Share:</b> Does the project include a bike share station? Please include these specifications on the project plans.		X
<b>T-3.1:</b> Decrease annual commuter miles traveled by single occupancy vehicles	<b>Car Sharing:</b> Does the project provide/facilitate car sharing by providing a designated car share space on or within the immediate vicinity of the project site? Examples of car share options include ZipCar, PitCarz, and Getaround. Please include these specifications on the project plans.		X
<b>T-3.1:</b> Decrease annual commuter miles traveled by single occupancy vehicles	<b>Parking De-Coupling:</b> Does the project separate the cost of parking from the cost of commercial space and/or residential housing by charging for each individually? Please include these specifications on the project plans.		X
<b>T-3.1:</b> Decrease annual commuter miles traveled by single occupancy vehicles	<b>Transportation Demand Management (TDM):</b> Does the project include a TDM plan? Please submit the TDM plan for review (Note: this measure cannot be combined with the mandatory measure that requires a TDM plan for projects that meet certain size thresholds.)		X
<b>T-4.1:</b> Expand the availability and use of alternative fuel vehicles and fueling infrastructure	<b>Alternative Vehicle Fueling Infrastructure:</b> Does the proposed project include functioning 240V Type II electric car chargers at 3% of parking spaces (at least one charger) AND conduit to allow for future charger installation to 25% of spaces?	X	
<b>T-5.1:</b> Facilitate high density, mixed-use, transit-oriented, and infill development	<b>Transit Oriented Development:</b> Is the project located within 0.25 mile of a major transit stop as defined in the Zoning Code. Please include a map outlining the nearest transit stop.		X
<b>T-6.1:</b> Reduce GHG emissions from heavy-duty construction equipment and vehicles	<b>Reduce GHG emissions from heavy-construction equipment:</b> Will the project utilize at least 30% alternative fueled construction equipment (by pieces of equipment) and implement an equipment idling limit of 3 minutes? Please provide idling limit plan including implementation strategies along with the total pieces of equipment and those utilizing alternative fuels.		X

## Water Conservation

<b>GHG Reduction Strategy (Measure in Pasadena's CAP)</b>	<b>Sustainable Development Action</b>	<b>Yes</b>	<b>No</b>
<b>WC-1.1:</b> Reduce potable water use throughout Pasadena	<b>Indoor Water Efficiency:</b> Will the project achieve at least a 35% reduction in indoor water use per the LEED V4 Indoor Water Use Reduction Calculator? Please attach the calculator output.		X
<b>WC-2.1:</b> Increase access to and use of non-potable water	<b>Rainwater Capture and Reuse:</b> Does the project utilize a rainwater capture and reuse system to reduce the amount of potable water consumed on site? Please include these specifications on the project plans.		X
<b>WC-2.1:</b> Increase access to and use of non-potable water	<b>Indoor &amp; Outdoor Recycled Water:</b> Will the project be plumbed to utilize recycled water for either indoor or outdoor water use? Please include these specifications on the project plans.	X	
<b>WC-2.1:</b> Increase access to and use of non-potable water	<b>Greywater:</b> Will the project be plumbed to take advantage of greywater produced on site such as a laundry to landscape system or another on-site water reuse system? Please include these specifications on the project plans.	X	
<b>WC-3.1:</b> Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	<b>Permeable Surfaces:</b> Is at least 30% of the hardscape (e.g., surface parking lots, walkways, patios, etc.) permeable to allow infiltration? Please include these specifications on the project plans.		X
<b>WC-3.1:</b> Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	<b>Stormwater Capture:</b> Is the project designed to retain stormwater resulting from the 95 <sup>th</sup> percentile, 24 hour rain event as defined by the Los Angeles County 95 <sup>th</sup> percentile precipitation isohyetal map? Please provide the engineered stormwater retention plan with the project plans ( <a href="http://dpw.lacounty.gov/wrd/hydrologygis/">http://dpw.lacounty.gov/wrd/hydrologygis/</a> )		X

## Waste Reduction

<b>GHG Reduction Strategy (Measure in Pasadena's CAP)</b>	<b>Sustainable Development Action</b>	<b>Yes</b>	<b>No</b>
<b>WR-1.1:</b> Continue to reduce solid waste and landfill GHG emissions	<b>Recycled Materials:</b> Does the project utilize building materials and furnishings with at least 50% (pre- or post-consumer) recycled content or products which are designed for reuse? At a minimum, projects must show at least 10% of the material by cost meets the recycled content requirement? Please submit the plan for review.		X
<b>WR-3.1:</b> Implement a city-wide composting program to limit the amount of organic material entering landfills	<b>On-Site Composting:</b> Does the project include an area specifically designated for on-site composting? Please include these specifications on the project plans.		X

## Urban Greening

<b>GHG Reduction Strategy (Measure in Pasadena's CAP)</b>	<b>Sustainable Development Action</b>	<b>Yes</b>	<b>No</b>
<b>UG-1.1:</b> Continue to preserve, enhance, and acquire additional green space throughout Pasadena to improve carbon sequestration, reduce the urban heat-island effect, and increase opportunities for active recreation	<b>Greenspace:</b> Does the project include at least 500 sq. ft. of public use greenspace (landscaped yards, parklets, rooftop garden, etc.)? At a minimum, 50% of the required greenspace must include softscape landscaping (e.g., trees, plants, grass, etc.).	X	
<b>UG-2.1:</b> Continue to protect existing trees and plant new ones to improve and ensure viability of Pasadena's urban forest	<b>Trees:</b> Does the project result in a net gain of trees? Please include these specifications on the project plans.	X	

## Total Actions Taken

Sector	Actions Selected (#)	Actions Required
Mandatory Actions	5	6
Energy Efficiency and Conservation	1	1
Sustainable Mobility and Land Use	1	1
Water Conservation	2	0
Waste Reduction	0	0
Urban Greening	2	0
Total # of Actions Selected		
<i>Total Required</i>	<i>11</i>	

## Supporting Documentation

Use the section below to provide supporting information describing how each selected Sustainable Development Action will be implemented in the proposed project. Additional information such as model outputs, invoices, and project plans should be noted below and attached to this submittal as needed.

Sustainable Development Action	Description of Project Implementation
All selections	Will be incorporated in final permit plans.



<b>Sustainable Development Action</b>	<b>Description of Project Implementation</b>

### **Option B: GHG Efficiency**

The efficiency threshold assesses the GHG efficiency of a proposed project on a service person (residents + full time employees) basis. This method recognizes that highly efficient projects (e.g., compact and mixed-use development) with relatively high mass emissions may nevertheless meet the local and State GHG reduction goals/targets. Using the demographic projections developed for the CAP, Pasadena has developed service person efficiency thresholds for the years of 2020, 2025, 2030 and 2035 which are consistent with Pasadena’s GHG emission goals included in the CAP and the State targets it is designed to achieve (AB 32, SB 32, and substantial progress towards EO S-3-05). Applicants may decide to assess their proposed project’s GHG emissions relative to Pasadena’s GHG efficiency thresholds in lieu of completing the Sustainable Development Actions. Applicants should utilize standard GHG modeling techniques (such as CalEEMod<sup>2</sup>) to estimate total GHG emissions associated with the proposed project. Models should include all construction emissions (amortized over 30 years) and operational emissions. Total annual emissions should be divided by the proposed project’s service population (residents + full time employees) to determine the efficiency of the proposed project using the following equation:

$$\text{Proposed Project's GHG Efficiency} = \text{Annual GHG Emissions} / \text{Service Population (Residents + Full Time Employees)}$$

The proposed project must be able to demonstrate a GHG efficiency which is less than or equal to the threshold listed below for the projects first operational year to be considered consistent with the Pasadena CAP and State targets it is designed to achieve. Refer to Appendix B for a complete description of the methodology used to calculate the efficiency thresholds.

<b>Project First Operational Year</b>	<b>Threshold</b>
2017 – 2020	5.63 MT CO <sub>2</sub> e/Service Person
2021 – 2025	4.56 MT CO <sub>2</sub> e/Service Person
2026 – 2030	3.57 MT CO <sub>2</sub> e/Service Person
2031 – 2035	2.73 MT CO <sub>2</sub> e/Service Person

<sup>2</sup> The California Emissions Estimator Model® (**CalEEMod**) is a statewide land use emissions computer model designed to provide a uniform platform for assessing air quality and GHG impacts associated with construction projects. Available at: <http://www.caleemod.com/>

### **Option C: Net Zero GHG Emissions**

In lieu of Option A or B, applicants can demonstrate consistency with this CAP by demonstrating their proposed project would result in no net increase of GHG emissions. A proposed project can reduce its GHG emissions through the purchasing of carbon offsets issued by Climate Action Reserve<sup>3</sup> or other validated carbon offset registry to a level which results in zero net GHG emissions. The following methodology must be followed to prove zero net GHG emissions.

1. The applicant must model the proposed project’s annual emissions using the most recent version of CalEEMod or equivalent model accepted by SCAQMD and/or CARB for CEQA purposes. Each model must include all emissions associated with the project including land clearing, demolition, earth moving, construction activities and operational related emissions such as energy use, water use, waste generation, transportation, area sources, and vegetation change, if applicable. The total annual operational emissions over 30 years as projected by the model should then be summed and added to the construction emissions to estimate the total lifetime GHG emissions associated with the project. CalEEMod is able to estimate operation related emissions over time taking into account changes to grid mix and vehicle fleet mandated by state legislation such as Renewable Portfolio Standard (RPS) and Pavley. Applicants should use CalEEMod forecasting to show overall GHG emissions and existing conditions (if applicable) should be modeled separately using CalEEMod for operations only and then subtracted from the project total to show the net change in GHG emissions.

**Example:**

*Construction Emissions (1,000 MT of CO<sub>2</sub>e) + Sum of Annual Emissions over 30 years (90,000 MT of CO<sub>2</sub>e) – Existing Conditions (500 MT CO<sub>2</sub>e) = 90,500 MT of CO<sub>2</sub>e*

2. The total emissions for the project must then be offset by Climate Reserve Tonnes or CRT’s through the Climate Action Reserve marketplace. In the above example, the proposed project would be required to purchase 90,500 CRT’s through the carbon marketplace. Offsets cost between \$12-\$15 as of September 2017 but prices are subject to changes in the carbon market. The marketplace can be found here:  
<http://www.climateactionreserve.org/how/crt-marketplace/>

The full CalEEMod output and verification of the CRT’s purchased must be provided to the City of Pasadena as part of the review process.

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<sup>3</sup> The Climate Action Reserve can be considered a bank which holds credits that amount to 1 metric ton of CO<sub>2</sub>e per Climate Reserve Tonne (CRT). These credits get their reduction value through projects which reduce GHG emissions such as renewable energy development or through carbon sequestration. Those projects can sell CRT’s equal to the amount of GHG emissions reduced. Other projects, can then purchase those CRT’s to offset their own emissions. For more information see the Technical Appendix B of the Climate Action Plan