CEQA 202 Series: Greenhouse Gas Emissions

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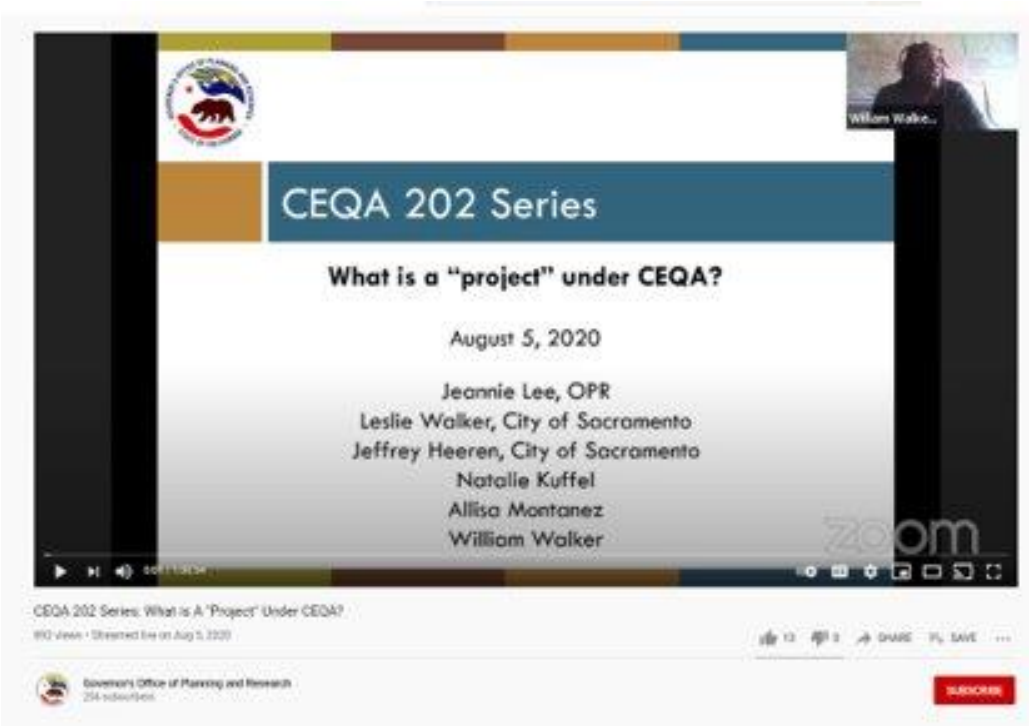
Notes about this Webinar

- We will be using the Q&A function at the bottom of your screen, not the chat function to take questions.
- You may input questions during the presentation at any time. We'll answer questions at the end.
- There will be a few poll question slides throughout the presentation that zoom participants will be able to vote in.
- Unless required by law, the points discussed today are recommended best practices for GHG analyses under CEQA.

CEQA 202 Series

- For a more detailed explanation of foundational CEQA concepts, look for our prior CEQA 202 webinars at opr.ca.gov/ceqa/getting-started.



Today's Presentation will Cover

Three Steps for GHG Analysis in CEQA

1. Identify and assess project's GHG emissions.
2. Determine significance.
3. If needed, avoid or mitigate project impacts.

Identifying and Assessing Emissions

Evaluate GHG Emissions Sources

- The project under CEQA, is defined to include, “the whole of an action, which has a potential for resulting in either a **direct physical change** in the environment or a **reasonably foreseeable indirect physical change** in the environment.” (CEQA Guidelines, § 15378, subd. (a).)
- Emissions sources include but may not limited to:

Construction Emissions

- Construction equipment on site
- Trucks hauling materials to and from the site
- Worker commute trips

Operational Emissions

- Vehicle trips (mobile sources)
- Natural gas consumption (on-site)
- Electricity consumption (on-site)
- Water consumption and generation of wastewater
- Solid waste disposal
- Landscape maintenance activity (area sources)

Consider the Lifetime of the Project

- Lead agencies have discretion in establishing the timeframe for the analysis of the project, however the analysis must give "due consideration to both the short-term and long-term effects." (CEQA Guidelines § 15126.2, subd. (a).)
- The appropriate timeframe will depend on the project and should be supported by substantial evidence.

Establish an Appropriate Methodology

- The analysis must demonstrate a good faith effort, based on the extent possible from scientific and factual data, to describe, calculate or estimate the amount of GHG emissions from a project. (CEQA Guidelines, § 15064.4, subd. (a).)
- Additionally, the model or methodology should:
  - Be supported by substantial evidence
  - The agency should explain the limitations of the methodology selected.

Poll Question #1

- True or False: Under CEQA, a project is required to quantify its greenhouse gas emissions.

Poll Question #1

- True or False: Under CEQA, a project is required to quantify its greenhouse gas emissions.
- **Answer: False**
- *Mission Bay Alliance v. Office of Community Investment and Infrastructure* (2016) 6 Cal.App.5th 160
  - The CEQA Guidelines state that lead agencies shall "make a good faith effort, based on the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions from a project." (Section 15064.4, subd. (a).)
  - However, a lead agency has the discretion to determine, based on the context of a particular project, whether to quantify the GHG emissions from a project or to rely on a qualitative analysis, or both.

Determining Significance

Environmental Setting/Baseline

- An EIR must include a description of the existing physical environmental conditions in the vicinity of the project. (Guidelines, § 15125.)
- Generally includes conditions as they exist at the time that the notice of preparation is published, or when environmental review commences.
- However, to achieve the most accurate picture of GHG emissions, there may be a need to define baseline conditions by referencing historic conditions or conditions expected when a project becomes operational.
- Consider both a local and regional perspective.

The Cumulative Nature of Climate Change

- When evaluating the significance of GHG impacts, the lead agency must determine whether the project's incremental contribution to climate change is cumulatively considerable.
- Even though a project's individual impact may be limited, the project may have significant impacts when viewed in connection with the effects of past, current, and foreseeable future projects.

Appendix G Checklist

VIII. GREENHOUSE GAS EMISSIONS. Would the project:

a) generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Thresholds of Significance

- A Threshold of Significance is “an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.”
- A lead agency may use more than one threshold of significance in its GHG analysis.

Types of Thresholds

- Mass Emission Thresholds (greater than zero)
- Efficiency Thresholds
- Net Zero Emissions threshold
- Zero Emissions
- Consistency with Relevant Regulations, Plans, Policies and Regulatory Programs (qualitative)

Mass Emission Thresholds

CONSIDERATIONS

- Common metric: $MTCO_2e$/year
- Straightforward, quantitative, clear
- e.g., 10,000 $MTCO_2e$/year
- Good methods exist for quantifying project-related GHGs
- If exceeded, amount of mitigation needed is unambiguous

- Challenge: Aligning with statewide target and/or science-based GHG targets
- Favors small inefficient projects (e.g., 12 exurban single-family homes); disfavors large GHG-efficient projects (e.g., 400-unit all-electric, affordable housing project near transit)
- Ignores the utility benefit of a project (e.g., office vs. school vs. housing)

Efficiency Thresholds

CONSIDERATIONS

- Straightforward
- Account for a project's utility
- No "penalty" for a GHG-efficient project being large
- Challenge: Need to be aligned with statewide or science-based target

- Common metrics
  - $MTCO_2e$/resident/year
  - $MTCO_2e$/employee/year
  - $MTCO_2e$/service population/year for mixed projects, where service population = residents + employees
- Challenging project types: retail stores, schools, parks

Poll Question #2

Can a lead agency ever use statewide data to support an efficiency threshold used for assessing project-level impacts?

Yes or no?

Poll Question #2

Can a lead agency ever use statewide data to support an efficiency threshold used for assessing project-level impacts?

- Yes – but only where substantial evidence supports why it is sufficient for use in project-level analyses
- *Golden Door Properties, LLC v. County of San Diego* (2018) 27 Cal.App.5th 892
  - The Court overturned San Diego County's use of an efficiency metric which relied on statewide GHG emissions data without substantial evidence to support how it was applicable to county-wide reductions.

Net Zero Threshold

BASIC APPROACH TO “NETTING OUT”

[New Emissions] – [Replaced Emissions Sources] ≤ 0

Net Zero Threshold

BASIC APPROACH

[New Emissions] – [Replaced Emissions Sources] ≤ 0

EXAMPLES

[High-rise Residential] – [Surface Parking Lot] = ?

[24-unit Apartment Bldg] – [6-unit Apt Bldg] = ?

[Office Park] – [Retail Strip Mall] = ?

Net Zero Threshold

BEST PRACTICE

- Only “net out” emissions if there is substantial evidence that those emissions would cease to occur as a result of the project.

RELEVANT EXAMPLES

- A high-rise residential building replacing a surface parking lot.
- A new office park replacing a truck distribution center.

Net Zero Threshold

BEST PRACTICE

- Netting out is straightforward when the new project is the same type as the existing project.

RELEVANT EXAMPLES

- A new 24-unit apartment building replacing a 6-unit apartment building (*same land use types*).
- A new grocery store replacing an apartment complex (*different land use types*).
- A new hotel resort developed on land used for cattle grazing (*different land use types*).

Net Zero Threshold

BEST PRACTICE

- Consider the remaining operational life of existing land use when netting out its emissions.

RELEVANT EXAMPLES

- New office park replacing a 60-year-old strip mall.
- New gravel mine proposed because a neighboring gravel mine will soon be fully mined.
- Landfill expansion project.

Zero Threshold

[Project Emissions] ≤ 0

- No “netting out” of existing emissions
- More clearly aligned with CARB’s 2022 Scoping Plan

BEST PRACTICES

- Address *both* CEQA Checklist questions.
- Regardless of the results of a quantitative analysis, still examine whether the new land use "would conflict with plans, policies, and regulations developed for the purpose of reducing GHGs." (Appendix G question VII-b)
- Statewide objective is to *reduce* GHG emissions to achieve specified targets; not simply keep the level of statewide emissions at current levels.

Consistency with Relevant Regulations, Plans, Policies and Regulatory Programs

- Consistency with requirements of GHG reduction plan (15064.4(b)(3))
  - *Mission Bay Alliance* case
- Consistency with state climate goals, including Scoping Plan (case law)
  - *Recognized by multiple cases over the years (Creed v. Chula Vista* (2011), *Friends of Oroville* (2013), *Newhall* (2015), *SANDAG* (2017), *Mission Bay Alliance* (2016)).

Center for Biological Diversity v. Department of Fish and Wildlife (2015) 62 Cal.4th 204 ("*Newhall*")

- Court found that CDFW did not violate CEQA by using consistency with AB 32 as a significance threshold.
- However, Court found that CDFW failed to set forth substantial evidence explaining how the AB 32-related statewide 29% emissions reduction number could be directly applied as a significance criterion for an individual development project.
- CDFW did not provide substantial evidence that there was a quantitative equivalence between the Scoping plan's statewide reduction and its project-level reduction.

Scoping Plan Consistency/Attributes Approach

Priority Areas	Key Project Attribute
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)
	Does not result in the loss or conversion of natural and working lands
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS
	Reduces parking requirements by: • Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or • Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or • For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit
	At least 20 percent of units included are affordable to lower-income residents,
	Results in no net loss of existing affordable units

Scoping Plan Consistency/Attributes Approach (continued)

Priority Areas	Key Project Attribute
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking

Poll Question #3

- Are lead agencies required to use statewide emissions reduction goals, such as the Governor's Executive Order goal of achieving eighty percent below 1990 levels by 2050, as thresholds of significance when evaluating GHG emissions?
- Yes or no?

Poll Question #3

- Are lead agencies required to use statewide emissions reduction goals, such as the Governor's Executive Order goal of achieving eighty percent below 1990 levels by 2050, as thresholds of significance when evaluating GHG emissions?
- **No** – *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal. 5th 497
  - Court held that SANDAG did not abuse its discretion in choosing not to use the EO's 2050 target as a threshold of significance
  - SANDAG's decision was supported by substantial evidence, and it presented information sufficient to adequately inform the public about the difference between projected emissions and the 2050 EO emissions goal.
  - CEQA analyses must "stay in step with evolving scientific knowledge and regulatory schemes."

Local Climate Action Plans: What are they and what do they do?

- Long-term planning document
- Address new construction and the built environment
- Cover all sectors
- Create a vision for the community
- Align with statewide GHG reduction targets
- Focus on GHG reduction
- Also might address adaptation/resilience, public health, equity

Climate Action Plans and CEQA

- Not a perfect fit: CAPs largely address existing development
- Statewide Guidance offers streamlining for future projects consistent with the CAP
- Guidelines provide basic “requirements” for CAPs
- More guidance is needed – what makes a CAP strong enough to support streamlining?

BAAQMD Guidance on CAPs

- Must align with state's carbon neutrality target (AB1279)
- Preponderance of mandatory vs. voluntary measures
- Address the largest GHG emission sources
- Focus on quality over quantity
- Minimal reliance on offsets
- Transparency in methods of quantification
- Critical: a strong implementation and monitoring strategy

CAPs: Questions to Ponder

- Should we only focus on the largest source sectors?
- What role can/should offsets play?
- Are we moving beyond quantification?

Mitigating or Avoiding Significant Impacts

Mitigating or Avoiding Significant GHG Impacts

- An EIR shall describe feasible measures which could minimize significant adverse impacts. (Guidelines § 15126.4, subd. (a)(1).)
- May include alternative project designs or locations.
- Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure identified. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).)

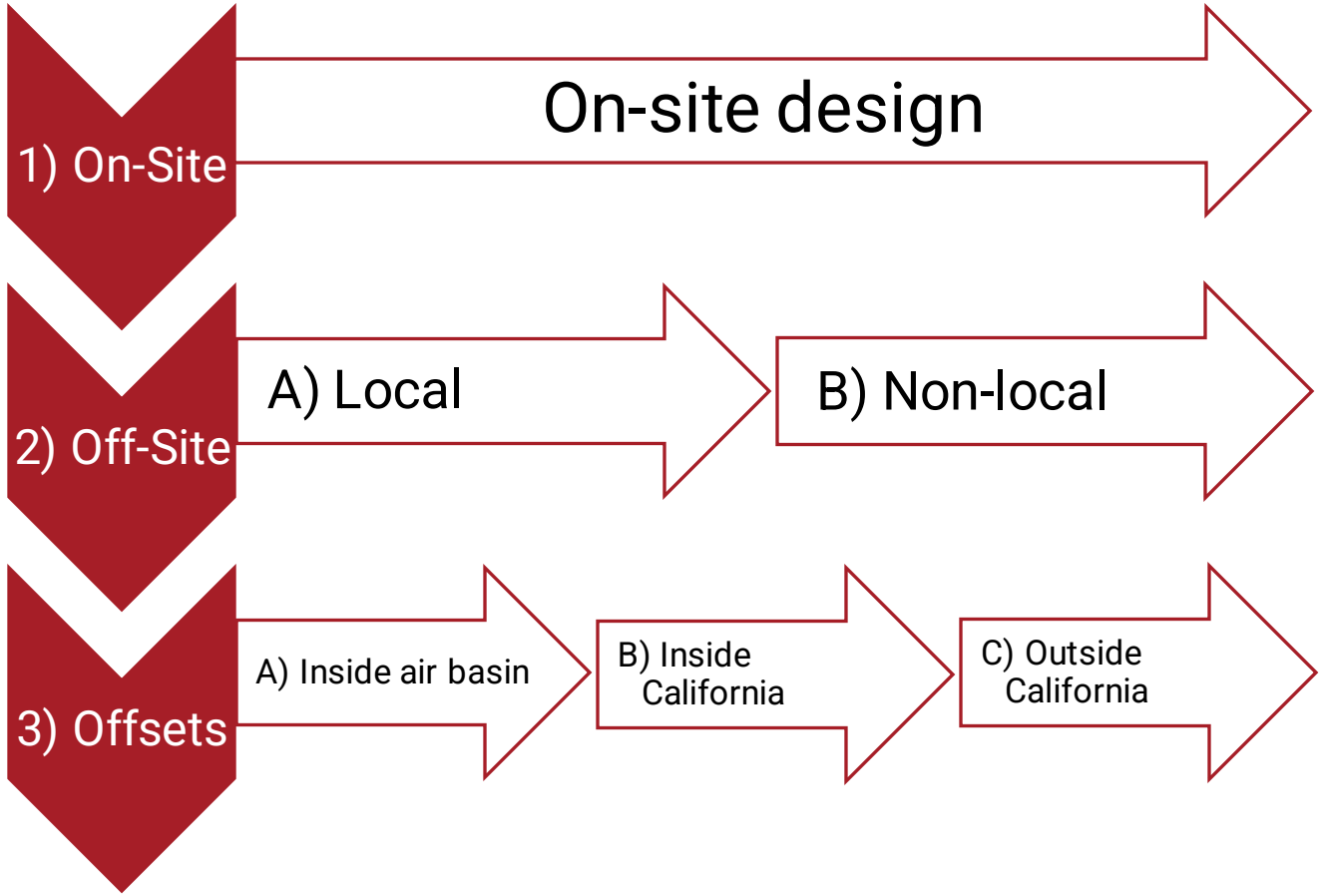
Types of Mitigation

- Mitigation measures for GHGs (CEQA Guidelines, § 15126.4, subd. (c).)
  1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
  2) Reductions in emissions resulting from a project through implementation of **project features, project design**, or other measures, such as those described in Appendix F;
  3) **Off-site measures**, including **offsets that are not otherwise required,** to mitigate a project's emissions;

Types of Mitigation (continued)

- Mitigation measures for GHGs (CEQA Guidelines, § 15126.4, subd. (c).)
  4) Measures that sequester greenhouse gases;
  5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

CARB Scoping Plan GHG Reduction and Mitigation Hierarchy



Mitigation Measure Requirements

- Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. (CEQA Guidelines, § 15126.4, subd. (a)(2).)
- Formulation of mitigation measures should not be deferred until some future time. If it is impracticable or infeasible to include specific details of a mitigation measure until after project approval, then the agency must:
  - 1) Commit itself to the mitigation
  - 2) Adopt specific performance standards the mitigation will achieve, and
  - 3) Identify the type(s) of potential actions that can feasibly achieve that performance standard and that will be considered, analyzed and potentially incorporated into the mitigation measure.

  CEQA Guidelines, § 15126.4(b).

Ensuring the Enforceability of Carbon Offsets

- CEQA guidelines specify that mitigation to reduce GHGs may include "offsets that are not otherwise required."
- The use of carbon offsets as a mitigation measure can impose challenges to ensuring enforceability under CEQA because the reduction in GHG emissions occurs elsewhere.
- *Golden Door Properties LLC v. County of San Diego* (2020) 50 Cal.App.5th 467
  - In evaluating whether a mitigation measure requiring the purchase of voluntary carbon offset credits were enforceable, the Court examined whether the measure met requirements imposed by CARB's Cap and Trade Program including that the emissions reductions from the offsets be real, permanent, quantifiable, verifiable, enforceable and additional.
  - The Court expressed concerns with the measures use of out-of-country offsets, as well as the fact that the measure did not require that the offsets be additional.

Any Questions?

- Please use the Q&A function at the bottom of your screen.
- For additional CEQA resources, please visit OPR's CEQA "Getting Started" webpage: opr.ca.gov/ceqa/getting started
- OPR's CEQA Technical Advisories: opr.ca.gov/ceqa/technical-advisories.html

For a copy of the slides, please email Shannon.Clark@opr.ca.gov