

8

Climate Change

Designing Healthy, Equitable, Resilient, and Economically Vibrant Places

“California, as it does in many areas, must show the way. We must demonstrate that reducing carbon is compatible with an abundant economy and human well-being. So far, we have been able to do that.”

—Governor Jerry Brown

Introduction

The impacts of climate change pose an immediate and growing threat to California’s economy, environment, and to public health. Cities and counties will continue to experience [effects of climate change](#) in various ways, including increased likelihood of droughts, flooding, wildfires, heat waves and severe weather. California communities need to respond to climate change both through policies that promote adaptation and resilience and by significantly reducing greenhouse gas (GHG) emissions. For requirements related to climate adaptation please see the [Safety Element](#).

While climate change is global, the effects and responses occur substantially at the local level, and impacts and policies will affect the ways cities and counties function in almost every aspect. Cities and counties have the authority to reduce (GHG) emissions, particularly those associated with land use and development, and to incorporate resilience and adaptation strategies into planning. For example, the interplay of general plans and [CEQA](#) requirements is particularly critical in evaluation of GHG emissions and mitigation. For this reason, specific guidance is provided on how to create a plan to reduce GHG emissions that meets the goals of both CEQA and general plans. To this end, this chapter summarizes how a general plan or climate action plan can be consistent with [CEQA Guidelines section 15183.5 \(b\)](#), entitled Plans for the Reduction of Greenhouse Gas Emissions. This chapter can also be used to update older plans so they comply with the criteria in [Section 15183.5 \(b\)](#) and associated CEQA streamlining opportunities.

This guidance, however detailed, should not be considered the only approach to addressing GHG emissions at the local level. Local governments have substantial discretion in choice of methodology and may identify appropriate methods to address this important issue. This chapter also provides recommended approaches to consistency with other documents that may be related to the general plan such as climate action plans (CAPs), climate adaptation plans, and plans to reduce GHG emissions. Other chapters have more specific guidance for addressing climate change in the context of that element/chapter.

Throughout this chapter, greenhouse gas emissions is referred to as “GHG emissions” and taking measures to address the impacts of climate change is referred to “adaptation.” For more in depth definitions of GHG emissions and resilience refer respectively to the California Air Resources Board Climate Change [Scoping Plan](#) and the California Natural Resources Agency [Safeguarding California Plan](#). For requirements related to climate adaptation please see the [Safety Element](#).

CORRELATIONS BETWEEN ELEMENTS

	Land Use	Circulation	Housing	Conservation	Open Space	Safety	Noise	EJ
Climate Change	■	■	■	■	■	■	■	■

■ Identified in statute ■ Closely related to statutory requirements

Reducing Greenhouse Gas Emissions

Local governments play a critical role in reducing GHG emissions. In California, local governments regulate many activities that contribute to GHG emissions and air pollutants, including industrial permitting, land use and transportation planning, zoning and urban growth decisions, implementation of building codes and other standards, and control of municipal operations.

Since the Legislature expressly recognized climate change as a consideration in CEQA in 2007, local governments have typically addressed climate change either in policies in the general plan itself, or through adoption of a CAP. Doing so, among other things, allows for consistency with GHG discussions and related mitigation measures in the General Plan EIR and mitigation monitoring and reporting program.

The CEQA Guidelines recognize the important role of Climate Action Plans in the CEQA process ([CEQA Guidelines § 15183.5, Tiering and Streamlining the Analysis of Greenhouse Gas Emissions](#)). The Guidelines set forth a basic framework for developing a plan to reduce GHG emissions and acknowledges the role CEQA plays in ensuring the impacts of climate change are addressed ([CEQA Guidelines § 15183.5\(b\), Plans for the Reduction of Greenhouse Gas Emissions](#)).

The [SEEC ClearPath California tool](#), supported by the state and available without charge, provides a “five milestone” process for GHG inventory, planning, implementation, and monitoring. While ClearPath is not the only approach, it includes support from state agencies and can be used as a starting point for local governments addressing GHG emissions. The [Governor’s Office of Planning and Research \(OPR\)](#) and the [California Air Resources Board \(ARB\)](#) serve on the advisory committee for management of the ClearPath California tool to ensure its ongoing improvement and consistency with California climate policy. ClearPath and most proprietary tools also correspond to the [Community Protocol for Addressing Community Scale Emissions and the Local Government Operations Protocol](#), which also have state support.

Plans to Reduce Greenhouse Gas Emissions

The GHG emissions reduction plan can be either a stand-alone CAP or directly part of the general plan. The CEQA Guidelines recognize either approach. Regardless of approach, local governments should inventory and mitigate GHG emissions “within a defined geographical area”—typically the city or unincorporated county over which they have land use authority.

Additionally, regardless of approach, it is preferable to create the plan to reduce GHG emissions concurrently with or closely following a general plan update. There are a number of benefits of aligning a GHG reduction strategy, such as a CAP, with a general plan update including:

1. Allowing local governments to include a wider range of mitigation measures in the GHG reduction strategy, especially those that are related to land use and transportation;
2. Allowing projects to take advantage of a wider range of CEQA streamlining measures;
3. Streamlining environmental review for the GHG reduction strategy itself; and
4. Ensuring that the CAP and general plan use a consistent set of baseline conditions and growth assumptions, which can save effort for planners.

SEEC ClearPath California “Five Milestone” Process for Addressing Community GHG Emissions



Source: www.californiaseec.org

The Role of CEQA Guidelines in Supporting GHG Emissions Reductions in General Plans

The CEQA Guidelines acknowledge the role of long-range plans, such as general plans, in addressing cumulative impacts (CEQA Guidelines § 15183.5(a)-(b)). This approach applies to greenhouse gas emissions (GHGs). Because GHGs can be evaluated in different types of plans, such as general plans, facilities plans, and CAPs, CEQA Guidelines section 15183.5(b) sets forth minimum criteria that a plan should satisfy to allow streamlining a cumulative impacts analysis under CEQA. For additional background, see pages 90 and 91 in the [Natural Resources Agency’s Final Statement of Reasons](#). For Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions pursuant to SB97 (Dec. 2009).

Under CEQA, lead agencies should analyze the GHG emissions of proposed projects, and should reach a conclusion regarding the significance of those emissions (CEQA Guidelines § 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions).

Lead agencies should also undertake an analysis of a proposed project’s potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives (Pub. Resources Code § 21100(b)(3); CEQA Guidelines, Appendix F). As with other environmental impacts, when a project’s GHG emissions may be significant, lead agencies should consider a range of potential mitigation measures to reduce those emissions. (CEQA Guidelines § 15126.4(c)). Lead agencies should analyze potentially significant direct, indirect, and cumulative environmental impacts that a project may cause by placing projects in hazardous locations, including locations potentially affected by hazards that result from climate change. Agencies should also analyze impacts to the project where the project risks exacerbating those hazards. (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369; CEQA Guidelines § 15126.2(a)).

As explained below, lead agencies may significantly streamline the analysis of GHG on a project level by using a programmatic greenhouse GHG emissions reduction plan meeting certain criteria ([CEQA Guidelines § 15183.5\(b\)](#)). As a result, the CAP and EIR, or general plan and EIR, with a robust discussion of climate impacts and mitigation, can be used to streamline project-level evaluation of climate impacts under CEQA.

CEQA Streamlining

CEQA requires analysis of a project's GHG emissions, a determination of whether those emissions are significant, and if so, mitigation of those emissions. On a project-by-project basis, such analysis can be complicated and costly. CEQA provides several ways for a project-level evaluation to rely on programmatic environmental review of climate impacts, including “tiering” (see [CEQA Guidelines § 15385, tiering](#)), use of master EIRs, and incorporation by reference ([CEQA Guidelines § 15183.5\(a\)](#)). While there are specific rules for using such tools, this chapter uses the term “streamlining” as a blanket term for relying on a certified plan-level environmental document, such as a general plan EIR, in analyzing the impacts of a specific project. Streamlining is a way for lead agencies to reduce project-level environmental review by ensuring robust evaluation at the programmatic level. Projects that are consistent with the CAP, for example, may be found to cause a less than significant impact under CEQA. ([CEQA Guidelines § 15064\(h\)\(3\)](#)).

1. Cumulative Impacts ([Section 15064\(h\)\(3\)](#))

[CEQA Guidelines Section 15064\(h\)\(3\)](#) provides that “[a] lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program,” that meets certain criteria. However, providing substantial evidence showing how the cumulative effect (in this case of GHG emissions) is addressed is essential to a well-functioning plan or mitigation program that is addressing climate change. A general plan or CAP can lay the foundation for this substantial evidence.

2. Developing a General Plan or Climate Action Plan for CEQA Streamlining related to GHG Emissions ([CEQA Guidelines § 15183.5\(b\)](#))

When a project is consistent with a general plan or CAP that satisfies the criteria in subdivision (b) of [Section 15183.5](#), a lead agency may also presume that the project's GHG emissions are less than significant. [Section 15183.5\(b\)](#) does not require public agencies develop plans for the reduction of GHG emissions, nor does it prohibit public agencies from developing individual ordinances and regulations to address individual sources of GHG emissions. However, a plan satisfying the criteria in that section can be used to streamline the CEQA analysis of future projects and can make it easier to manage both implementation and consistency discussions as required in general plans and general plan EIRs.

As technology improves to support the development of spatial accounting for GHG reduction strategies, CAPs should also be modified to reflect this more integrated approach. Tools such as [Urban Footprint](#), [General Plan Mapping Tool](#) and the [California GeoPortal](#) can help support decision making by local officials through a data rich, geospatially-referenced environment while also retaining the substantial evidence to support a CEQA analysis.

[CEQA Guidelines Section 15183.5, Tiering and Streamlining the Analysis of Greenhouse Gas Emissions](#) outlines six “Plan Elements” that should be included in a plan to reduce GHG emissions. This general plan guidelines chapter provides additional guidance on how to implement this section in a general plan, or a CAP that is incorporated by reference into a general plan.

Further Guidance on the Six “Plan Elements” and Other Considerations

STEP 1: Section 15183.5(b)(1)(A) Inventory

“Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area”

An essential component of a community scale CAP is the GHG emissions inventory. The [Local Government Operations Protocol](#) provides an approach for GHG inventories for municipal operations. The [United States Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions](#) provides an approach for community scale GHG emissions inventories in California and nationwide. OPR recommends use of these protocols in local government planning efforts. The Community Protocol does a good job of providing standards for quantifying emissions from different sources; however, individual jurisdictions may choose to do more detailed or different types of analysis depending on community needs.

OPR continues to work with the [Statewide Energy Efficiency Collaborative \(SEEC\)](#), [ICLEI](#), [Local Governments for Sustainability](#), the [California Air Resources Board](#) and the [Association of Environmental Professionals](#) to ensure

the Protocol responds to the needs of California and is effectively integrated into tools, both currently available and under development, for local government use in calculating community scale greenhouse gas emissions. OPR recommends the use of the SEEC tools and templates for development of a general plan or CAP. However, there may be locally appropriate reasons to use other tools and resources such as when additional granularity is desired in specific sectors or when add-on tools achieve better results than the settings in ClearPath. For additional information on available tools and additional resources to complete GHG analysis, please refer to the [Cool California](#) website.

STEP 2: Section 15183.5(b)(1)(B) Reduction Target *“Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable”*

A summary report published by the State Energy Efficiency Collaborative, “[State of Local Climate Action: California 2016](#)”, found that almost all jurisdictions with a greenhouse gas emissions reduction target include 2020. Many jurisdictions also include a general plan buildout year target. Some are, and increasingly so, including goals for 2050. With a few exceptions, local targets are typically consistent with long-term targets the State has established for 2020 and 2050. Some jurisdictions are preparing updates to include 2030 targets. Nearly all jurisdictions include a “mass emissions” calculation. Some also include “per capita” and “service population” estimates where those metrics may be useful for additional context. Examples are also included in the SEEC document and case studies are available through the [Integrated Climate Adaptation and Resiliency](#)

Consumption-Based Greenhouse Gas Emissions Inventories

Consumption-based emissions inventories (CBEI’s) combines emissions from transportation and heating fuels used by households with emissions embodied in the life cycle of energy, food, goods and services they consume, regardless of where those emissions were produced in global supply chains. In contrast, production-based inventories traditionally used in CEQA and general plan discussions count emissions where they physically enter the atmosphere.

The CBEI for cities and counties in California is calculated by [U.C Berkeley’s CoolClimate Network](#) and [CoolCalifornia](#). Online carbon footprint calculators, maps and downloadable datasets are designed to inform households on their GHG emissions and actions that can be taken to reduce consumer drive GHG emissions.

Program (ICARP) Clearinghouse. Analyzing mass emissions at the community, state, per capita emissions, and service population emissions may be appropriate to support a full understanding of community emissions.

Reducing GHG emissions on a trajectory consistent with long term State emissions reduction targets, as outlined in [Executive Orders S-03-05](#) and [B-30-15](#), and supported by the [International Panel on Climate Change \(IPCC\)](#), can demonstrate that a plan's emissions will be less than significant for CEQA purposes. Additional recommendations from the [California Air Resources Board Scoping Plan](#) for local action should also be considered.

Communities may also consider selecting multiple target years. Selecting a single reduction target year does not typically allow an agency to accurately assess the trajectory of the plan over time. Given the long-term nature of the effects of climate change, understanding the effects of the plan on long-term emissions reductions is necessary to determine whether the plan will reduce emissions to a less than significant level. Examining the long-term trajectory also allows a lead agency to determine whether the emissions reductions in the plan are sustainable, or will be overtaken by population growth, increased driving, or other shifts in emissions.

Take for example, a plan that sets only a near-term target. Such a plan might rely on increasing building energy efficiency to achieve near-term goals. Looking further out, however, might demonstrate that steady increases in vehicle miles traveled will counteract those reductions, and result in an emissions trajectory that increases rather than decreases. Setting targets out to the general plan horizon year or beyond allows a lead agency to consider the full suite of measures that might be necessary to achieve long-term reduction goals.

What Target Years Should the Plan Include?

Once a lead agency commits to looking at a long-term trajectory, the precise points along that trajectory that it chooses to measure may be influenced by practical considerations. The mechanism selected to measure progress towards a target should ensure that it allows the lead agency to meaningfully assess the impacts of a plan. Choosing to measure 2020, 2035 and 2050 emissions may allow a lead agency to compare its progress to projected statewide and region-wide emissions reductions based on work being done under SB 375, AB 32, SB 32, and other State programs. Choosing the year 2030 will align the jurisdiction's efforts with the State's interim target year and link to other air quality regulations. In order to maintain a trajectory towards the statewide 2050 reduction target, local governments should be aiming for more robust reductions in later years. This is due to the phase-in of more significant land use policies and the associated emissions benefits that will be achieved by more efficient circulation patterns and resource use. Generally, the target year may reflect horizon years of local planning documents, such as general plans,

Community spaces can serve multiple functions, creating places to gather, recreate and generate economic activity



Image by Urban Advantage, Opticos

while also ensuring that long term monitoring can be satisfied through the choices made in target years. If a CAP is developed to mitigate the impacts of a general plan, the CAP should also include a target for the horizon year of the general plan.

What Baseline Year is Appropriate?

Typically, a GHG emissions reduction plan baseline year includes the most recent year for which information is available. In the 2006 AB 32 Scoping Plan, the recommended target for local government action was 15% below “current” levels by 2020, generally construed as the baseline years between 2005 – 2008. Newer baseline GHG inventories use years after 2008, which may require some additional calculation to determine consistency with the State’s 1990 baseline year. As long as the appropriate narrative and substantial evidence is provided to support a particular baseline year, the specific year chosen is less important than the targets.

STEP 3: Section 15183.5(b)(1)(C) Forecast Projected Emissions for Activities Covered by the Plan

(“Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area”)

This step is the long-term forecast and includes trends reflecting existing programs and policies. In the case of a city’s general plan, it might address development or infrastructure added by the general plan policies. The forecast might also include implementation of state regulations addressing climate change, such as adopted building codes. In sum, the forecast includes emissions from all activities expected to occur absent any policies in the CAP.

When discussing State programs in a forecast, timing of the baseline year and the start of implementation of State programs are important. Reductions measured towards a reduction target should not include the benefits of State programs already in force; rather these reductions should be reflected in the forecast. Regardless of the role State programs play in local emissions reductions, the focus of local CAPs should be on measures to reduce emissions beyond what the State programs will achieve. The ultimate goal is a plan that identifies strategies to realistically meet longer term State targets as discussed previously.

The same principle applies with respect to existing local reduction measures. For example, a local green building ordinance adopted in 2004 would not be counted as a GHG reduction measure if the plan’s inventory base year is 2005. Emission reductions attributed to that ordinance should be reflected in the GHG inventory and forecast – that is, the total amount of GHG emissions from building energy use in the inventory would be lower because the effects of the green building ordinance would already be taking place. Lastly, when accounting for the impacts of existing state or local programs in a local GHG reduction plan, it is important to ensure there is no double-counting of emission reductions.

Mandatory Measures - Nuance

Although mandatory measures are preferred to establish the substantial evidence that a particular emissions reduction measure will have the stated benefit, there are some examples of incentive based measures that could be considered mitigation. One example is proposed to expand an energy efficiency program that has been in place several years and have a proven emissions reduction track record. These types of measures can be included in reductions towards a target, as long as assumptions reflect the proven ability for that program to reduce emissions. In other words, there should be substantial evidence to support the calculations for the measure.

STEP 4: Section 15183.5(b)(1)(D) Reduction Measures (“Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level”)

The heart of a CAP is the suite of reduction measures that will ensure that the plan achieves the selected reduction targets in a transparent and replicable manner. To do so, the lead agency should compare the emissions projected in Step 3 (Forecast) with the targets set in Step 2 (Targets). If forecasted emissions from activities covered by the plan in Step 3 are projected to exceed the reduction targets established in Step 2, additional reduction measures will be needed. See [CEQA Guidelines Section 15126.4\(c\)](#), Mitigation Measures Related to Greenhouse Gas Emissions, for additional information on the appropriate form measures should take. Only GHG emission reduction measures implemented after the baseline year should be counted towards the plan’s GHG emissions reduction target.

Feasibility and Enforceability

CEQA Guidelines sections [15168\(b\)\(4\)](#) and [15168\(c\)\(3\)](#) recognize that programmatic documents like a general plan or CAP provide an opportunity to develop mitigation plans that will apply on a project-specific basis. As a result, a CAP needs to include measures that will achieve the reduction target. How the plan achieves those targets, whether through mandatory or a mix of voluntary and mandatory measures, is up to the lead agency, so long as substantial evidence supports the conclusion.

When addressing greenhouse gas emissions, like all other technical analysis, the methodology and calculations should be transparent and replicable with the goal of providing substantial evidence supporting the assumptions, analysis and conclusions. Measures should also be real and verifiable, through either full enforceability or through substantial evidence in the record supporting an agency’s conclusion that mitigation will be effective.

A number of published court cases address the need for feasible and enforceable emission reduction measures. The decision in [Communities for a Better Environment v. City of Richmond \(2010\) 184 Cal. App. 4th 70](#), provides guidance on the level of detail that is needed. In that case, the city proposed to mitigate the effects of a refinery project by developing an emissions reduction plan after project approval. Specifically, the city pledged to implement measures that would ensure no net increase in emissions from the refinery. The EIR for the refinery suggested several possible measures, including energy efficiency upgrades and carbon sequestration. On appeal, the court held that the city’s mitigation plan was inadequate. Specifically, the court found:

“... The final EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the 898,000 metric tons of emissions resulting from the Project. No effort is made to calculate what, if any, reductions in the Project’s anticipated greenhouse gas emissions would result from each of these vaguely described future mitigation measures. Indeed, the perfunctory listing of possible mitigation measures ... are nonexclusive, undefined, untested and of unknown efficacy.” ([Communities for a Better Environment, supra, 184 Cal.App. 4th at 93](#)).

The court observed that to be adequate, a plan should include measures that are “known to be feasible”, “coupled with specific and mandatory performance standards to ensure that the measures, as implemented, will be effective” ([Id. at p. 94](#)).

Finally, when discussing emissions reduction measures in a general plan or CAP, co-benefits from reduction strategies should be considered that may result in better health outcomes, lower energy costs, improved access to transportation options, recreational opportunities, and general resource efficiency.

Existing Local and Regional Plans

Relying on emissions reductions that are achieved at the local level to the detriment of regional emissions is not an appropriate approach to achieving local targets. In the context of GHG emissions, some projects may cause adverse environmental impacts but still provide an overall benefit of reducing GHG emissions on a statewide or regional level. For example, a city may make a policy choice to allow increased housing density within a jobs-rich region in order to reduce region-wide GHG emissions from vehicles and transportation (See, e.g., [2007 Integrated Energy Policy Report \(IEPR\)](#), at p. 210). Though the introduction of new housing within the jurisdiction may result in near-term or local GHG emissions, doing so may assist the region as a whole in meeting region-wide reduction targets. [CEQA Guidelines Section 15093\(a\)](#) expressly allows a lead agency to consider this type of environmental benefit of a project in a statement of overriding considerations in the environmental document. This ensures that lead agencies may consider regional and statewide benefits along with a project's adverse impacts. Consistent with [CEQA Guidelines Section 15021\(d\)](#), the lead agency may consider environmental benefits to balance a project's significant adverse environmental effects that remain even after the adoption of all available feasible mitigation measures.

Regional transportation plans may contain information regarding transportation-related greenhouse gas emissions that is useful in a cumulative impacts analysis. Sustainable community strategies in regional transportation plans include projections of a region's GHG emissions and related cumulative effects.

Planning inclusive communities creates space for all residents



Image by Urban Advantage, Moule & Polyzoides

Offsets and sequestration

Offsets and sequestration are emerging as a mechanism to achieve longer term targets that using traditional emission reduction measures will not achieve. CEQA recognizes offsets and sequestration as potential mitigation for GHG emissions. Lead agencies have discretion to choose what is considered feasible and what they are capable of monitoring. Onsite or local offsets and sequestration measures may be more easily monitored and supported with substantial evidence.

In identifying sequestration projects, offsets/offsite mitigation as possible strategies for GHG reductions, cities and counties should keep in mind that achieving long term targets may be challenging and that innovative approaches to addressing emissions locally may be necessary. CAPs should include strategies that address the natural sequestration capabilities within a community, and community-wide efforts that may benefit from project-based funding. Offsets/offsite mitigation should be employed after other measures are generally exhausted, and the proposed measure(s) should be tied to impacts resulting from the project. For example, if a retrofit program is proposed to support GHG reductions within the community covered by the plan, then reductions resulting from the measure are appropriate to count towards achievement of a specific target, assuming the retrofit program is additional to legal requirements (see discussion below).

The lead agency should find, based on substantial evidence, that any measure, including offsets or sequestration measures, is capable of being accomplished successfully within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors ([CEQA Guidelines § 15364](#)).

Must be additional

Actions identified as reduction measures in a CAP should not be otherwise required by law or regulation. This is important for measures that apply to new development as well as measures that require funding of offsets/offsite mitigation.

STEP 5: Section 15183.5(b)(1)(e) Monitoring (*“Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendment if the plan is not achieving specified levels”*)

CAPs may be updated every three to five years in order to make adjustments based on the trajectory of emissions under adopted policies. Accordingly, “many plans are on a five year update cycle with tracking of inventories occurring more frequently” ([State of Local Climate Action: California 2016](#)). Each update should provide context with regional planning efforts, such as those included in a regional transportation plan (RTP) or sustainable community strategy (SCS).

When incorporated into a general plan, a CAP’s policies should also be reflected in the general plan implementation program. This allows for regular monitoring along with other general plan policies in the annual status report submitted to OPR.

Establishing a mechanism to monitor the plan’s progress toward achieving the stated target and to require amendment if the plan is not achieving specified levels is an important part of any CAP or general plan. Because GHG reduction strategies tend to be long-term, strategies may become stale, particularly as methods used to quantify GHG emissions evolve and economic growth projections change. Resources are available that allow for efficient monitoring, including through the [SEEC ClearPath California](#) tool. Ongoing monitoring of the success of mitigation measures will ensure they are successfully implemented according to the timeline specified within the strategy and that the plan remains eligible for CEQA streamlining. This is also an ideal opportunity to update the decision making body on progress made to date on emissions reductions and implementation of programs in a CAP.

STEP 6: Section 15183.5(b)(1)(F) Environmental Review (*Plan must “be adopted in a public process following environmental review”*)

Local governments adopting CAPs and general plans that incorporate GHG emissions reduction policies are required to analyze the impacts of the policies on the environment. CEQA requires analysis and mitigation of a project’s significant adverse environmental impacts. While the overall effect of a CAP may be beneficial, a robust CAP may entail environmental tradeoffs. For example, a CAP that calls for increased solar development may require analysis of impacts to species or habitat. Increases in density may require analysis of land use impacts. Such impacts should be analyzed and, if necessary, mitigated through an environmental document. Note that the CEQA Guidelines define “environmental documents” to include “Initial Studies, Negative Declarations, draft and final EIRs, documents prepared as substitutes for EIRs and Negative Declarations under a program certified pursuant to [Public Resources Code Section 21080.5](#), and documents prepared under NEPA and used by a state or local agency in the place of an Initial Study, Negative Declaration, or an EIR” ([CEQA Guidelines § 15361](#)).

Subsequent Projects

A lead agency may rely on the analysis in the CAP or general plan to forego further CEQA analysis of greenhouse gas emissions if a project is consistent with the analysis in the plan.

CEQA Guidelines [section 15064.4](#) together with [section 15064\(h\)\(3\)](#) provides a lead agency the ability to demonstrate consistency with an existing GHG reduction plan, but it should show that the plan actually addresses the emissions that would result from the project. One way to establish clear compliance with a CAP is a project checklist whereby applicants for new projects identify which CAP measures apply to the project, and include those measures in the application for project review. This is similar in nature to a general plan consistency analysis or zoning code compliance review.

A plan that includes a compliance checklist, discussed in Step 5 above, can simplify this evaluation for later projects. In the absence of such a checklist, a lead agency should demonstrate that the project is consistent with the development assumptions that underlie the plan and verify that relevant measures in the plan are incorporated into the later project. Thus, instead of performing a full GHG analysis (including quantification of emissions and development of mitigation) for the individual project, the initial study or EIR for the later project may just include the evaluation described above.

Climate Adaptation Planning

Emergency managers, planning agencies, private companies, and communities affected by climate change need to plan for the increase in the type, extent, and intensity of natural hazards. As outlined in more detail in the [safety element](#), a jurisdiction can start the process of understanding these hazards by using the resources in [Cal-Adapt](#), the State’s visualization tool for climate impacts. Cal-Adapt can be used in conjunction with California’s climate change adaptation decision support tool called the [Adaptation Planning Guide](#). Together they can guide creation of an adaptation plan or a general plan that meets minimum requirements for addressing climate adaptation, as required in the [safety element](#). The [safety element](#) may be the “home” for adaptation discussions in the general plan, but climate change adaptation should be integrated throughout the elements of a general plan to create internal consistency and support holistic consideration of this important issue. A general plan should also provide context for changes in the environmental setting that will occur over time. For additional information on requirements and recommendations for addressing climate risk, including policy recommendations, please visit the [safety element](#) discussion.

Many local governments find it difficult to address climate change risk and adaptation policy alone. Increasingly, they are choosing to create or join collaborative partnerships that address climate adaptation at a multijurisdictional level. Regional collaboratives can be a coordination point for policy and program development and implementation. The Alliance of Regional Collaboratives for Climate Adaptation (ARRCA) (see www.arccacalifornia.org) is one example. ARCCA was established in 2012 to help various regions of the state prepare for climate change related extreme events such as flooding, heat waves, fires, and others.

Tools and Resources for Addressing Climate Change at the Local Level

Some of the more useful climate change tools and resources referenced throughout this section and in other parts of the GPG are included in the table below. This, and additional resources, such as case studies, executive orders, legislation, and regulatory underpinnings of this discussion are located on the OPR Integrated Climate Adaptation and Resiliency Program [website](#).

Process Guidance and Vulnerability/Impact Tools	Comprehensive free resource supported by the State of California to reduce GHG emissions at the community scale	California State Energy Efficiency Collaborative (SEEC) ClearPath California
	Guidelines for California Environmental Quality Act compliance	CEQA Guidelines
	Decision making framework supported by the State of California for addressing adaptation at the local level	Adaptation Planning Guide
	Tool supported by the State of California for visualizing the impacts of climate change and links to resource	Cal-Adapt
	Federal resource for visualizing impacts, historical trends, case studies, decision support.	Climate Resilience Toolkit
Greenhouse Gas Emissions Tools	State of California supported online resource that hosts links to various tools and case studies	Cool California
	Outlines the steps to reduce GHG emissions and includes templates supported by the State of California	California State Energy Efficiency Collaborative
	Outlines examples of policies and programs to reduce GHG emissions	California Air Pollution Control Officers Association (CAPCOA)
	Provides state priorities, targets and the narrative regarding the importance of local planning on climate change. Also included recommended local targets and measures to reduce GHG emissions	California Air Resources Board Scoping Plan
	California Energy Commission Planning Guide	Energy Aware Planning Guide
Climate Adaptation and Resilience	The state supported decision support framework and guide to developing adaptation policy at the local level in California	Adaptation Planning Guide
	The State's approach to addressing climate impacts, including context to how the State should work in coordination with regional and local efforts.	Safeguarding California Plan
	The State's framework for hazard mitigation, including climate risk in the context of emergency services.	State Hazard Mitigation Plan

OPR Recommended Policies

Numerous element specific climate change policy recommendations are included throughout the general plan guidelines. Further policy guidance is included in the resources outlined in the table above. Additional recommended policies can be found in the Air Resource Board Scoping Plan. A partial list of recommended policies can be found in the general plan guidelines [Appendix A](#).