Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County

November 8, 2011
(revised)

Introduction

At its September 13, 2011 meeting, the Ventura County Air Pollution Control Board requested that District staff report back on possible greenhouse gas (GHG) significance thresholds for evaluating GHG impacts of land use projects in Ventura County under the California Environmental Quality Act (CEQA). This report responds to that request.

This report presents a number of options for setting GHG significance thresholds. Since 2008, both the California Air Resources Board (ARB) and several larger local air districts (South Coast, Bay Area, and San Joaquin) have undertaken efforts to identify and adopt suitable GHG significance thresholds for land use development projects in their respective jurisdictions. Several other California air districts, including this one, are still looking into this complex matter as part of their CEQA implementing procedures (CEQA Guidelines § 15022) or thresholds of significance development (CEQA Guidelines § 15064.7). Such thresholds, however, would only be advisory and not regulatory directives. That is because, although California air districts have a vital role in the CEQA review process (CEQA Guidelines § 15086 and CEQA Guidelines, Appendix G: Environmental Checklist, Section III., Air Quality), and have authority to regulate emissions from indirect or areawide sources (Health & Safety Code § 40716(a)), they do not have authority over land use projects (Health & Safety Code § 40716(b)), and have not adopted control measures, rules, or regulations governing GHG emissions from land use projects. It is important to note here that the District rarely, if ever, is the CEQA lead agency for a project, land use or otherwise, because the District has an entirely ministerial permit process that makes air quality permits issued by the District exempt from CEQA review.

Regulatory Setting

California Climate Change Initiatives

California has been a pioneer in efforts to address anthropogenic global warming and climate change. Most notable of these efforts are Executive Order S-3-05; Assembly Bill (AB) 32 (Nunez), *The California Global Warming Solutions Act of 2006;* and Senate Bill (SB) 375 (Steinberg), *Sustainable Communities and Climate Protection Act of 2008*. Further information regarding California's climate change initiatives and programs can be found on ARB's Climate Change Program website at http://www.arb.ca.gov/cc/cc.htm. Given state, national, and international concerns regarding global climate change, numerous local agencies in California have developed or are developing policies, programs, and regulations to reduce California's GHG emissions.

Executive Order S-3-05

In response to the concern that GHGs are causing global warming and affecting global climate, former Governor Schwarzenegger issued Executive Order S-3-05 in June 2005, which established several GHG emission reduction targets for California. GHG emissions are to be reduced to 2000 emission levels by 2010; to 1990 emission levels by 2020 (a 29 percent reduction from business-as-usual (BAU) emission levels projected for 2020); and to 80 percent below 1990 levels by 2050.

California Global Warming Solutions Act of 2006 (AB 32)

The goal of AB 32 is to reduce California's GHG emissions to 1990 levels by 2020. AB 32 establishes a comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, and cost-effective reductions of GHG. More specifically, it makes ARB the primary state agency responsible for developing and maintaining a statewide inventory of GHG emissions and for formulating plans and action steps to reduce current GHG emissions statewide to 1990 GHG emission levels. The main strategies for making these reductions are outlined in ARB's AB 32 Scoping Plan. The Scoping Plan has a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an implementation regulation to fund the program. On October 20, 2011, overcoming legal challenges, the ARB unanimously adopted cap-and-trade regulations, which is the centerpiece of the AB 32 program.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

The Southern California Association of Governments (SCAG), the MPO for most of Southern California, including Ventura County, is developing an SCS for the entire SCAG region as part of the 2012 Regional Transportation Plan (RTP). The goal of this effort is achieve its SB 375 GHG reduction targets of 8 percent per capita for the planning year 2020 and 13percent per capita for 2035. SCAG expects to adopt its 2012 RTP and SCS in April 2012. Further information regarding SCAG's climate change programs can be found on SCAG's website at http://www.scag.ca.gov. The San Diego Association of Governments (SANDAG) is the first metropolitan planning organization (MPO) to prepare a draft Regional Transportation Plan (RTP), with an (SCS) designed to meet the regional GHG emissions reduction target set for the SANDAG by ARB. To date, ARB and the state Attorney General's Office have commented on the SANDAG RTP/SCS and SANDAG is working to improve its modeling system to better quantify vehicle travel behavior and better evaluate land use scenarios.

California Environmental Quality Act (CEQA)

CEQA (Public Resources Code (PRC) §§21000 - 21177) was enacted by the State Legislature in 1970 to require evaluation and public disclosure of the environmental impacts of proposed projects that require discretionary approvals from governmental agencies. CEQA also requires that lead agencies establish specific procedures for administering their responsibilities under CEQA, including orderly evaluation of projects, the development and publication of thresholds of significance that the agency uses in the determination of the significance of a project's environmental effects, and preparation of environmental documents. (CEQA Guidelines §§ 15022 and 15064.7).

Fundamental to CEQA is the requirement that lead agencies determine whether their proposed discretionary actions would result in significant effects on the environment. CEQA also requires that potentially significant environmental impacts either be avoided or mitigated where feasible. CEQA applies to activities directly undertaken by governmental agencies, activities financed in whole or in part by governmental agencies, and private activities that require approval from governmental agencies.

CEQA encourages public agencies to adopt "thresholds of significance" to use in determining the significance of environmental effects. A threshold of significance is an identifiable, quantitative, qualitative, or performance level of a particular environmental effect. Noncompliance with a threshold of significance would normally result in a determination that the project would have a significant environmental impact. Compliance with a significance threshold would normally result in a determination that the project would not have a significant environmental impact.

Public agencies use significance thresholds to disclose how they evaluate and characterize various environmental impacts associated with discretionary projects they review. Significance thresholds also are used to: (1) determine what type of an environmental document should be prepared for a project; primarily a negative declaration, mitigated negative declaration or an environmental impact report (EIR); and (2) help identify the type and level of mitigation measures needed to reduce a potentially significant impact to a less than significant level. While public agencies are not required to develop significance thresholds, if they decide to develop them, they are required to adopt them by ordinance, resolution, rule, or regulation through a public process.

State law authorizes a lead agency to adopt any significance threshold it sees appropriate, as long as the threshold is based on substantial evidence. CEQA Guidelines §15064.7 encourages public agencies to develop and publish significance thresholds that are identifiable, quantitative, qualitative or performance levels of environmental effects that the agencies use for determining the significance of those environmental effects. The courts have ruled that a "threshold of significance" for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant.

Before an agency determines any threshold of significance for any environmental issue, it must be made clear that a threshold, or the absence of one, does not relieve a lead agency from having to prepare an EIR or legal challenges to the adequacy of an analysis leading to a conclusion, or lack of a conclusion, of significance under CEQA. CEQA has generally favored the preparation of an EIR where there is any substantial evidence to support a fair argument that the project may cause a significant adverse environmental impact.

In summary, CEQA does not require a lead agency to establish any significance thresholds, including any for GHG emissions. CEQA merely encourages development of such thresholds, but the absence of an adopted threshold of significance does not relieve the agency from the obligation to determine if a project has the potential to cause a significant environmental impact.

SB 97

SB 97, enacted in 2007 as PRC § 21083.05(a), states that GHG emissions are subject to CEQA. Hence, lead agencies are now obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects.

SB 97 also required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions as an environmental effect. The amendments were developed to provide guidance to public agencies regarding the analysis and mitigation of GHG emissions and the effects of GHG emissions. According to the GHG amendments, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. Moreover, a consistent approach should be applied for the analysis of all such projects and the analysis must be based on best available information.

In April 2009, OPR submitted the CEQA GHG amendments to the Natural Resources Agency to comply with PRC § 21083.05. In July 2009, the Natural Resources Agency initiated a public review process, and proposed revisions in response to public comments received during the review process. The Natural Resources Agency transmitted the amendments to the Office of Administrative Law (OAL) in December 2009. On February 16, 2010, OAL approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010 and can be found at http://ceres.ca.gov/ceqa/guidelines/. Although these amendments to the CEQA Guidelines do not require the establishment of thresholds of significance for project GHG emissions, § 15126.4 was amended to provide specific guidance on measures to mitigate the significant effects of GHG emissions.

District's Role in the CEQA Process

The District has long participated in the CEQA process by providing project applicants, environmental consultants, and lead agencies with air quality information and analyses needed for environmental documents required by CEQA. The District also reviews and comments on the air quality sections of environmental documents sent to it for that purpose.

To help lead agencies and others evaluate the air quality impacts of development projects, and to prepare the air quality sections of environmental documents required by CEQA, the District has prepared and maintains a document called the *Ventura County Air Quality Assessment Guidelines* (Guidelines). The Guidelines document was first adopted in 1980 and has been revised several times since with the most recent change dated October 2003. The Guidelines is an advisory document that offers a framework and uniform procedures for preparing air quality evaluations required by CEQA for projects within Ventura County. The final decision on whether to use the Guidelines rests with the CEQA lead agency that has final approval or denial authority over the project. However, most county lead agencies follow the Guidelines for projects within their jurisdictions.

The central feature of the Guidelines is recommended emission thresholds of significance for emissions of specified air pollutants levels (i.e., criteria contaminants such as NOx, ROG, CO, etc.). Levels above the applicable threshold are considered to have a significant effect on the environment and require mitigation, and levels below are considered not to have a significant effect on the environment and not require mitigation. The Guidelines also recommend appropriate mitigation measures to lessen or eliminate project air impacts found to be significant. The District adopted its first set of thresholds for CEQA in 1980, the first air district in the state to do so.

Options for Greenhouse Gas Thresholds of Significance for Land Use Projects

A number of agencies and organizations have put forth various approaches and options for addressing GHG emissions for CEQA purposes. Chief among these efforts is the California Air Pollution Control Officers Association's (CAPCOA) white paper, *CEQA and Climate Change* (January 2008). This white paper is a comprehensive reference of the approaches and it outlines various options for addressing GHG emissions in CEQA documents. Specifically, the CAPCOA white paper considers the application of several different CEQA thresholds of significance and offers three programmatic approaches for setting CEQA significance thresholds for GHG emissions from land use developments. The three different programmatic approaches are:

(1) a no threshold approach;

(2) a zero threshold approach; or

(3) a non-zero approach.

Within in each programmatic approach are one or more specific CEQA thresholds of significance options. None of these approaches are perfect nor are all feasible. Each approach and its sub-options has its advantages and disadvantages.

Not a single California air pollution agency is considering either of the first two approaches for GHG significance thresholds. This is because either approach would greatly increase the number of EIRs that would have to be prepared for development projects. Even small projects that normally would qualify for negative declarations would need EIRs to address their GHG emissions. This is especially true for the zero-threshold approach. Under this approach, all projects subject to CEQA, regardless of size, and not qualifying for a CEQA exemption, would be required to quantify and mitigate their GHG emissions and would require EIRs to disclose any residual unmitigable GHG emissions. Moreover, it is conceivable that with a zero GHG threshold, many small projects would need EIRs for no other reason than their GHG emissions. Examples of such projects include single family custom homes, small offices, and day care centers.

No Threshold Approach

It is permissible under CEQA to not have a significance threshold for potential environmental effects, including GHG emissions. However, absence of a threshold does not relieve agencies of their obligations to address GHG emissions from projects under CEQA. They still need to conduct some level of analysis for every project regardless of size to determine whether an EIR and mitigation measures are needed. Recent CEQA case law reemphasizes that a CEQA lead agency must undertake a good faith analysis of a project's GHG emissions and that such obligation is not relieved in the absence of a well-defined threshold of significance for project-specific or cumulative GHG emissions. This approach may result in a large number of projects proceeding to EIRs solely because of their GHG emissions. A secondary consequence could be that agencies not adopting some sort of GHG significance threshold would find themselves facing more CEQA legal challenges.

An agency has three choices if it chooses not to have a GHG significance threshold: a presumption of significance, presumption of insignificance, or no presumption:

(1) The agency can begin with a presumption of significance and the analysis would be used to support a case-specific finding of no significance. This is similar to establishing a threshold of zero, except that here, the “threshold” is rebuttable. This approach may result in a large number of projects requiring EIRs.

(2) The agency can begin with a presumption of insignificance, and the analysis would be used to support a case-specific finding of significance. A presumption of insignificance could be based on the perspective that it would be speculative to attempt to identify the significance of GHG emissions from a project relative to climate change on a global scale. This approach might reduce the number of projects requiring EIRs. It is likely to have greater success with smaller projects than larger ones, and a presumption of *insignificance* may be more likely to be challenged by project opponents.

(3) It is not necessary for the lead agency to have a presumption either way. The agency could approach each project from a *tabula rasa* perspective, and have the determination of significance more broadly tied to the specific context of the project. This approach is likely to be resource intensive, and creates the greatest uncertainty for project proponents. To the extent that it results in a lead agency approving similar projects based on different determinations of significance for GHG emissions, it may be more vulnerable to legal challenge from either proponents or opponents of the project.

District staff does not recommend this approach because a large number of project may need EIRs for no other reason than their GHG emissions.

Zero Threshold Approach

A zero-based GHG threshold is one where any net increase in project GHG emissions, regardless of project type or size, would be considered significant for purposes of CEQA review. The underlying concept of a zero threshold is that any amount of project specific GHG emissions above zero would be considered a significant impact. A zero threshold approach is based on the belief that: 1) all GHG emissions contribute to global warming and climate change and should be considered significant, and 2) not controlling GHG emissions from smaller sources would be neglecting a major portion of the GHG inventory.

If a lead agency determines that any degree of project-related increase in GHG emissions would contribute considerably to climate change, and therefore be a significant impact, it could adopt a zero-emission threshold to identify projects that would need to reduce their emissions. A lead agency may determine that a zero-emission threshold is justified even if other experts disagree. A lead agency is not prevented from adopting any significance threshold it sees appropriate, as long as it is based on substantial evidence. If the zero threshold approach is chosen, all projects with GHG emissions that result in a net increase of GHG emissions would have to quantify and mitigate their GHG emissions, regardless of project size or availability of GHG reduction measures to reduce the project’s emissions. Projects that could not meet the zero-emission threshold would be required to have EIRs to disclose the unmitigable significant impact and lead agencies would have to adopt statements of overriding consideration for any such projects they decided to approve.

A very serious concern about a zero threshold is that it could preclude a lead agency from approving a large set of otherwise qualified projects by using certain categorical exemptions allowed by CEQA. If a lead agency wishes to adopt a zero-based GHG threshold, it should consider the probable increase in costs and workload for itself and project applicants. Many projects that would have qualified for a CEQA exemption or a negative declaration could require further environmental impact analysis under a zero-based threshold, including preparation of mitigated negative declarations or EIRs. Moreover, the trade-offs between the increase in the number of projects requiring review and the quality of the reviews should be considered as well. It would also be useful to consider whether meaningful mitigation can be achieved from small projects.

For the foregoing reasons, no California air pollution control district has considered a zero-based GHG threshold and District staff does not recommend it either.

Non-zero Threshold Approach

A non-zero GHG threshold is one where net project GHG emissions above a certain level would be considered significant and below would be considered less than significant.

A non-zero threshold would likely minimize agency resources spent on environmental analyses for projects that would emit only very small amounts of GHGs and help prevent the environmental review system from being overwhelmed. A non-zero GHG threshold is consistent with the non-zero thresholds that many air districts have long recommended for ozone precursor emissions.

A non-zero threshold could be interpreted as a *de minimis* level for a cumulative impact. In effect, this would establish that certain projects with smaller GHG emission sources do not contribute *substantially* to the global GHG budget and that lead agencies could approve those projects without any mitigation of their GHG emissions. This approach is consistent with CEQA. The CEQA Guidelines recognize that there may be a point where a project's contribution, although above zero, would not be a *cumulatively contribution* to a significant cumulative impact and, therefore, not trigger the need for a significance determination. (CEQA Guidelines § 15130(a)(3)).

The CAPCOA white paper presents two approaches for the non-zero GHG threshold concept, which are described below and summarized in Table 1. Table 1 also presents several options not presented in the CAPCOA white paper (described later in this report under Other Approaches).

Approach 1: Non-Zero Threshold – Statute and Executive Order Approach

This approach is based on achieving the objectives of AB 32 or EO S-3-05, and explores four possible options under this scenario. A project would be required to meet the target objectives, or reduce GHG emissions to the target objectives to be considered less than significant. The four options under this approach are means to achieve the 2020 goals of AB 32 from new development, estimated to be about a 30 percent reduction from BAU.

Table 1
Comparison of GHG Threshold Options*

	Threshold	GHG Emission Threshold (MT CO_2e/yr)**	Threshold Description	Future Development Captured by Threshold
Approach 1				
1.1	AB 32/EO S-3-05 Derived Uniform Percentage-Based Reduction		Projects must reduce GHG emissions compared to business- as-usual (BAU) to be less than significant; two approaches: Project must reduce GHG emissions 33% compared to BAU (2020 target), *OR* Project must reduce GHG emissions 80% compared to BAU (2050 target).	All projects
1.2	Uniform Percentage-Based (e.g. 50%) Reduction for New Development		Projects must reduce GHG emissions compared to BAU by a uniform percentage to be considered less than significant, e.g., 50%.	All projects
1.3	Uniform Percentage-Based Reduction by Economic Sector		Projects must reduce GHG emissions compared to BAU by a uniform percentage based on economic sector to be less than significant. There would be specific reduction goals for each economic sector, such as residential, commercial, and industrial development.	All projects
1.4	Uniform Percentage-Based Reduction by Region		Projects must be consistent with appropriate GHG plan to be considered less than significant. Uniform GHG emission reduction by region, consistent with AB32 emission reduction goals, e.g., 33% or 80% reductions compared to BAU.	All projects

<table>
<tr><th></th><th>Threshold</th><th>GHG Emission Threshold (MT CO_2e/yr)**</th><th>Threshold Description</th><th colspan="3">Future Development Captured by Threshold</th></tr>
<tr><td colspan="7">Approach 2</td></tr>
<tr><td>2.1</td><td>Zero Threshold</td><td>0</td><td>Employs a decision tree concept. The Tier 1 cut point would be no increase in GHG emissions, i.e., a zero threshold. Projects with no GHG emissions would not be significant. The Tier 2 cut point would be for projects with emissions greater than zero, and use one of the following threshold options.</td><td colspan="3">All projects</td></tr>
<tr><td>2.2</td><td>Quantitative Threshold Based on Market Capture</td><td>~900</td><td>Establish a quantitative threshold based on capturing a percentage, e.g., 90%, of future discretionary projects. CAPCOA's threshold is 900 MT CO_2e/yr. Projects less than this would not be significant.</td><td colspan="3">Residential development >54 dwelling units (du)
Office space >57,924 ft^2
Retail space >27,272 ft^2
Supermarket >11,278 ft^2
Small, medium, large industrial</td></tr>
<tr><td rowspan="6">2.3</td><td rowspan="6">ARB's GHG Mandatory Reporting Threshold

OR

Potential Cap and Trade Entry Level</td><td rowspan="6">25,000

OR

10,000</td><td rowspan="6">This threshold is based on ARB's mandatory reporting threshold of 25,000 MT CO_2e/yr. Alternatively; use the Market Advisory Committee threshold of 10,000 MT CO_2e/yr. Projects less than either would not be significant.</td><td></td><td>25,000 MT CO_2e/yr</td><td>10,000 MT CO_2e/yr</td></tr>
<tr><td>Residential Development</td><td>1487 du</td><td>596 du</td></tr>
<tr><td>Office Space</td><td>1,609,000 ft^2</td><td>643,000 ft^2</td></tr>
<tr><td>Retail Space</td><td>669,000 ft^2</td><td>268,000 ft^2</td></tr>
<tr><td>Supermarket</td><td>312,946 ft^2</td><td>125,107 ft^2</td></tr>
<tr><td>Medium/larger Industrial</td><td>415,282 ft^2</td><td>166,112 ft^2</td></tr>
<tr><td rowspan="3">2.4</td><td rowspan="3">Regulated Inventory Capture</td><td rowspan="3">40,000 – 50,000</td><td rowspan="3">This approach establishes a GHG threshold based on and analogous to a NOx/ROG criteria pollutant CEQA significance threshold. GHG threshold is established using the following steps:

Define NOx/ROG CEQA thresholds in tons per year
Define the regional NOx/ROG inventory in tons per</td><td></td><td>40,000 MT CO_2e/yr</td><td>50,000 MT CO_2e/yr</td></tr>
<tr><td>Residential Development</td><td>2,381 du</td><td>2,975 du</td></tr>
<tr><td>Office Space</td><td>2,574,000 ft^2</td><td>3,218,000 ft^2</td></tr>
</table>

<table>
<tr><th></th><th>Threshold</th><th>GHG Emission Threshold (MT CO_2e/yr)**</th><th>Threshold Description</th><th colspan="3">Future Development Captured by Threshold</th></tr>
<tr><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3">year.
Calculate percentage of NOx/ROG inventory the significance threshold represents to obtain “minimum percentage of regulated inventory” for NOx/ROG. Define the current California-wide GHG emission inventory in MT CO_2e/yr. Apply minimum percentage of regulated inventory to California-wide GHG inventory to develop a GHG threshold analogous to the CEQA threshold.</td><td>Retail Space</td><td>1,071,000 ft^2</td><td>1,338,000 ft^2</td></tr>
<tr><td>Supermarket</td><td>500,718 ft^2</td><td>625,898 ft^2</td></tr>
<tr><td>Medium/larger Industrial</td><td>664,451 ft^2</td><td>830,564 ft^2</td></tr>
<tr><td>2.5</td><td>Unit-Based Threshold Based on Market Capture</td><td>Not applicable</td><td>Establish quantitative unit-based thresholds based on capturing a percentage, e.g., 90%, of future discretionary projects in specific market sectors (similar to 2.2 above). Projects under the size specified for the specific market sectors would not be significant.

Commercial project emissions vary substantially, so projects would have to be examined by project type. Examples of variation are given in the next column.</td><td colspan="3">CAPCOA examples of commercial project emission variation include:
30,000 ft^2 office = 466 MT CO_2e/yr;
30,000 ft^2 retail*** = 990 MT CO_2e/yr;
30,000 ft^2 supermarket = 2,397 MT CO_2e/yr

Residential development >54 dus
Office space >57,924 ft^2
Retail space >27,272 ft^2
Supermarket >11,278 ft^2
Small, medium, large industrial</td></tr>
<tr><td rowspan="4">2.6</td><td rowspan="4">Projects of Statewide, Regional, or Areawide Significance</td><td rowspan="4">Not applicable</td><td rowspan="4">This threshold would include tiered CEQA thresholds based on CEQA’s definition of “projects with statewide, regional or areawide significance” (§15206(b))</td><td colspan="2">Development Type/Size</td><td>Emissions</td></tr>
<tr><td colspan="2">Residential Development >500 du</td><td>8,402 MT CO_2e/yr</td></tr>
<tr><td colspan="2">Shopping Center >500,000 ft^2</td><td>18,690 MT CO_2e/yr</td></tr>
<tr><td colspan="2">Commercial Office Building >250,000 ft^2</td><td>3,884 MT CO_2e/yr</td></tr>
</table>

	Threshold	GHG Emission Threshold ($MT\ CO_2e/yr$)**	Threshold Description	Future Development Captured by Threshold	
				Hotel/Motel >500 units	7,061 MT CO_2e/yr
				Industrial/Manufacturing >600,000 ft^2	36,125 MT CO_2e/yr
2.7	Efficiency-Based Thresholds	TBD tons/year/person TBD tons/year/unit	Efficiency-based thresholds would be based on measurements of efficiency compared to intensity. Must be based on reasonable GHG emissions compared to BAU.	Depends on the efficiency measure selected.	
Other Options					
3.1	Criteria Pollutant-Based Threshold		This threshold would tie project GHG thresholds to an air agency's criteria pollutant thresholds, i.e., either ROG or NOx thresholds and would be specific to each project type.		
3.2	Bright Line Gap-Based Threshold		This threshold is based on the "gap" between the benefit of emission controls and reduction programs in year 2020 projected emissions, and the year 2020 goals mandated by AB 32.		
3.3	Best Performance Standards		This threshold relies on projects complying with GHG emission reduction plans, or implementing Best Performance Standards to reduce GHG emissions.		

* Options 1.1 – 1.4 and 2.1 – 2.7 are as described in California Air Pollution Control Officers Association's (CAPCOA) *CEQA and Climate Change*, January 2008. Emission values calculated with the URBEMIS model in the CAPCOA document were re-calculated using the California Emissions Estimator Model (CalEEMod), a more recent and comprehensive model used in California to estimate emissions from land use development. Options 3.1 – 3.3 are options that are not included in the CAPCOA document. For all CalEEMod runs, the following input values were used: Year: 2012, Climate zone: 8, Air District: Ventura County, Utility Company: Southern California Edison.

** Metric tons of CO_2 equivalent per year ($MT\ CO_2e/yr$).

*** For "retail" as described in the CAPCOA document, District staff used "strip mall" land use in the CalEEMod program.

Threshold Option 1.1: AB 32/EO S-3-05 Derived Uniform Percentage-Based Reduction

This threshold option would require a project to meet a percent reduction target based on the average reductions needed from BAU emissions from all GHG sources. Using the AB 32 2020 target, this approach would require all discretionary projects to achieve a 33 percent reduction from projected BAU emissions in order to be considered less than significant. A more restrictive approach would use the 2050 targets. EO S-3-05 seeks to reduce GHG emissions to 80 percent below 1990 levels by 2050. To reach the 2050 milestone would require an estimated 90 percent reduction (effective immediately) of BAU emissions. Using this goal as the basis for a significance threshold may be more appropriate to address the long-term adverse impacts associated with global climate change.

No air district is considering this option and District staff does not recommend it either because many small projects may not be able to mitigate their GHG emissions and therefore require EIRs.

Threshold Option 1.2: Uniform Percentage-Based (e.g.50 percent) Reduction for New Development

This threshold option is based on a presumption that new development should contribute a greater percent reduction from BAU because greater reductions can be achieved at lower cost from new projects than can be achieved from existing sources. This approach would establish that new developments reduce emissions by at least 50 percent compared to BAU development. This reduction rate is greater than the recommended reduction rate for meeting the Threshold 1.1 Option 2020 target (33 percent), but is significantly less restrictive than the Threshold 1.1 Option 2050 target reduction rate (90 percent). If a 50 percent GHG reduction were achieved from new development, existing emissions would have to be reduced by 25 to 30 percent in order to meet the 2020 emissions goal, depending on the year used to determine the baseline inventory. Although this reduction goal is reasonable for achieving the 2020 goal, it would not be possible to reach the 2050 emissions target with this approach even if existing emissions were 100 percent controlled.

No air district is considering this option and District staff does not recommend it either because many small projects may not be able to mitigate their GHG emissions and therefore require EIRs.

Threshold Option 1.3: Uniform Percentage-Based Reduction by Economic Sector

This option would use a discrete GHG reduction goal specific to the economic sector associated with the project. There would be specific reduction goals for each economic sector, such as residential, commercial, and industrial development. Specifying different reduction thresholds for each market sector allows selection of the best regulatory goal for each sector taking into account available control technology and costs. This approach would avoid over-regulating projects (i.e. requiring emissions to be controlled in excess of existing technology) or under-regulating projects (i.e. discouraging the use of available technology to control emissions in excess of regulations). This approach requires extensive information about the emission inventories and best available control technology for each economic sector.

No air district is considering this option and District staff does not recommend it either because it would require extensive information on GHG emission inventories and control technologies.

Threshold Option 1.4: Uniform Percentage-Based Reduction by Region

AB 32 and EO S-3-05 are written such that they apply to geographic regions (i.e., the entire state of California) rather than on a project or sector level. One could specify regions of the state, such as the South Coast Air Basin, Sacramento Valley, or Bay Area which are required to plan (plans could be developed by regional governments, such as councils of governments) and demonstrate compliance with AB 32 and EO S-3-05 reduction goals at a regional level. To demonstrate that a project has less than significant emissions, one would have to show compliance with the appropriate regional GHG plan. Effectively this option allows for analysis of GHG emissions at scales smaller than the state as a whole. Specifying regions in rough correlation to existing air basins or jurisdictional control allows for regional control of emissions and integration with regional emission reduction strategies for criteria and toxic air pollutants. Although differing GHG reduction controls for each region are possible, it is likely that all regions would be required to achieve 1990 emission inventories by the year 2020 and 80 percent fewer emissions by 2050.

Several air districts are considering this option as an option in their tiered approaches and such an option could be viable for this county as well.

Approach 2: Non-Zero Threshold – Tiered Threshold Options

This approach is comprised of a number of tiered GHG significance threshold options. The options range from first tier threshold set at zero to subsequent tiers demonstrating project or plan consistency with AB 32 goals and followed by options set at defined emission levels or based on the size of a project. CAPCOA notes that some applications of the tiered threshold approach may require inclusion in a General Plan or adoption of enabling regulations or ordinances to render them fully effective and enforceable. Figure 1 presents a conceptual tiered GHG threshold approach.

Threshold Option 2.1: Zero First Tier Tiered Threshold

This option would employ the decision tree concept and set the first tier cut-point at zero. The second tier cut-point could be one of the qualitative or quantitative thresholds discussed below. First-tier projects would be required to implement a list of very feasible and readily available mitigation measures.

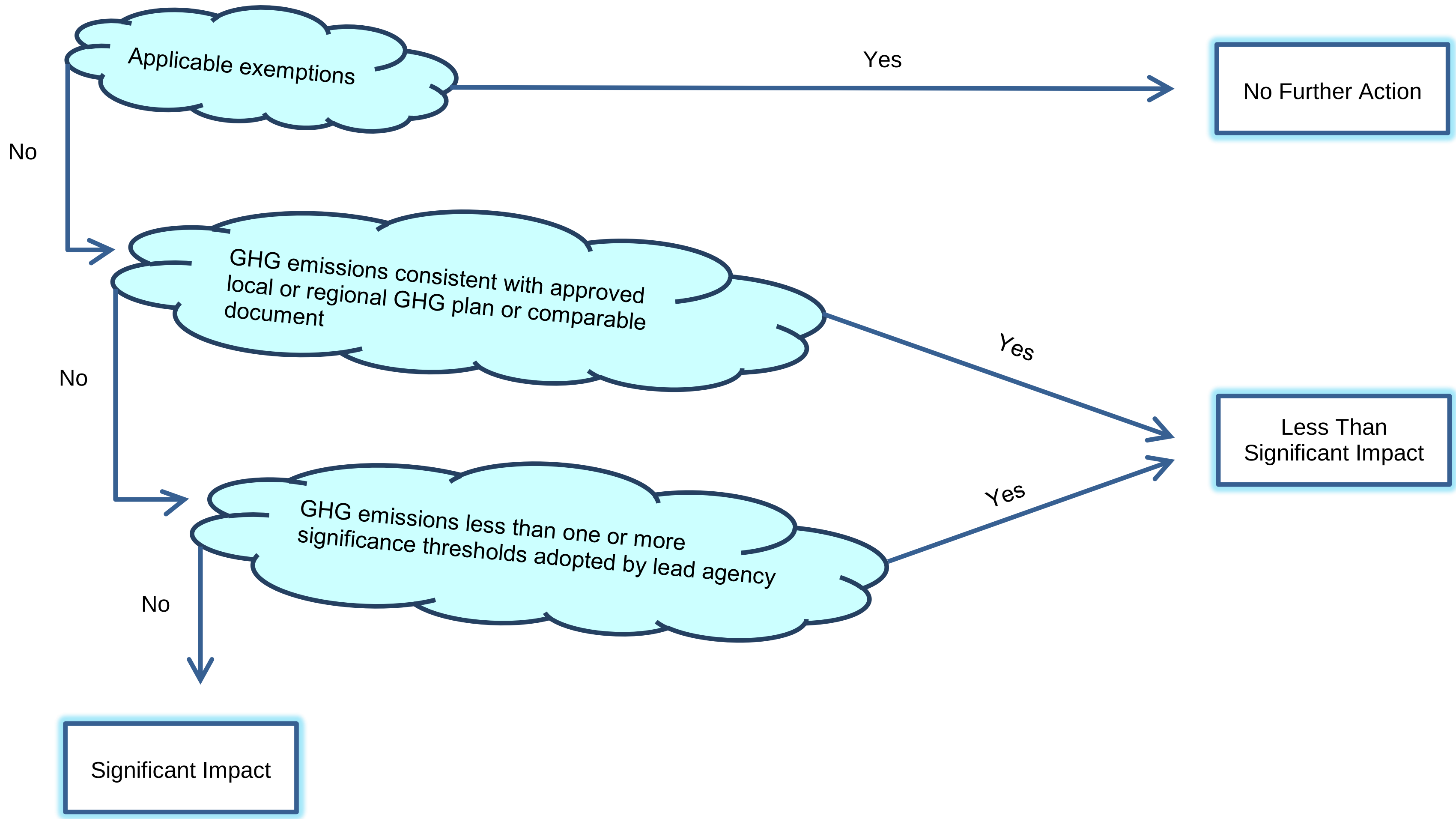
No air district is considering this option because there may not be meaningful mitigation for small projects and District staff does not recommend it either.

Threshold Option 2.2: Quantitative Threshold Based on Market Capture

This option employs a “bright line” threshold to capture of 90 percent or more of likely future discretionary developments. The objective is low enough to capture a substantial fraction of future residential and non-residential land use development expected to be constructed to accommodate future statewide population and job growth, while the emission threshold is high enough to exclude most small land use development projects that contribute a minor fraction of cumulative statewide GHG emissions. Another advantage of this option is that it is simple and easy to understand and implement.

The South Coast Air Quality Management District (AQMD) and the Ventura County Air Pollution Control District (APCD) are considering this option for the reasons stated above.

Figure 1
Conceptual Tiered GHG Significance Determination



Threshold Option 2.3: ARB GHG Reporting Threshold

This option calls for a GHG significance threshold of 25,000 metric tons per year, consistent with ARB's Mandatory GHG Reporting Program threshold for certain large industrial sources. In Ventura County, a 25,000 metric ton significance threshold would correspond to the GHG emissions of approximately 1,487 residential units, 1.6 million square feet of office space, 669,000 square feet of retail, and 312,950 square feet of supermarket space.

No air district is considering this option and District staff does not recommend it either because very few projects in Ventura County would generate GHG emissions in excess of 25,000 metric tons.

An alternative would be 10,000 metric tons per year threshold, the same as being considered by some air districts as a threshold for stationary sources subject to CEQA. In Ventura County, a 10,000 metric tons per year significance threshold would correspond to the GHG emissions of approximately 596 residential units, 643,000 square feet of office space, 268,000 square feet of retail, and 125,100 square feet of supermarket space.

The Monterey Bay Unified APCD recently began consideration of this option, but few projects would be significant for their GHG emissions and the threshold may not objectively meet the *cumulatively considerable* standard of CEQA Guidelines § 15065(a)(3).

Threshold Option 2.4: Regulated Emissions Inventory Capture

This option would establish a GHG significance threshold analogous to the criteria pollutant thresholds that many California air districts have adopted for CEQA. Because NOx/ROG significance thresholds are a well-tested mechanism to ensure that individual projects address cumulative impacts, and to encourage individual projects to reduce GHG emissions under CEQA, this threshold presumes that NOx/ROG emission thresholds could be used to develop similar GHG thresholds.

(1) Define NOx/ROC CEQA thresholds in tons per year (e.g., 4.6 t/yr in Ventura County).

(2) Define the regional NOx/VOC inventory in tons per year (e.g., annual onshore NOx inventory (point sources excluded) for 2008 ~15,498 t/yr).

(3) Calculate percentage of NOx/VOC inventory the significance threshold represents (4.6/ 15,498 = 0.0003) to obtain "minimum percentage of regulated inventory."

(4) Define California GHG emission inventory for 2008 in metric tons CO_2e per year (477.74 MMT CO_2e). Apply minimum percentage of regulated inventory to California GHG inventory for 2008 to develop a GHG threshold analogous to the CEQA Threshold (e.g., 0.0003 x 477.74 MMT = 143,322 metric tons CO_2e per year = significance threshold for Ventura County).

No air district is considering this option and District staff does not recommend it either because it would result in widely different GHG thresholds by air basin because of varying GHG emission inventories.

Threshold Option 2.5: Unit-Based Thresholds Based on Market Capture

This option is similar to Option 2.2 but would capture approximately 90 percent of future development on a sector basis - residential and commercial (by type), rather than by percentage of GHG emissions as in Option 2.2. The objective is to capture a substantial fraction of future housing and commercial developments to accommodate future statewide population and job growth, while setting the unit thresholds high enough to exclude small development projects that will contribute a small fraction of cumulative statewide GHG emissions.

The South Coast AQMD considered this option but is focusing its efforts on Option 2.2 instead.

Threshold Option 2.6: Projects of Statewide, Regional, or Areawide Significance

For this threshold, a set of qualitative, tiered CEQA thresholds would be adopted based on "projects with statewide, regional or areawide significance" under CEQA Guidelines § 15206(b). Project sizes defined under this section include the following:

- Residential development of more than 500 dwelling units.
- Shopping center or business employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space.
- Commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space.
- Hotel/motel development of more than 500 rooms.
- Industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, or encompassing more than 600,000 square feet of floor space.

In Ventura County, these thresholds would correspond to GHG emissions of approximately 8,402 MT/yr for 500 single family homes; 18,690 MT/yr for a 500,000 square foot shopping center; 3,884 MT/yr for a 250,000 square foot office project; 7,061 MT/yr for a 500 room hotel/motel; and 36,125 MT/yr for a 600,000 square foot industrial facility.

These thresholds levels would capture few projects in Ventura County.

No air district is considering this option because it would capture and mitigate few GHG emissions.

Threshold Option 2.7: Efficiency-Based Thresholds

This option is based on efficiency metrics, such as GHG emissions per capita or employment, or some combination thereof, set to ensure consistency with AB 32 GHG emission reduction goals. GHG efficiency thresholds can be determined by dividing the estimated 2020 AB 32 GHG emissions inventory goal (allowable GHG emissions), by the estimated 2020 population and employment, referred to as the Service Population (SP).

The service population for a residential project would be the number of new residents. The service population for a commercial project would be number of employees. The service population for a mixed use project would be the number of residents plus employees. This calculation gives approximate efficiency threshold values of 4.6 MT CO_2e per SP for individual projects (housing developments, shopping centers, etc.), and 6.6 MT CO_2e per SP for general plans, etc.

The benefit of an efficiency-based threshold is that it tends to encourage mixed-use, infill development over more traditional "sprawl-type" development (i.e., large suburban residential housing tracts or commercial shopping centers) that has been the norm in California for many decades.

The Bay Area AQMD has adopted this metric as a GHG threshold, and several others (Sacramento Metropolitan AQMD, Monterey Bay Unified APCD, South Coast AQMD, and Ventura County APCD) are considering efficiency metrics as well. Please know that the Bay Area AQMD approach is currently being subjected to litigation by the Building Industry Association.

Other Approaches

The CAPCOA white paper does not address the following approaches but they have been or are being considered by several state air districts, including Ventura County.

Threshold Option 3.1: Criteria Pollutant-Based Threshold

This option ties project GHG thresholds to an air agency's criteria pollutant thresholds. Under this option, the GHG threshold would be the amount of CO_2e that corresponds to the agency's ROG or NOx threshold and would be specific to each project type. The advantage of this threshold is that no project would be significant only for its GHG emissions. It would be significant for GHG emissions only if either project ROG or NOx emissions were also significant.

Only one air district, the Monterey Bay Unified APCD, is considering this option. Other districts are not considering this option because there is no established relationship between the effects of ROG and NOx on ambient ozone levels and the effects of GHGs on global warming.

Threshold Option 3.2: Bright Line Gap-based Threshold

This option is based on AB 32 GHG reduction goals and assumes that, even with the benefit of anticipated GHG emission controls and reduction programs, the actual GHG emissions in the year 2020 will be greater than the level needed to meet AB 32 goals. This difference (the "gap") can be estimated and becomes the so-called "bright line" threshold for CEQA purposes. The Bay Area AQMD adopted this approach for one of their GHG thresholds. Their bright line gap threshold is 1,100 MT of CO_2e/yr. The San Luis Obispo County APCD, the Monterey Bay Unified APCD, and the Sacramento Metropolitan AQMD are also considering this approach.

This option is being considered by District staff for Ventura County but the fiscal and staff resources needed to determine the "gap" are quite significant and the effort may take several months. It may also require the services of a consultant. The cost to develop a bright line gap threshold for Ventura County may exceed $100,000 and take considerable time based on ballpark estimates from other air districts.

Threshold Option 3.3: Best Performance Standards

This approach to GHG thresholds relies on land use project developers implementing Best Performance Standards (BPS) for GHG emissions. BPS are defined as the most effective achieved-in-practice means of reducing or limiting GHG emissions from a GHG emissions source that is also economically feasible. BPS includes specifications about the equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category which minimize GHG emissions.

Projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoid or substantially reduce GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected source or project and supported by a CEQA environmental document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.

Projects implementing BPS would not require quantification of project GHG emissions. Consistent with CEQA, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions. Projects not implementing BPS would require quantification of project GHG emissions and demonstration that project GHG emissions would be reduced or mitigated by at least 29 percent, compared to BAU, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. BAU is the amount of GHG emissions a source would produce in the year 2020 assuming that no actions are taken to curb GHG emissions from the source. Projects achieving at least a 29 percent GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

The San Joaquin Valley APCD has adopted this option, the only California air pollution agency to do so to date, because they concluded that existing science is inadequate to characterize the impact of project level GHG emissions on global climate change and that the best approach is to reduce GHG emissions from all projects through project design elements.

Local Air Pollution Control District GHG Emission Threshold of Significance Efforts to Date

Neither AB 32, SB 375 nor SB 97 establish a statutory mandate that requires local air pollution control districts to establish GHG significance thresholds for CEQA purposes. Nonetheless, land use agencies (i.e., cities and counties) throughout the state are looking to their local air districts for guidance on appropriate GHG thresholds because CEQA Guidelines § 15064.7(c) states that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Several air districts have responded to this need by developing GHG thresholds for CEQA purposes as they have done for other air pollutants. However, it is not possible to define how micro-scale GHG emissions from any single land use development project regardless of size, or even sets of such projects, will affect global warming or global climate change. This inability to characterize the global effects of micro-scale GHG emissions makes it impossible to establish with any degree of certainty a level at which localized human-caused GHG emissions will significantly affect the global warming or global climate change.

Furthermore, GHG emission impacts are exclusively cumulative impacts because there are no non-cumulative GHG emission impacts from a global warming and global climate change perspective. This means that establishing appropriate GHG significance thresholds for local level projects in order to address global warming and climate change has been very challenging and has directed the focus of most such efforts towards setting GHG thresholds based on the "cumulatively considerable" model of addressing environmental effects under CEQA. See CEQA Guidelines §§ 15130(b)(1)(B) and 15130(d).

The sections below present local air pollution control agency efforts to address GHG emissions for CEQA purposes. The efforts described focus on land use projects where a land use agency is the CEQA lead agency. Table 2 summarizes these approaches.

Table 2
Greenhouse Gas Thresholds by Agency

Agency	Threshold Option *	Status
Bay Area AQMD	2.7, Efficiency-Based Thresholds 3.2, Bright Line Gap-Based Threshold	Adopted Adopted
San Joaquin Valley APCD	3.3, Best Performance Standards	Adopted
South Coast AQMD	2.2, Quantitative Threshold Based on Market Capture 2.7, Efficiency-Based Thresholds	Considering Considering
Sacramento Metropolitan AQMD	2.7, Efficiency-Based Thresholds	Considering
San Luis Obispo County APCD	2.7, Efficiency-Based Thresholds 3.2, Bright Line Gap-Based Threshold	Proposed Proposed
San Diego County APCD	2.7, Efficiency-Based Thresholds 3.2, Bright Line Gap-Based Threshold	Considering Considering
Monterey Bay Unified APCD	3.1, Criteria Pollutant-Based Threshold 3.3, Bright Line Gap-Based Threshold	Considering Proposed
Ventura County APCD	2.2, Quantitative Threshold Based on Market Capture 2.7, Efficiency-Based Thresholds	Considering Considering

* Threshold option numbers and names correspond to the threshold options listed in Table 1, *Comparison of GHG Threshold Options*, in this report.

Only two air agencies to date have adopted GHG thresholds for land use projects, the Bay Area AQMD, and the San Joaquin Valley APCD. Several air districts, including Ventura County APCD, are evaluating GHG threshold options for land use projects.

California Air Resources Board

On October 24, 2008, ARB released its Preliminary Draft Staff Proposal, *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act.* The purpose of ARB's GHG threshold effort was to provide a uniform set of statewide GHG thresholds adoptable by local agencies for their own use rather than have a hodgepodge set of thresholds across the state's counties and regions.

ARB's preliminary draft proposal for residential and commercial projects relied on a tiered performance-based approach. Projects complying with a previously approved GHG plan, satisfying CEQA Guidelines § 15064(h)(3), and meeting certain other requirements would be considered insignificant for GHG emissions.

ARB solicited comments on their proposal and held two public workshops but has not adopted their recommendations.

Bay Area AQMD

The Bay Area AQMD adopted tiered GHG thresholds in June 2010 as part of an update to their CEQA guidelines document, *Air Quality Guidelines*. They have two sets of GHG thresholds. The first set covers land use development projects (project level), such as residential projects and office buildings; the second covers land use plans (plan level), such as land use area plans and general plans.

The Bay Area AQMD's project-level thresholds are: (1) compliance with a qualified GHG Reduction Strategy, such as a Sustainable Communities Strategy; or (2) a bright line gap threshold of 1,100 MT/yr of CO_2e (Threshold Option 3.2); or (3) 4.6 MT CO_2e/SP/yr (Threshold Option 2.7).

Their plan level thresholds are (1) an efficiency threshold of 6.6 MT CO_2e/SP/yr (residents & employees), or (2) compliance with a Qualified GHG Reduction Strategy. They recommend that the 6.6 MT CO_2e/SP/yr efficiency threshold (Threshold Option 2.7) only be applied to general plans. Other land use plans, such as specific plans, should use the project-level threshold of 4.6 CO_2e/SP/yr. Although adopted, the Bay Area's thresholds are the subject of litigation by the Building Industry Association.

San Joaquin Valley APCD

The San Joaquin Valley APCD adopted a Best Performance Standards approach (Threshold Option 3.3) for development projects in December 2009. The San Joaquin Valley APCD is the only air district that has taken this approach because they have concluded that existing science is inadequate to characterize the impact of project level GHG emissions on global climate change and that the best approach is to reduce GHG emissions from all projects through project design elements.

South Coast AQMD

South Coast AQMD staff is proposing a tiered approach with the main components entailing consistency with locally adopted GHG reduction plans followed by "bright line" screening GHG threshold values set to capture 90 percent of project GHG emissions by project type (Threshold Option 2.2). They are also considering efficiency-based thresholds similar to the Bay Area AQMD's (Threshold Option 2.7) for both land use projects and general plans. The South Coast AQMD has put their GHG thresholds effort on hold until sometime next year due to higher priority commitments.

Sacramento Metropolitan AQMD

The Sacramento Metropolitan AQMD is developing a tiered approach involving consistency with a GHG reduction plan followed by efficiency metrics similar to the Bay Area AQMD's 4.6 MT CO_2e/SP/yr for land use projects and plans and 6.6 MTCO_2e/SP/yr for land use plans (Threshold Option 2.7). However, they removed the transportation component of the land use efficiency metric, leaving a land use only efficiency metric of 2.71 MT/SP CO_2e/SP/yr. They are assessing this metric combined with a 15 percent GHG emission reduction from project-related transportation sources but have no anticipated adoption date.

San Luis Obispo County APCD

The San Luis Obispo County APCD is working on a tiered approach involving consistency with a GHG reduction plan followed by a bright line gap GHG threshold metric (Threshold Option 3.1).

They have reported that this approach requires considerable staff resources and time. They are also developing efficiency-based GHG threshold metrics for land use projects and plans (Threshold Option 2.7). They anticipate adoption in January 2012.

San Diego County APCD

The County of San Diego land use agency is developing GHG thresholds for that region. The San Diego County APCD is participating in this effort in an advisory capacity. They are considering a tiered approach involving consistency with a GHG reduction plan combined with a bright line gap threshold of 2,500 MT CO_2e/SP/yr for commercial and residential projects (Threshold Option 3.2). They are also looking at an efficiency threshold metric of 4.32 MT CO_2e/SP/yr (Threshold Option 2.7). They anticipate board consideration in early 2012.

Monterey Bay Unified APCD

The Monterey Bay Unified APCD was considering a tiered approach for land use projects comprising consistency with an adopted GHG reduction plan and followed by a bright line gap threshold (Threshold Option 3.1) for land use projects. However, they have revised their thinking regarding a bright line gap approach and are now considering a GHG threshold level correlated to their ROG and NOx project thresholds (Threshold Option 3.1).

The Monterey Bay District recently began consideration of a 10,000 MT CO_2e/yr threshold option for land use projects, but under it few projects would be significant for their GHG emissions and the threshold may not objectively meet the *cumulatively considerable* standard of CEQA Guidelines § 15065(a)(3).

They are also considering plan-level thresholds for general plans based on consistency with an adopted Greenhouse Gas Reduction Strategy or Climate Action Plan. If a lead agency has an adopted qualified Greenhouse Gas Reduction Strategy or Climate Action Plan, and its general plan is consistent with such a climate plan, the GHG impacts of the general plan would be considered less than cumulatively considerable. Moreover, if the lead agency develops a qualified Greenhouse Gas Reduction Strategy or Climate Action Plan as part of its general plan, implementation of the general plan would be less than cumulatively considerable. They are also considering an efficiency threshold to assess plan-level impacts. A GHG-efficiency metric would enable analysis of a proposed general plan to determine if it would meet AB 32 emission reduction goals. They have no projected adoption date.

Ventura County APCD

Ventura County APCD staff is considering a tiered approach with the main components involving consistency with a locally adopted GHG reduction plan followed by a bright-line threshold for land use projects that would capture 90 percent of project GHG emissions (Threshold Option 2.2). The South Coast AQMD is also considering this as their primary approach for land use projects. Ventura County APCD staff is also exploring an efficiency-based metric (Threshold Option 2.7) for land use projects and plans.

Given that Ventura County is adjacent to the South Coast AQMD jurisdiction and is a part of the SCAG region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the South Coast

AQMD. GHG emissions are not like local air pollutant emissions that only affect the area in which they are emitted. Local GHG emissions potentially affect the entire globe and having harmonized regional GHG emission thresholds would help streamline project review and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout most of Southern California. However, since the South Coast AQMD has put their GHG thresholds effort on hold until sometime next year due to higher priority commitments, there are at least three options for proceeding with local GHG emission thresholds of significance as follows:

(1) Delay adopting local GHG thresholds until the South Coast AQMD adopts GHG thresholds;

(2) Proceed with interim local GHG thresholds with the understanding that they may be revised after the South Coast AQMD adopts GHG thresholds; or

(3) Not wait for the South Coast AQMD and proceed with our own set of GHG thresholds.

District staff is not certain when the South Coast AQMD will restart their effort to adopt GHG significance thresholds, and if we wait until they have adopted GHG thresholds, our effort to adopt GHG thresholds may be unnecessarily delayed. However, as mentioned above, District staff believes it is desirable that there be regional consistency of GHG thresholds, and moving forward now may mean that local GHG thresholds end up being different from those of that adjacent and larger region. Therefore, unless directed otherwise by the Air Pollution Control Board, District staff will continue to evaluate and develop suitable GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region.

Conclusion

Establishing local CEQA significance thresholds for global-scale environmental concerns like global warming and climate change has been a major challenge for all those who have undertaken the effort. CEQA was designed for and works best for projects with local to regional scale environmental effects, such as those on local roadways, waterways, wildlife habitats, and in areas that are relatively small and well defined. CEQA does not work as well or at all on a global scale. This is because micro-scale effects, such as additional vehicular traffic from a new shopping center, cannot be seen on large scales. Nonetheless, CEQA case law mandates that lead agencies assess whether a project's GHG emissions may have a significant environmental impact on global warming and climate change and to develop and impose feasible mitigation measures to substantially lessen any such significant effects to the extent feasible.

Numerous approaches and options have been put forth to assess GHG emissions from land use development projects for CEQA purposes. Each has its own set of advantages and disadvantages. Some are workable and some not. Some are easy to understand and some not. No one individual approach or option is perfect.

This report summarizes the most prominent of the approaches and options either adopted or being considered by local air agencies. The most common approach is a tiered approach involving first, applicability of any CEQA exemptions, followed by project consistency with a local climate action plan, and then an efficiency-based threshold (Threshold Option 2.7) and/or a bright line gap-based threshold (Threshold Option 3.2). Other options are a threshold based on capturing 90 percent of project GHG emissions (Threshold Option 2.2) and a threshold based on an air agency's criteria pollutant thresholds (Threshold Option 3.1).

Unless directed otherwise, District staff will continue to evaluate and develop suitable interim GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region.