Next Generation Climate Action Plans – Are They Ready for CEQA Compliance?

Extended Abstract #49

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INTRODUCTION

Local governments across the country have been developing climate action plans (CAPs) to reduce greenhouse gas (GHG) emissions since the early 1990's. These plans historically have been visionary documents that lay out noble goals and describe broad approaches for achieving them. Climate action plans have largely lacked the technical rigor and mandatory policies to serve as effective implementation mechanisms for the long-term reduction of GHGs. However, there is evidence of a trend toward development of more technical, aggressive, and effective plans in recent years.

In June 2010, the Bay Area Air Quality Management District (BAAQMD) adopted thresholds of significance for GHG emissions under the California Environmental Quality Act (CEQA) for new development projects or land use plans. Defining a threshold of significance for GHGs is critical, because the threshold serves as the trigger to requiring the implementation of GHG mitigation measures. Successful implementation of the new GHG thresholds will ensure that future developments and land use plans incorporate GHG reduction strategies and help the State meet climate protection goals established by the Global Warming Solutions Act (AB32). The District's 2010 CEQA Guidelines lay out specific technical recommendations for meeting these thresholds of significance.

In addition to the District's new GHG significance thresholds, tools and methods for GHG data acquisition and quantification have improved in terms of accuracy, relevance to local governments, and usability. The result has been a new performance level for CAPs in the Bay Area, including more quantification, mandatory policies and more aggressive targets.

BODY

History of Climate Action Plans

In 1993, the International Council for Local Environmental Initiatives (ICLEI) launched the Cities for Climate Protection Campaign, an international effort to develop a generic framework for municipal energy policy that local governments could use to develop and implement local greenhouse gas emission reduction policies[1]. Through this program, local governments utilized the first methodologies and tools for preparing community-wide inventories of GHG emissions.

Early Climate Action Plans

The first local CAPs followed a framework developed by ICLEI that persists to this day. The framework includes a baseline inventory of GHG emissions from various community-wide sectors, such as residential and commercial buildings, transportation, solid waste and industrial facilities. The baseline inventory is followed by a business-as-usual forecast demonstrating what future GHG levels might be, should no actions be taken to reduce emissions. The climate action plan includes a GHG emission reduction target, articulated as a percentage reduction below baseline levels by the forecast year. The majority of the plan focuses on the GHG reduction strategy – a combination of policies and programs that will be implemented to reduce GHGs and achieve the reduction target. Climate action plans developed in the 1990's reflected aggressive emission reduction targets, but lacked the technical basis and statutory authority to ensure that the desired levels of GHG emissions would be reduced and the targets achieved. Many of these early plans were not even formally adopted by the jurisdiction's governing body.

Early tools for quantifying GHG emissions used generalized default values and relied heavily on user inputs. In the early years of climate action planning, charting general trends in emission levels was viewed as more important than technical accuracy, largely because protocols for GHG quantification simply did not exist. As noted by Schneider and Kousky, "while the [ICLEI] software only provides estimates and does not address all the complications inherent in accurately measuring emissions, the cities do not seem to need more accurate methods to chart their progress or inspire emission reductions."[2]

Early CAPs focused primarily on voluntary actions to promote GHG reduction, as opposed to mandatory programs, ordinances and codes. The CAPs also often lacked strong implementation mechanisms to ensure that the GHG reduction strategies would achieve the plans' goals over time. The result was often an inspirational, visionary document that laid out a blueprint for moving toward a lower carbon future, but with little or no authority to effect actual change.

CAPs and the California Environmental Quality Act

The California Environmental Quality Act

The California Environmental Quality Act (CEQA), established in 1970, requires that public agencies follow a public review process for development projects that they undertake or regulate to determine if the project would have a significant effect on the environment. It is up to the lead public agency to determine, based on substantial evidence, if a significant effect, or impact, would result from a project.[3] Guidance on how to determine significance is provided in CEQA Guidelines produced by the Governor's Office of Planning and Research (OPR). Environmental impacts covered by CEQA include impacts to land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

In 2007, California's State Attorney General sued San Bernardino County based on its failure to analyze increased greenhouse gas emissions that would result from the county's proposed general plan amendment.[4] The Attorney General's office has since continued to consider GHG emissions a relevant environmental impact under CEQA and has continued to issue comment letters to local agencies. While this made local governments sit up and take notice, there was still a lack of specific guidance on how GHGs should be addressed within CEQA.

In March, 2010, OPR amended its CEQA Guidelines to provide discussion and guidance on how lead agencies should address GHG emissions in the environmental review process. The amended guidelines allow for future development projects that are consistent with local GHG reduction plans to tier off the environmental review done for those plans.[5] Tiering enables a future project to use the environmental review done on the GHG reduction plan in lieu of doing a separate (and costly) review of GHG emissions for the project. However, OPR's Guidelines do not lay out specific direction on how to develop or what to include in local GHG reduction plans.

CEQA and the Bay Area Air Quality Management District

In June 2010, the Bay Area Air Quality Management District adopted local thresholds of significance for GHG emissions and updated its own CEQA guidelines for air quality impacts. The BAAQMD defined both project-level and plan-level GHG thresholds. Paralleling OPR's approach, BAAQMD included a plan-level threshold allowing for future development projects to tier off the environmental review done for "Qualified GHG Reduction Strategies." BAAQMD followed OPR's qualitative guidance on what to include in such strategies, but included more specific clarification, and produced a second document with detailed guidance, *GHG Plan Level Quantification Guidance*.

As a result of the tiering benefit allowed in both OPR's and BAAQMD's CEQA guidelines, local agencies in the Bay Area are actively pursuing development of CAPs specifically intended to serve as "Qualified GHG Reduction Strategies."

Review Methods

Since adoption of the local thresholds of significance in June 2010, BAAQMD has been reviewing local CAPs to determine how they measure up to the minimum standard elements of a "Qualified GHG Reduction Strategy" laid out in BAAQMD's 2010 CEQA Guidelines. According to the Guidelines, a "qualified" CAP must include:

A) A community-wide GHG emissions inventory for the base year and a business-as-usual forecast of emissions for the future/target year
B) A GHG reduction target consistent with AB 32 (equivalent to returning emissions to 1990 levels by 2020)
C) Identification of increases or decreases in local GHG emissions due to actions occurring outside the jurisdiction (such as through the State's AB 32 Scoping Plan)
D) Identification and quantification of sufficient GHG reduction measures to meet the reduction target
E) A monitoring and implementation strategy for the plan
F) Preparation of an environmental review document pursuant to CEQA

While items A, B, C, D and E have historically been included in local CAPs, BAAQMD's *GHG Plan Level Quantification Guidance* includes technical requirements that in some instances exceed the technical work traditionally seen in CAPs. Until 2010, item F was rarely included in local climate action plan development and adoption.

BAAQMD employs the following process for reviewing CAPs.

1. Conduct a detailed review of the baseline emissions inventory: verify that all relevant emission sources have been included; check data sources and assumptions for credibility; verify that appropriate emission factors have been used. The BAAQMD looks for Scope 1 and 2 emissions sources to be included in the emissions inventory, along with some Scope 3 emissions (those associated with the decomposition of solid waste and sewage waste-water).
2. Conduct a detailed review of the business-as-usual emissions forecast: ensure that appropriate growth factors have been used for each sector; check growth projections for consistency with general plan (if recently updated) or regional growth projections.
3. Review the incorporation of GHG reductions due to state level actions: verify local reductions taken for statewide measures pursuant to AB 32; check for double-counting of emission reductions.
4. Ensure reduction target is consistent with AB 32: verify that the GHG reduction target articulated in the plan is consistent with a return to 1990 emission levels by 2020 (also articulated as a 15% reduction below 2008 levels by 2020).
5. Conduct a detailed review of GHG reduction measures: check assumptions, data sources and models used to develop GHG reduction estimates for mitigation measures for credibility; review balance of mandatory vs. voluntary mitigation measures; review balance of GHG mitigation burden on new vs. existing development; identify feasible mandatory measures not included in GHG reduction strategy.
6. Review the implementation strategy: review strength of the monitoring and implementation strategy, including staffing, financing and implementation schedule; requirement for annual monitoring and reporting on implementation of all GHG mitigation measures; mechanism for new projects to clearly demonstrate consistency with the plan; requirement for periodic updating of the baseline inventory.
7. Check for environmental review document: ensure that some level of environmental review has been completed, such as an initial study or environmental impact report, either for the climate action plan itself or as part of a broader effort such as a general plan update that incorporates the CAP.

BAAQMD draws upon a variety of tools and resources in its review of local CAPs[6]. Although generalized reviews of CAPs have been conducted for the purposes of identifying trends and drawing broad conclusions[7], BAAQMD staff believes that the review process described above brings a new level of rigor to the process of reviewing CAPs.

Results and Discussion

Local Government Response to the New GHG Thresholds

Since June 2010, BAAQMD has conducted extensive review and issued comment letters on six CAPs and completed detailed review on an additional four draft plans. The CAPs reviewed indicate that local governments are rising to the challenge posed by BAAQMD's GHG threshold of significance for CEQA. The CAPs reviewed by BAAQMD are consistently including:

- GHG reduction targets consistently reflecting the AB 32 reduction goal
- GHG community inventories including more sources of emissions

- More detailed, extensive and transparent quantification of specific mitigation measures
- More mandatory policies (this is still an area for improvement, as discussed below)
- Environmental review to reap the benefit of tiering
- Stronger connections to general plans

Remaining Challenges

The biggest challenges in preparing local plans that meet the requirements of a "Qualified GHG Reduction Strategy" include 1) a lack of widely-accepted quantification methodologies or protocols, and 2) demonstrating in convincing fashion that the GHG reduction target will be met.

In 2008, the California Air Resources Board adopted the *Local Government Operations Protocol*. This protocol addresses how to conduct a GHG inventory for a local government's own operations (municipal buildings, fleet, etc.). As yet, no protocol has been established for conducting an inventory of GHG emissions at the community level, although ICLEI is expected to release such a protocol by the end of 2011. In the absence of a protocol, local agencies are following a variety of methodologies and using different tools and models to develop their community inventories. This results in a mixture of inventories that cannot be easily evaluated in order to observe trends or make comparisons. An example is the handling of transportation-related emissions. Some local inventories include emissions from all the vehicle travel occurring within the geographic boundary of the jurisdiction, while others exclude vehicle travel resulting from pass-through trips that neither begin nor end within the jurisdiction.

To validate the premise of allowing future development projects to tier off a "Qualified GHG Reduction Plan" for purposes of CEQA analysis of GHG emissions, these plans must ultimately demonstrate that they achieve their GHG reduction targets. Determining whether a plan will achieve its target is a key challenge. Many factors must be considered, including the rigor of the technical analysis, the credibility of the assumptions and GHG reduction estimates associated with the mitigation measures, the level of local control over implementation of the mitigation measures, and the strength of the implementation strategy. Technical analysis and the credibility of GHG reduction estimates will continue to improve as tools and protocols are developed. The level of control over implementation of mitigation measures is an important factor, but difficult to quantify. Control over implementation weakens as the ratio of voluntary to mandatory measures in the plan increases. Control is also diluted when there is a high degree of reliance on state level action to meet the local target. The strongest local CAPs are those that rely primarily on local, mandatory policies and mitigation measures to achieve the reduction target and that have strong mechanisms for implementing and monitoring the effectiveness of the CAP.

SUMMARY

BAAQMD's extensive review of CAPs has led to the conclusion that the CAP's implementation and monitoring mechanisms are critical to the ability of future projects to tier off the CAP's environmental review. In order to take advantage of the tiering benefit and avoid environmental review for GHG impacts, the project proponent must be able to demonstrate that the CAP is being fully implemented, and that the project is consistent with the CAP (meaning that all applicable mandatory and voluntary mitigation measures contained in the CAP are being included in the project's design). BAAQMD therefore recommends to local agencies that CAP

implementation strategies include: annual reporting on the implementation of all mitigation measures in the plan; periodic (every 3-5 years) updates to the GHG inventory; and a compliance checklist or similar mechanism for projects to demonstrate consistency with the CAP. The cities of San Francisco and Vallejo have developed such checklists, which will also facilitate their annual reporting on CAP implementation.

Contribution to Other Research Efforts

The work that BAAQMD is doing in reviewing and commenting on local CAPs is contributing to ICLEI's current work in developing a community-wide protocol for conducting GHG inventories. BAAQMD staff serves on ICLEI's national protocol development team. BAAQMD's experience with implementing its CEQA Guidelines and thresholds of significance may also inform future updates to OPR's statewide CEQA Guidelines.

Next Steps

In addition to participating in the development of a national protocol for community-wide GHG emissions inventories, the BAAQMD is launching an effort to develop guidance on CEQA tiering and streamlining associated with local climate action plans. The BAAQMD anticipates having guidance available in early 2012 that will serve to reduce uncertainty on the part of local governments in applying CEQA streamlining and tiering opportunities to local climate planning.

ACKNOWLEDGEMENTS

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[7] Kousky and Schneider, op cit.