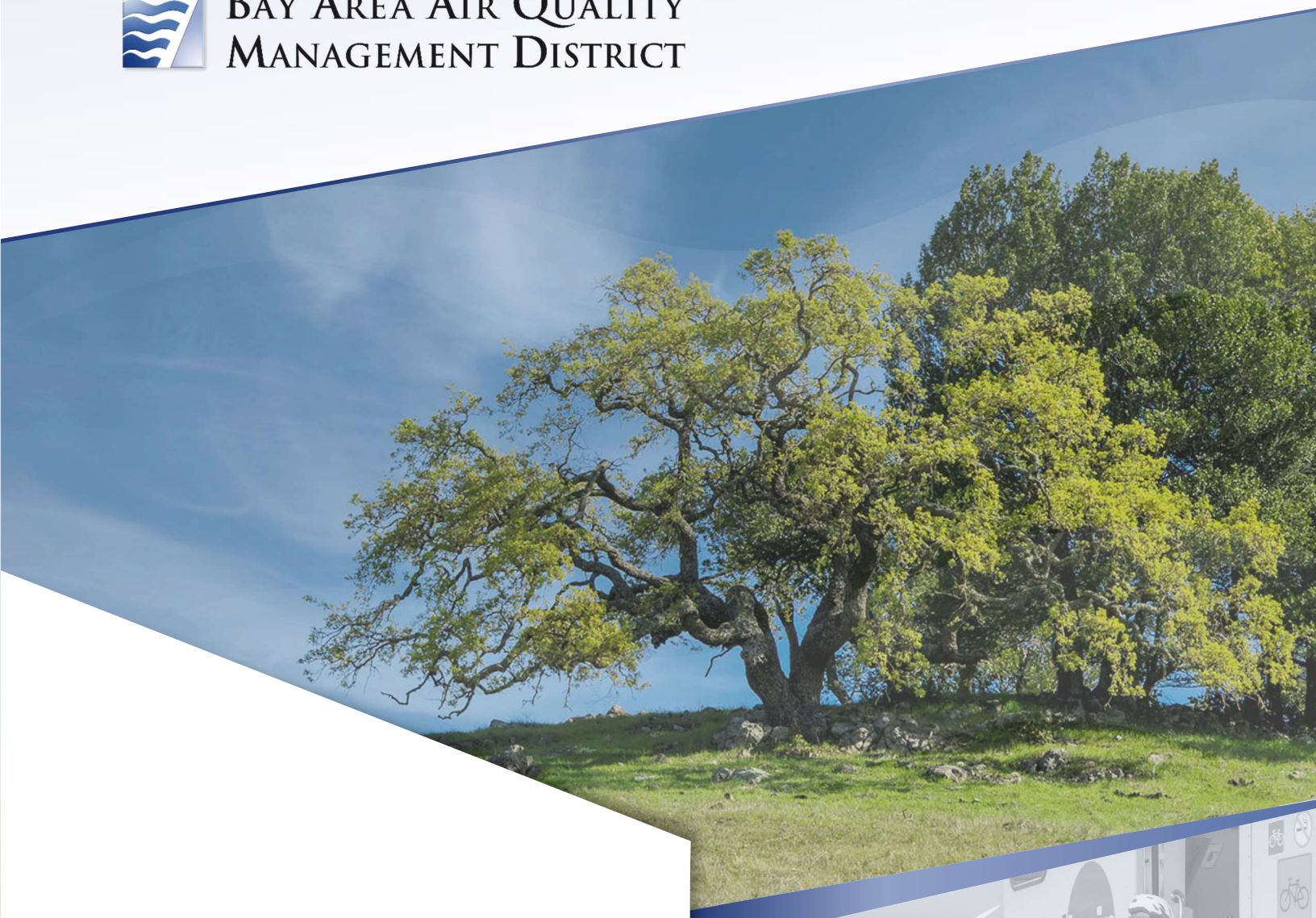
DOCKETED	
Docket Number:	21-SPPE-01
Project Title:	CA3 Backup Generating Facility-Vantage
TN #:	244199
Document Title:	Justification Report
Description:	CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans
Filer:	Ngoc Tran
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	7/25/2022 5:05:55 PM
Docketed Date:	7/25/2022

Bay Area Air Quality Management District



Justification Report:

CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans

April 2022

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Justification Report

CEQA Thresholds for Evaluating the Significance of Climate Impacts

Veronica Eady
Senior Deputy Executive Officer

Damian Breen
Senior Deputy Executive Officer

Greg Nudd
Deputy Air Pollution Control Officer

Adan Schwartz
Acting District Counsel

PRINCIPAL CONTRIBUTORS:

Henry Hilken
Director of Planning and Climate Protection

Alexander "Sandy" Crockett
Acting Senior Assistant Counsel

Abby Young
Climate Protection Manager

Wendy Goodfriend, Ph.D.
Air Quality Planning Manager

Jakub Zielkiewicz
Senior Advanced Projects Advisor

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600
San Francisco, CA 94105
415.749.5000

TECHNICAL ASSISTANCE FROM:

ASCENT

Honey Walters
Principal-in-Charge

Poonam Boparai
Principal

Hannah Kornfeld, AICP
Project Manager

April 2022

TABLE OF CONTENTS

Figures

Tables

LIST OF ABBREVIATIONS

ºC	degrees Celsius
AB	Assembly Bill
Air District	Bay Area Air Quality Management District
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
DC	direct current
EIR	environmental impact report
EV	electric vehicle
GHG	greenhouse gas
HCD	California Department of Housing and Community Development
OPR	Governor's Office of Planning and Research
RPS	Renewables Portfolio Standard
SB	Senate Bill
VAC	voltage of alternating current
VMT	vehicle miles traveled
ZEV	zero-emission vehicle

This page intentionally left blank.

1 INTRODUCTION AND EXECUTIVE SUMMARY

This report presents the Bay Area Air Quality Management District's (Air District's) recommended thresholds of significance for use in determining whether a proposed project will have a significant impact on climate change. The Air District recommends that these thresholds of significance be used by public agencies to comply with the California Environmental Quality Act (CEQA).

Evaluating climate impacts under CEQA can be challenging because global climate change is inherently a cumulative problem. Climate change is not caused by any individual emissions source but by a large number of sources around the world emitting greenhouse gases (GHGs) that collectively create a significant cumulative impact. CEQA requires agencies in California to analyze such impacts by evaluating whether a proposed project would make a "cumulatively considerable" contribution to the significant cumulative impact on climate change. (See CEQA Guidelines Sections 15064[h] and 15064.4[b].)[1] But CEQA does not provide any further definition of what constitutes a cumulatively considerable contribution in this context. These thresholds of significance are intended to assist public agencies in determining whether proposed projects they are considering would make a cumulatively considerable contribution to global climate change, as required by CEQA.

The Air District's recommended thresholds of significance are summarized below, with a detailed discussion of the basis for the thresholds presented in the remainder of this report. The information provided in this report is intended to provide the substantial evidence that lead agencies will need to support their determinations about significance using these thresholds. This information also provides the substantial evidence to support adoption of these thresholds by the Air District's Board of Directors. (See CEQA Guidelines Section 15064.7 [thresholds must be adopted by the Board of Directors through a public review process and be supported by substantial evidence].)

1.1 THRESHOLDS FOR LAND USE PROJECTS

For land use development projects, the Air District recommends using the approach endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the State's long-term climate goals. As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less-than-significant impact on climate change under CEQA. If a project would contribute its "fair share" of what will be required to achieve those long-term climate goals, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change (62 Cal.4th 220–223).

[1] The 2021 State CEQA Guidelines, including Appendices F and G, can be found at the following website: https://www.califaep.org/docs/CEQA_Handbook_2021.pdf.

Applying this approach, the Air District has analyzed what will be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality[2] by 2045. The Air District has found, based on this analysis, that a new land use development project being built today needs to incorporate the following design elements to do its "fair share" of implementing the goal of carbon neutrality by 2045:

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

If a project is designed and built to incorporate these design elements, then it will contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. If the project does not incorporate these design elements, then it should be found to make a significant climate impact because it will hinder California's efforts to address climate change. These recommended thresholds for land use projects are discussed in more detail in Section 4.

[2] "Carbon neutrality" is defined in Executive Order B-55-18 as the point at which the removal of carbon pollution from the atmosphere meets or exceeds carbon emissions. Carbon neutrality is achieved when carbon dioxide and other GHGs generated by sources such as transportation, power plants, and industrial processes are less than or equal to the amount of carbon dioxide that is stored, both in natural sinks and mechanical sequestration.

1.2 THRESHOLDS FOR GENERAL PLANS AND RELATED PLANNING DOCUMENTS

The Air District recommends a similar approach for cities and counties adopting general plans and related planning documents that will guide long-range development in their jurisdictions. The Air District recommends that cities and counties evaluate such plans based on whether they will be consistent with California's long-term climate goal of achieving carbon neutrality by 2045. To be consistent with this goal, these plans should reduce GHG emissions in the relevant jurisdiction to meet an interim milestone of 40 percent below the 1990 emission levels by 2030, consistent with Senate Bill (SB) 32, and to support the State's goal of carbon neutrality by 2045. Cities and counties planning to develop in a manner that is not consistent with meeting these GHG reduction targets will have a significant climate impact because they will hinder California's efforts to address climate change.

Thresholds for Plans (Must Include A or B)
A. Meet the State's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or
B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

The Air District also strongly recommends that cities and counties adopt climate action plans to document specific strategies and implementation measures to achieve these 2030 and 2045 goals. Robust climate action plans that meet the requirements of CEQA Guidelines Section 15183.5(b) can provide such jurisdictions with a number of benefits. If properly developed, they will provide the substantial evidence a jurisdiction needs to demonstrate that its general plan updates and related planning documents will not have a significant climate impact as outlined in the preceding paragraph. In addition, a jurisdiction can use a qualified climate action plan to evaluate individual land use projects under CEQA. This gives the local jurisdiction the flexibility to tailor requirements for land use projects in its community to the specific circumstances of that community rather than use the Air District's general thresholds for land use projects described above. In addition, a jurisdiction can adopt a climate action plan immediately, without having to wait for its next general plan update cycle.

Thresholds for general plans and related planning documents are discussed in more detail in Section 5. Guidance from the Air District on how to develop and adopt a comprehensive climate action plan that satisfies the detailed requirements of CEQA Guidelines Section 15183.5(b) is set forth in Appendix C to the Air District's Air Quality Guidelines.

1.3 Important Considerations for Using These Thresholds

The Air District has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans. As such, these thresholds may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project or general plan update.

Lead agencies should keep this point in mind when evaluating other types of projects. A lead agency does not necessarily need to use a threshold of significance if the analysis and justifications that were used to develop the threshold do not reflect the particular circumstances of the project under review. Accordingly, a lead agency should not use these thresholds if it is faced with a unique or unusual project for which the analyses supporting the thresholds as described in this report do not squarely apply. In such cases, the lead agency should develop an alternative approach that would be more appropriate for the particular project before it, considering all of the facts and circumstances of the project on a case-by-case basis.

In addition, lead agencies should keep in mind that the science of climate change – and California's regulatory and policy responses to it – are constantly evolving. As the technical and policy considerations on which these thresholds of significance are based advance in the future, lead agencies may need to make adjustments to the thresholds as set forth herein to be consistent with the most current information. As the California Supreme Court has explained, lead agencies are required to "ensure that CEQA analysis stays in step with evolving scientific knowledge and state regulatory schemes" (*Cleveland National Forest Foundation v. SANDAG* (2017) 3 Cal.5th 497, 519). Making appropriate adjustments to these thresholds in light of future developments will ensure that lead agencies comply with this important CEQA mandate.

2 FRAMEWORK FOR ANALYZING IMPACTS UNDER CEQA

The central requirement of the CEQA environmental analysis is to determine whether implementing a project will result in any significant adverse impact on the environment, either individually or cumulatively.

This mandate requires the reviewing agency first to evaluate whether the project will have a significant impact by itself and then to consider whether the project may contribute to a significant cumulative impact in conjunction with other past, present, and reasonably foreseeable future projects that also contribute to the impact.[3]

In the cumulative context, the analysis has two parts. To evaluate cumulative impacts, the agency must assess (1) whether the overall cumulative impact will be significant and, (2) if the overall impact is significant, whether the incremental contribution that the individual project under review will add to the overall cumulative problem will be cumulatively considerable. As Section 15064(h)(1) of the CEQA Guidelines states:

> When assessing whether a cumulative effect requires an EIR [environmental impact report], the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable.

Both parts of this test must be met for a project's impact to be treated as significant under CEQA. If the overall cumulative impact does not rise to the level of a "significant" impact, or if the project's incremental

[3] A cumulative impact is the change in the environment that results from the incremental impact of the project under review in conjunction with other past, present, and reasonably foreseeable probable future projects (CEQA Guidelines Section 15355).

contribution is not cumulatively considerable, then the project's impact is not treated as significant. (See *San Francisco Baykeeper, Inc. v. State Lands Commission* [2015] [242 Cal.App.4th 202, 222] [project not significant if "the cumulative impact is insignificant or if the project's incremental contribution to the impact is not cumulatively considerable"]; see also CEQA Guidelines Sections 15130[a][3] and 15064[h].)

Cumulatively considerable means that the incremental effect of the specific project under review will be significant when viewed in the context of the overall cumulative problem (CEQA Section 21083[b][2]). CEQA does not require that any incremental addition to a significant cumulative impact, no matter how small, must necessarily be treated as cumulatively considerable. The statute does not require a so-called "one additional molecule" standard, and some projects' incremental contributions would be so minor that their impact does not have to be treated as significant even though the projects would add an additional amount to the significant cumulative impact (*Communities for a Better Environment v. California Resources Agency* [2002] [103 Cal.App.4th 98, 120]; see also CEQA Guidelines Section 15064[h][4].) The level at which the incremental addition becomes cumulatively considerable will depend on the nature of the particular cumulative impact being evaluated. The ultimate test is whether any additional amount should be considered significant in the context of the existing cumulative effect. (CEQA Section 21083[b][2]).)

Applying these principles, the environmental impact analysis under CEQA is a four-step process:

- Step One: **Determine the level at which an impact on the environmental resource under consideration becomes "significant."** This is the touchstone for assessing whether the project may have a significant impact individually or may contribute to a cumulative impact that is significant. The level at which the impact becomes significant will depend on the nature of the environmental resource being evaluated.
- Step Two: **Evaluate whether the project under review would degrade the environmental resource to such an extent that there would be an impact exceeding the "significant" level determined during Step One**. If implementing the project would cause an impact to exceed that level all by itself, then the project's impact is treated as significant under CEQA and the project requires preparation of an EIR, implementation of feasible mitigation measures to reduce the impact to a less-than-significant level, and consideration of alternatives that would avoid or lessen any significant impacts. If the project under review would not degrade the environmental resource to such an extent that there would be a significant impact, the analysis proceeds to Step Three.
- Step Three: **Determine whether the contribution of the project combined with the contributions of all other past, present, and reasonably foreseeable future projects would exceed the "significant" level determined during Step One.** If implementing the project would not cause a significant impact by itself, it still must be evaluated to determine whether it would make a cumulatively considerable contribution to a significant cumulative impact. The first element of that analysis is to assess the overall cumulative impact caused by the project in conjunction with other past, present, and reasonably foreseeable future projects affecting the same resource. If the overall cumulative impact exceeds the "significant" level determined during Step One, then the project would contribute to a significant cumulative impact, and the analysis proceeds to Step Four to determine whether that contribution is cumulatively considerable.

- Step Four: **Determine whether the project's incremental contribution is cumulatively considerable.** The final step is to determine whether the project's incremental contribution is cumulatively considerable in light of the overall cumulative impact. If implementing the project would make a cumulatively considerable contribution to a significant cumulative impact, the impact is considered significant under CEQA and the agency must prepare an EIR, impose feasible mitigation measures to bring the incremental contribution below the cumulatively considerable level, and consider alternatives.

The CEQA analysis applies this four-step process to evaluating climate impacts just as it does for all other impacts.

3 ANALYZING IMPACTS ON GLOBAL CLIMATE CHANGE

CEQA requires agencies to consider a project's impacts on global climate change in the same manner that they consider impacts on other areas in the environmental review document. Climate change is unique, however, given the global nature of the problem.

Step One in the analysis requires determining the level at which climate change becomes a "significant" environmental problem. There is a general consensus that we need to limit the warming of the planet to no more than 1.5 degrees Celsius (ºC) in order to maintain a sustainable global climate. Aiming to limit global warming to 1.5ºC is a goal recognized by the Paris Agreement on Climate Change and in California's Executive Order B-55-18, and the Intergovernmental Panel on Climate Change (IPCC) has documented the serious adverse consequences that are expected if the climate warms by more than that amount (IPCC 2018). A 1.5ºC rise in global temperatures is therefore an appropriate measure of the level at which climate change will become significant. A global temperature increase of more than that amount will constitute a significant climate impact.

Proceeding to Step Two in the analysis, it is clear that no individual project could have a significant climate impact all by itself, because no project by itself could cause the global temperature to rise by 1.5ºC. Indeed, it is difficult to conceive of any project whose GHG emissions would cause global temperature to change in any detectable way. The California Supreme Court acknowledged this situation in its *Center for Biological Diversity* decision, explaining that "an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 204, 219 [citation omitted]).

Moving on to the cumulative analysis, Step Three asks whether the project would contribute to a significant cumulative impact in conjunction with all other past, present, and foreseeable future projects that are contributing to the same impact. With respect to climate change, clearly the answer is yes. Climate change is a cumulative problem caused by millions or billions of individually minor sources all around the globe contributing to the global impact, and it is unquestionably a significant cumulative problem.[4] The

[4] CEQA requires the cumulative analysis to consider the contributions from all projects that contribute to the impact (i.e., all projects that contribute to the degradation of the environmental resource being evaluated). (See *City of Long Beach v. Los Angeles Unified School Dist.* [2009]

global climate has already warmed by approximately 1.0ºC compared to a preindustrial baseline, and IPCC projects that continued growth in GHG emissions will cause that warming to reach 1.5 ºC by 2030–2053 if nothing is done to limit it (IPCC 2018).

The analysis therefore focuses on Step Four: determining whether the project's GHG emissions would make a cumulatively considerable contribution to the significant problem of global climate change. As the Supreme Court noted in its *Center for Biological Diversity* decision, the question is "whether the project's incremental addition of greenhouse gases is 'cumulatively considerable' in light of the global problem, and thus significant" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 219). This is the challenge that has faced lead agencies in undertaking the CEQA analysis: how to determine the level at which a project becomes cumulatively considerable.

4 THRESHOLDS FOR LAND USE DEVELOPMENT PROJECTS

4.1 THE SUPREME COURT'S "FAIR SHARE" ANALYSIS AND CONSISTENCY WITH CALIFORNIA'S LONG-TERM CLIMATE GOALS

The crucial question in the CEQA climate impact analysis is whether the project under review would make a cumulatively considerable contribution to the significant cumulative problem of global climate change. For land use development projects, the Air District recommends using the approach endorsed by the California Supreme Court in the *Center for Biological Diversity* decision, discussed above, which focuses on determining whether the project would be doing its "fair share" to implement California's ambitious long-term climate goals. This approach evaluates whether a project's GHG emissions are cumulatively considerable based on "their effect on the state's efforts to meet [those] goals…." (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 221.) If a new land use project would serve California's pressing need to provide housing, jobs, and related infrastructure in a manner that supports achieving those climate goals, then it would help to solve the climate change problem, and its GHG emissions should not be treated as cumulatively considerable. As the Supreme Court held, "consistency with meeting [those] statewide goals [is] a permissible significance criterion for project emissions" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 220), and an agency's "choice to use that criterion does not violate CEQA" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 223).

This approach is based on the principle inherent in CEQA that an individual project would make a less-than-cumulatively-considerable contribution if it would do its part to address the cumulative problem. As the Supreme Court explained, "if a plan is in place to address a cumulative problem, a new project's incremental addition to the problem will not be 'cumulatively considerable' if it is consistent with the plan

[176 Cal.App.4th 889, 907], *Bakersfield Citizens for Local Control v. City of Bakersfield* [2004] [124 Cal.App.4th 1184, 1219 fn. 10], and *Kings County Farm Bureau v. City of Hanford* [1990] [221 Cal.App.3d 692, 720]). In the context of global climate change, this means considering all sources of GHG emissions around the globe that contribute to the global problem. Given the large number of sources involved, the analysis needs to use the "summary of projections" method to assess the magnitude of the total cumulative impact, not the "list of projects" method. (See CEQA Guidelines Section 15130[b].)

and is doing its fair share to achieve the plan's goals" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 223). No individual project needs to solve the entire cumulative problem by itself. Indeed, no individual project could, given that the problem is the result of such a large number of diverse emission sources. But each individual project does need to do what is required of it to ensure that the overall solution is implemented, and if it does that, then its impact on climate change can be treated as less than cumulatively considerable. As the Supreme Court put it in the climate context, "[t]o the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall greenhouse gas reductions necessary [to achieve the State's climate goals], one can reasonably argue that the project's impact is not cumulatively considerable, because it is helping to solve the cumulative problem..." (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 220 [internal quotation marks omitted]).

4.2 USING THE EXECUTIVE ORDER B-55-18 AND THE 2045 CARBON NEUTRALITY GOAL IN THE "FAIR SHARE" ANALYSIS

The *Center for Biological Diversity* case was decided in 2015, and it specifically addressed only the Assembly Bill (AB) 32 goal of attaining 1990 emission levels by 2020 statewide, not the longer-term goal for 2045. However, we are now past the 2020 milestone. At this point, the focus has shifted to the longer-term goals and ultimately to carbon neutrality by 2045. Moreover, the Supreme Court has recognized the necessity and appropriateness of using these longer-term goals as the touchstone for the CEQA analysis. As it held in *Cleveland National Forest Foundation v. SANDAG*, these longer-term goals express "what scientific research has determined to be the level of emissions reductions necessary to stabilize the climate by midcentury and thereby avoid catastrophic effects of climate change" (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th 497, 513). They represent "the scientifically-supported level of emissions reduction needed to avoid significant disruption of the climate and [are] used as the long-term driver for state climate change policy development" (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th 497, 513 (citation omitted)[5]).

The consistency analysis approved by the Supreme Court in *Center for Biological Diversity* can be applied to these longer-term goals in the same way it was applied to the AB 32 2020 goal. If a project would be consistent with meeting these long-term State climate goals, then its climate impact can be seen as less than cumulatively considerable "because it is helping to solve the cumulative problem of greenhouse gas emissions as envisioned by California law" (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015] 62 Cal.4th 220 (citation omitted)).

Moreover, although the 2045 goal is set forth in an executive order and not in a statute, as with the 2020 AB 32 goal that the Supreme Court addressed in *Center for Biological Diversity*, the Executive Order B-55-18 goal is appropriate to use for developing a threshold of significance given the science supporting it. The Supreme Court explicitly rejected the argument that an executive order cannot be used for this purpose because it has not been adopted by statute in the *SANDAG* case. It explained that the executive order at

[5] These statements were referring to the older Executive Order S-3-05, which included an 80-percent reduction target by 2050, but they apply with equal force to the more recent Executive Order B-55-18.

issue there "expresses the pace and magnitude of reduction efforts that the scientific community believes is necessary to stabilize the climate. This scientific information has important value to policymakers and citizens in considering the emission impacts of a project…" (*Cleveland National Forest Foundation v. SANDAG* [2017] 3 Cal.5th 515). Agencies are required to design their CEQA analyses "based to the extent possible on scientific and factual data," and if an executive order best embodies the current state of the scientific and factual data, an agency may use it as the basis for its CEQA analysis (*Ibid*. (quoting CEQA Guidelines Section 15064[b]).

4.3 DETERMINING A LAND USE PROJECT'S "FAIR SHARE" FOR GETTING TO CARBON NEUTRALITY BY 2045

The "fair share" analysis looks at how a new land use development project needs to be designed and built to ensure that it will be consistent with the goal of carbon neutrality by 2045. This is California's current articulation of what will be required to achieve long-term climate stabilization at a sustainable level, as articulated in Executive Order B-55-18. If a land use project incorporates all of the design elements necessary for it to be carbon neutral by 2045, then it will contribute its portion of what is needed to achieve the State's climate goals and will help to solve the cumulative problem. It can therefore be found to make a less-than-cumulatively-considerable climate impact.

A land use project's "fair share" will not necessarily include everything that will need to happen in order to achieve carbon neutrality by 2045. There will likely be certain aspects of achieving carbon neutrality that are beyond the scope of how a land use project is designed and thus cannot reasonably be allocated to its "fair share." For example, becoming carbon neutral by 2045 will require California's electrical power generators to shift to 100-percent carbon-free energy resources, which is not something that can be controlled through the design of new land use projects. But for those aspects that can be controlled or influenced by how such projects are designed, projects need to address those aspects in order to contribute their "fair share" of what is needed to attain carbon neutrality. If a project is not designed and built to ensure that it can be carbon neutral by 2045, then it will impede California's ability to achieve its long-term climate goals and should be treated as making a cumulatively considerable contribution to global climate change.

To determine the "fair share," the analysis should therefore focus on the design elements that need to be incorporated into the project in order to lay the foundation for achieving carbon neutrality by 2045. As GHG emissions from the land use sector come primarily from building energy use and from transportation, these are the areas that need to be evaluated to ensure that the project can and will be carbon neutral. With respect to building energy use, this can be achieved by replacing natural gas with electric power and by eliminating inefficient or wasteful energy usage. This will support California's transition away from fossil fuel–based energy sources and will bring the project's GHG emissions associated with building energy use down to zero as our electric supply becomes 100 percent carbon free. With respect to transportation, projects need to be designed to reduce project-generated VMT and to provide sufficient electric vehicle (EV) charging infrastructure to support the shift to EVs. As explained below, the Air District recommends using a threshold of a 15-percent reduction in project-generated VMT per capita compared with existing

levels (or other, more current percentage to the extent further analysis shows that a different level of reduction is needed) and providing EV charging infrastructure as specified in the California Green Building Standards Code (CALGreen) Tier 2 standards. If a land use project being designed and built today incorporates the design elements necessary for the project to be carbon neutral by 2045, then it will contribute its "fair share" to achieving the State's climate goals. A lead agency can therefore conclude that it will make a less-than-cumulatively-considerable climate impact.

There is no proposed construction-related climate impact threshold at this time. Greenhouse gas emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions.

The following sections provide a more detailed discussion of the framework for evaluating the design elements necessary for a project to be consistent with California's long-term climate goals. The Air District recommends that lead agencies use the design elements as the threshold of significance for land use projects under the Supreme Court's "fair share" approach discussed above.

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

4.3.1 Building Energy Use

Energy used in residential and nonresidential buildings in California comes primarily from natural gas and electricity, the generation and consumption of which can result in GHG emissions. Natural gas usage emits GHGs directly when it is burned for space heating, cooking, hot water heating and similar uses, whereas electricity usage emits GHGs indirectly to the extent that it is generated by burning carbon-based fuels. For the building sector to achieve carbon neutrality, natural gas usage will need to be phased out and replaced with electricity usage, and electrical generation will need to shift to 100-percent carbon-free sources. To support these shifts, new projects need to be built without natural gas and with no inefficient or wasteful energy usage.

ELECTRICITY

Eliminating GHG emissions associated with building electricity usage will be achieved by decarbonizing California's electrical generation infrastructure. California has committed to achieving this goal by 2045 through SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 strengthened the State's Renewables Portfolio Standard (RPS) by requiring that 60 percent of all electricity provided to retail users in California come from renewable sources by 2030 and that 100 percent come from carbon-free sources by 2045.

The land use sector will benefit from RPS because the electricity used in buildings will be increasingly carbon-free, but implementation does not depend (directly at least) on how buildings are designed and built. RPS will be implemented by the generators that produce and sell the electricity, not by the end users of that electricity. Implementing SB 100 is therefore not part of the "fair share" that falls to land use development projects to ensure that California reaches its 2045 carbon neutrality target.

Nevertheless, land use projects do have an important role to play on the demand side to ensure that SB 100 can feasibly be implemented. Inefficient electricity usage will hinder the shift to renewable power generation by requiring additional carbon-free generating resources to be developed, increasing the cost of shifting to renewables and other carbon-free energy sources, and delaying full implementation longer than necessary. Thus, to the extent that new land use projects have a role to play in ensuring that SB 100 is successfully implemented, that role is to maximize the efficiency with which they use electricity and to eliminate any wasteful or unnecessary usage. If a new land use project maximizes efficiency and eliminates wasteful and unnecessary usage, then it will implement its "fair share" in this area, consistent with achieving the State's long-term climate goals. Conversely, if a project is not designed to use electricity in an efficient manner, then it will hinder the successful implementation of SB 100 and the State's long-term climate goals.

CEQA requires lead agencies to evaluate a project's potential for wasteful, inefficient, or unnecessary energy usage under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines, along with State CEQA Guidelines Appendix F and Appendix G, Section VI. The Air District recommends using the results of this analysis to determine whether the project will implement its "fair share" with respect to supporting the implementation of SB 100. If the energy analysis required under CEQA Section 21100(b)(3) shows that a project will not result in any wasteful, inefficient, or unnecessary electrical usage, then it will

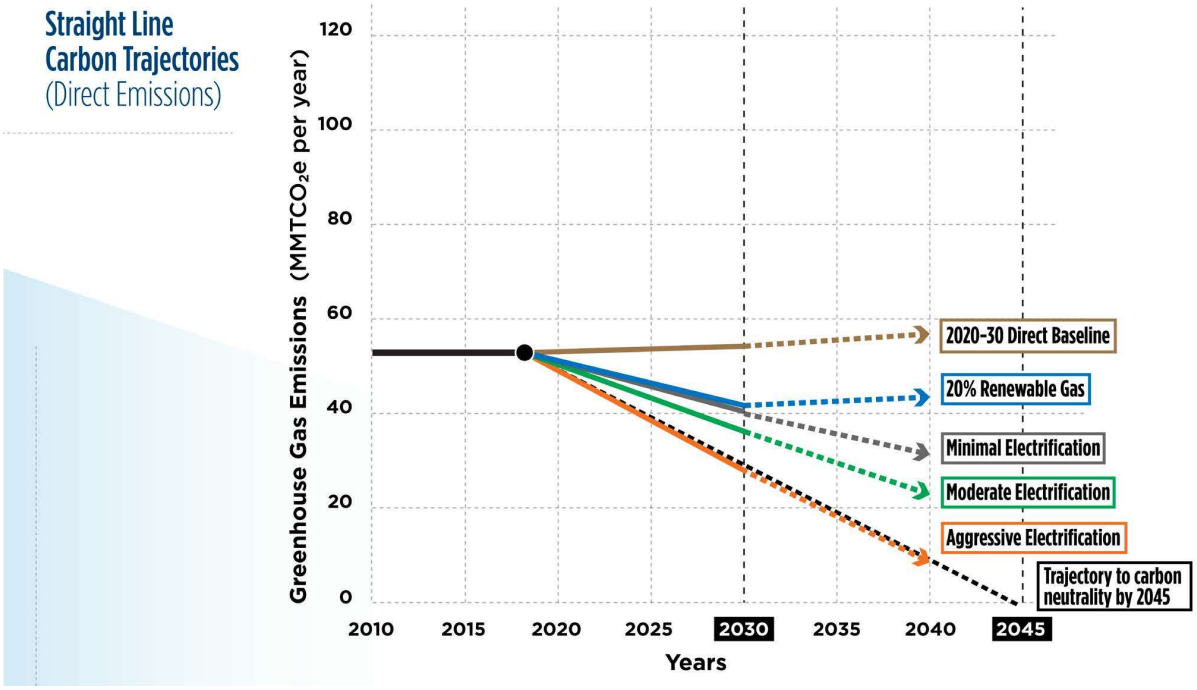
be consistent with implementing SB 100 and will not make a cumulatively considerable climate impact with respect to building electrical usage. If the project is found to involve wasteful, inefficient, or unnecessary electrical usage, then the lead agency should conclude that it will make a cumulatively considerable impact and treat it as significant in this regard.

NATURAL GAS

Regarding natural gas usage, new land use development projects must be built without any natural gas infrastructure in order to be consistent with achieving the 2045 carbon neutrality goal. There is no practical way to eliminate the GHG emissions that are generated by burning natural gas, so the land use sector will need to fully eliminate natural gas usage in buildings in order to achieve the goal of carbon neutrality. Given the difficulty of retrofitting existing buildings to replace the use of natural gas with the use of electricity, California needs to stop building natural gas infrastructure in new buildings if it is going to be able to achieve full electrification by the 2045 target date. Retrofitting an existing building to replace natural gas infrastructure with electrical service is far more difficult and expensive than simply building a new all-electric building (CEC 2021a; E3 2019). For California to successfully eliminate natural gas usage by 2045, it will need to focus available resources on retrofitting existing natural gas infrastructure. This task will become virtually impossible if we continue to build more natural gas infrastructure that will also need to be retrofit within the next few years.

This need to eliminate natural gas in new projects in order to achieve carbon neutrality in buildings by 2045 is demonstrated by analyses conducted by the California Energy Commission (CEC) in its California Building Decarbonization Assessment (CEC 2021a). CEC published the California Building Decarbonization Assessment primarily in response to the requirements of AB 3232, which required CEC to evaluate how the State can reduce GHG emissions from its residential and commercial building stock by at least 40 percent below 1990 levels by 2030. But CEC went beyond just analyzing that 2030 goal and evaluated what will be necessary to achieve the longer-term goal of carbon neutrality by 2045. The analysis considered a number of different scenarios and projected the total GHG emissions from residential and commercial buildings under each of them. The results of CEC's analysis are shown graphically in Figure 1.

Figure 1 Effectiveness of CEC-Modeled Electrification Scenarios at Achieving Carbon Neutrality by 2045



Source: CEC 2021a:14

The CEC's analysis shows that only the most aggressive electrification scenario will put the building sector on track to reach carbon neutrality by 2045. Anything that hinders such aggressive efforts will jeopardize California's chances of achieving full building decarbonization by 2045 and impair the state's ability to reach its long-term climate goals. Installing natural gas infrastructure in new buildings will do so because it will add even more infrastructure that will need to be retrofit with electricity between now and 2045. New projects therefore need to eliminate natural gas in order to implement their "fair share" of achieving the long-term 2045 carbon neutrality goal. If a project does not use natural gas in its buildings, then a lead agency can conclude that it is consistent with achieving the 2045 carbon neutrality goal and will not have a cumulatively considerable impact on climate change. If a project does use natural gas, then it will hinder California's ability to decarbonize its building sector. In that case, the lead agency should conclude that it will make a cumulatively considerable impact and treat it as significant.

4.3.2 Transportation

The second principal source of GHG emissions associated with land use comes from transportation. Decarbonization of the transportation infrastructure serving land use development will come from shifting the motor vehicle fleet to EVs, coupled with a shift to carbon-free electricity to power those vehicles. Land use projects cannot directly control whether and how fast these shifts are implemented, but they can and do have an important indirect influence on California's transition to a zero-carbon transportation system.

New land use development can influence transportation-related emissions in two areas related to how it is designed and built. First, new land use projects need to provide sufficient EV charging infrastructure to serve the needs of project users who will be driving EVs. If project users cannot find the charging

infrastructure they need to charge their vehicles at the residential, commercial, and other buildings they frequent, they will be discouraged from switching to an EV. But if those buildings provide sufficient charging infrastructure to make driving an EV easy and efficient, then users will find it easy to choose to drive an EV, and the rate of EV penetration will be accelerated. It is therefore very important for land use projects to provide the EV charging infrastructure needed to support growing EV usage.

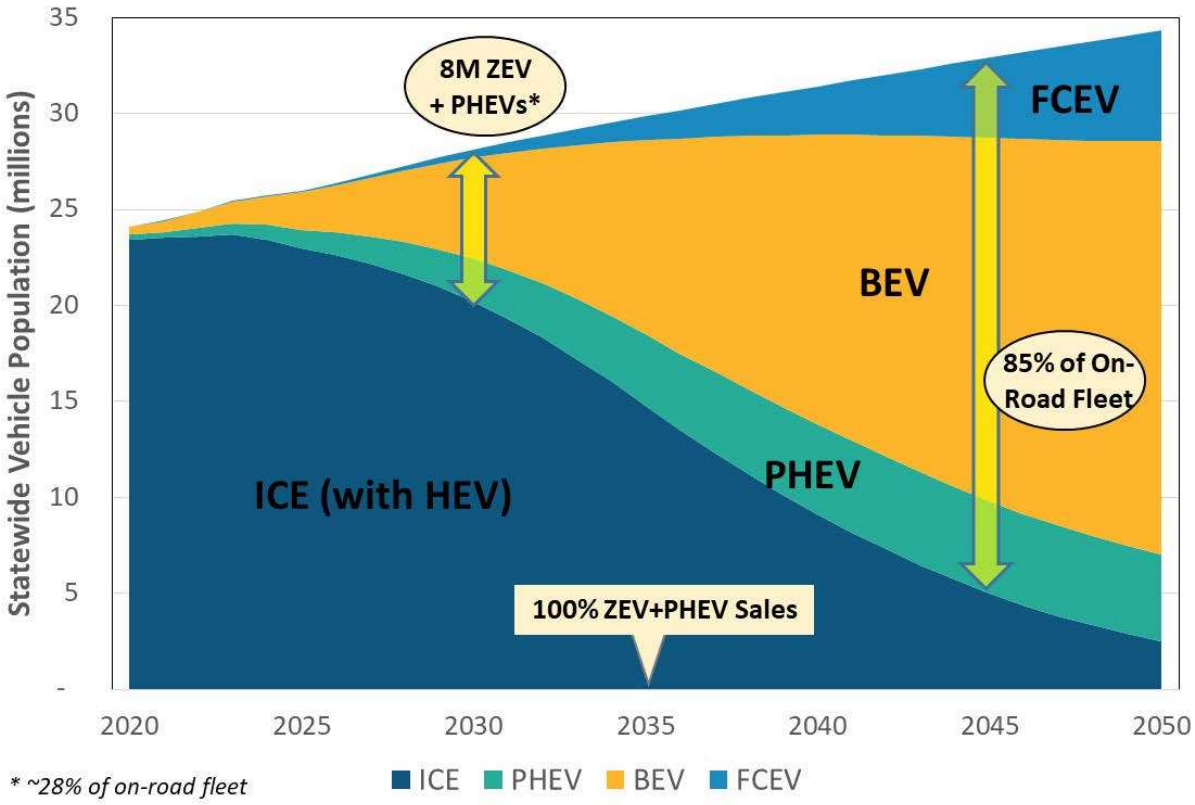
Second, new land use projects can influence transportation-related GHG emissions by reducing the amount of VMT associated with the project. Motor vehicle transportation does not need to be eliminated entirely in order for the land use sector to achieve carbon neutrality, as carbon-free vehicle technology can be used (e.g., EVs powered by carbon-free electricity sources). But for that goal to be realistically implemented by 2045, California will need to reduce its per-capita VMT. How land use development is designed and sited can have a significant influence on how much VMT the project will generate. New land use projects need to provide alternatives to motor vehicle–based transportation such that VMT per capita can be reduced to levels consistent with achieving carbon neutrality by 2045.

The design elements that new land use projects need to incorporate to address these two areas are outlined below.

EV CHARGING INFRASTRUCTURE

To implement the decarbonization of California's motor vehicle transportation, the California Air Resources Board (CARB) has adopted a comprehensive Mobile Source Strategy incorporating a suite of policies to promote the shift away from fossil fuel–powered vehicles (CARB 2021b). These policies include aggressive targets for EV penetration, including Executive Order B-16-12's goal of 1.5 million zero-emission vehicles (ZEVs) on the road by 2025 and Executive Order N-79-20's call for all new light-duty vehicles sold in California to be battery electric or plug-in hybrid by 2035. CARB's modeling projects that these efforts will result in as many as 8 million light-duty EVs in the statewide fleet by 2030 and that 85 percent of the on-road fleet will be EVs by 2045 (CARB 2021b:94–95). The results of CARB's modeling for its 2020 Mobile Source Strategy scenario are shown in Figure 2, below.

Figure 2 Statewide Light-Duty Vehicle Technology Penetration in the On-Road Fleet



Source: CARB 2021b

Notes: BEV = battery electric vehicle; FCEV = fuel cell electric vehicle; HEV = hybrid electric vehicle; ICE = internal combustion engine vehicle; PHEV = plug-in electric vehicle; ZEV = zero emission vehicle.

Implementing this widespread shift to EVs will require the installation of extensive EV charging infrastructure, and new development will need to provide its "fair share" of that infrastructure. Indeed, new development has an especially important role to play, as installing EV charging infrastructure in new buildings is far less expensive than retrofitting existing buildings. CARB has found that installing EV charging infrastructure in a new building can save an estimated $7,000–$8,000 per parking space compared with retrofitting it later (CARB 2019a:19).

The requirements for EV charging infrastructure in new land use development projects are governed by the CALGreen regulatory standards. These standards are set forth in Title 24 of the California Code of Regulations, and they are regularly updated on a 3-year cycle. The CALGreen standards consist of a set of mandatory standards that are legally required for new development, as well as two more aggressive sets of voluntary standards known as Tier 1 and Tier 2. Although the Tier 1 and Tier 2 standards are voluntary, they often form the basis of future mandatory standards adopted in subsequent updates.

The CalGreen standards have recently been updated (2022 version) and will be in effect from January 1, 2023, through December 31, 2025. The 2022 CALGreen standards seek to deploy additional EV chargers in various building types, including multifamily residential and nonresidential land uses. They include requirements for both EV capable parking spaces and the installation of Level 2 EV supply equipment for multifamily residential and nonresidential buildings. The 2022 CALGreen standards go beyond previous

iterations and include requirements for both EV readiness and the actual installation of EV chargers. As with previous iterations, the 2022 CALGreen standards include both mandatory requirements and more aggressive voluntary Tier 1 and Tier 2 provisions.

The 2022 CALGreen mandatory standards were adopted based on what will be required to serve anticipated EV charging demand through the year 2025. CARB evaluated what will be required to serve demand through 2025 as part of its role in ensuring that the CALGreen standards support California's long-range climate goals pursuant to AB 341 (Health and Safety Code Section 18930.5[b]). CARB suggested a number of necessary revisions for the 2022 iteration of the standards, including an increase in the percent of parking spaces in certain types of projects that must be EV-capable from the earlier 6 percent to the current 10 percent. These revisions were based on CARB's assessment of the level of EV infrastructure that will be required to support the Executive Order B-16-12 target of 1.5 million ZEVs on the road by 2025. CARB conducted this analysis in 2019 using the Electric Vehicle Infrastructure Projection model (EVI-Pro) developed by the National Renewable Energy Laboratory and the California Energy Commission. Using EVI-Pro, CARB projected the amount of EV charging infrastructure required by 2025 and then calculated the amount of infrastructure expected by 2025 under existing mandatory codes and standards. The results of this analysis showed a gap between what would be achieved under existing codes and standards and what will be needed as of 2025 (CARB 2019a). The revised 2022 CALGreen mandatory standards adopted for the current 2023–2025 cycle are intended to close this gap and ensure that the charging infrastructure needs of 2025 will be met.

However, providing EV charging infrastructure to meet expected demand as of 2025 will not be sufficient to support the much more extensive level of EV penetration anticipated farther into the future. As shown in Figure 2, the number of EVs on the road is projected to grow exponentially, and the demand for EV charging infrastructure will increase accordingly. If a project provides only enough infrastructure to satisfy 2025 demand, it will fall well short of what project users will need as the State progresses toward 2045. The Air District therefore recommends using the more aggressive Tier 2 CALGreen standards to evaluate whether new land use development projects will provide their "fair share" of EV charging infrastructure. This approach is also consistent with CARB's assessment that the Tier 2 standards will need to be made mandatory in CALGreen to support the exponential increase in EV adoption rates as we move past 2025 (CARB 2019a:16).

Looking toward a post-2025 horizon is also appropriate because land use development projects have a long lifetime and will be in use in future years when extensive EV penetration is projected. To be consistent with implementing California's 2045 climate goals, such projects cannot simply provide a level of infrastructure aimed at 2025 levels of EV use, as is reflected in the current CALGreen mandatory standards. A new land use development project will need to implement the more aggressive Tier 2 CALGreen standard for its impact to be less than significant in this area.

VEHICLE MILES TRAVELED

With respect to VMT, CARB studies have shown that California will not be able to achieve its long-term climate goals if we continue our current high level of VMT per capita. The State will need to significantly reduce its VMT per capita in order to attain the goal of carbon neutrality by 2045 (CARB 2021b:105–126).

New land use projects have an important role to play in doing so, as the way a project is sited and designed can significantly affect how the people who use the project will get around. For example, project siting and design can affect whether project users will be forced into making long car trips on a regular basis or whether they will be able to take advantage of alternative transportation options for their daily travel needs. New land use projects will need to be built with reduced levels of VMT per capita in order to implement their "fair share" of what it will take to eliminate GHG emissions from the transportation sector.

CARB has developed an analytical methodology for determining the level of VMT reduction that will be necessary to achieve California's long-term GHG emissions goals. This methodology calculates the total statewide VMT that California can accommodate and still hit its emissions targets and then divides that total statewide VMT by the State's projected population as of the target year. This calculation gives the amount of VMT per capita that the State can accommodate consistent with achieving the target. CARB's methodology then compares this targeted VMT-per-capita number with current VMT per capita to establish the reduction from current baseline levels necessary in order to hit the target.

CARB developed this methodology in conjunction with the VMT-per-capita threshold that the Governor's Office of Planning and Research (OPR) adopted for evaluating transportation impacts pursuant to SB 743 (see CEQA Guidelines Section 15064.3). SB 743 required lead agencies to abandon the old "level of service" metric for evaluating a project's transportation impacts, which was based solely on the amount of delay experienced by motor vehicles. This metric was criticized for prioritizing motor vehicle transportation and disincentivizing alternative modes, such as public transit, walking, and biking. SB 743 tasked OPR with developing an alternative metric to assess transportation impacts, and it directed OPR to base its alternative metric on factors such as reducing GHG emissions and developing multimodal transportation networks (CEQA Section 21099[b][1]). OPR concluded that the VMT-per-capita metric was the most appropriate for this purpose, and it published new Guidelines Section 15064.3 in November 2017.

CARB applied its methodology in support of OPR's VMT-per-capita metric to determine the appropriate level of VMT reduction that would allow the State to attain its long-term emissions goals, looking initially to the 2050 long-term target of an 80-percent reduction in GHG emissions compared to 1990 levels (CARB 2019b). CARB found that total statewide VMT would need to be limited to 1,035 million miles driven per day in order to achieve that target, consisting of 908 million light-duty-vehicle miles and 127 million heavy-duty-vehicle miles. With the State's population projected to grow to 49 million people by 2050, this works out to a per-capita VMT of 18.51 miles per day for light-duty vehicles and 21.09 miles per day for all vehicle types combined.[6] Given current baseline per-capita VMT levels of 22.24 miles per day for light-duty vehicles and 24.61 miles per day for all vehicle types, the reductions needed to achieve the 2050 goal are 16.8 percent for light-duty vehicles and 14.3 percent for all vehicle types combined. CARB's calculations are summarized in Table 1.

[6] Statewide population projections are provided by the California Department of Finance, and VMT projections are provided by CARB's scenario planning tool, Vision (CARB 2019b:5).

Table 1 Per-Capita VMT Reductions Necessary to Attain 2050 GHG Reduction Target

	Light-Duty Vehicles	All Vehicle Types
Baseline VMT/capita	22.24 miles per day	24.61 miles per day
2050 VMT/capita	18.5 miles per day	21.09 miles per day
Reduction needed	**16.8%**	**14.3%**

Based on this analysis (as well as other factors), OPR recommended using a 15-percent reduction in per-capita VMT as an appropriate threshold of significance for evaluating transportation impacts, as this level of VMT addresses transportation and corresponds to what would be needed to attain the State's 2050 climate target (OPR 2018).[7]

CARB is currently updating this analysis for the 2045 carbon neutrality target in connection with its 2022 Scoping Plan Update. Although that work is ongoing and CARB has not finalized its revised analysis, CARB has suggested that it will use the same 15-percent-per-capita VMT reduction threshold that it derived in connection with the 2050 target. Specifically, in October 2021, CARB updated its Mobile Source Strategy, an important constituent of the Scoping Plan, using the same 15-percent reduction target as used in previous plans (CARB 2021b:105). The Air District therefore recommends that lead agencies use OPR's 15-percent per-capita VMT reduction threshold for evaluating land use projects (OPR 2018). Alternatively, to the extent CARB determines that a different threshold would be more appropriate for purposes of the 2045 carbon neutrality target in connection with its work on the 2022 Scoping Plan Update, lead agencies should use that 2045-specific threshold instead. If a land use project is designed and built so that its associated VMT per capita is reduced to the extent determined to be necessary by CARB, then it will implement its "fair share" of the VMT reductions needed to attain the State's long-term climate goals and can be found to have a less-than-significant climate impact.

Finally, it is worth noting that some local jurisdictions may have developed their own VMT-per-capita thresholds for use in CEQA transportation analyses pursuant to SB 743. If such a jurisdiction-specific VMT-per-capita threshold is available and applicable, the Air District recommends that lead agencies use it in their climate impact analyses, provided that it was established based on what it will take to achieve California's long-term climate goals in a manner akin to the analysis outlined above. If an SB 743 transportation threshold is not established at a level commensurate with achieving those climate goals, then it would not be appropriate to use it to evaluate climate impacts. But if it is based on the level of VMT necessary for the local jurisdiction to attain climate neutrality by 2045, then a lead agency can use it to evaluate whether a project is doing its "fair share" with respect to ensuring that VMT is reduced sufficient to achieve the State's climate goals.

OPR has provided guidance to local jurisdictions on choosing appropriate local VMT reduction thresholds in its Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). The advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. It specifies recommended thresholds of significance for residential, office, and retail projects,

[7] The 15-percent reduction is compared to existing VMT per capita measured as either regional VMT per capita or city VMT per capita (OPR 2018:15).

which are reflected in the "Thresholds for Land Use Projects" section on page 10 of this document. These types of projects reflect the vast majority of land use projects implemented in the Bay Area. For other types of projects, lead agencies should follow the guidance provided in the OPR advisory. OPR may update or supplement this advisory in the future in response to new information and advancements in modeling and methods, so lead agencies should continue to track the development of the advisory and always use the most recent version.

5 THRESHOLDS FOR GENERAL PLANS AND SIMILAR LONG-TERM COMMUNITY-WIDE PLANNING DOCUMENTS

Local governments are essential partners in achieving California's goal to reduce GHG emissions. Local governments not only approve specific land use development projects but have primary authority to plan for and zone how and where land is developed within their jurisdiction to accommodate population growth and the changing needs of their communities. CEQA also applies to these planning decisions, and local governments are required to evaluate the climate impacts when adopting such plans.

Thresholds for Plans (Must Include A or B)
A. Meet the State's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or
B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

5.1 REDUCING GHG EMISSIONS TO MEET GHG REDUCTION TARGETS

For long-term communitywide planning documents (e.g., general plans, long-range development plans, climate action plans) to have a less-than-significant climate impact, they must demonstrate that GHG emissions from the jurisdiction will decline consistent with California's GHG reduction targets of 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. A city or county that plans to develop in a manner that will cause emissions to exceed these targets will hinder the State's ability to achieve its climate goals and thus will have a significant climate impact. Conversely, a city or county that will develop in a way that will meet those targets will support the State's ability to achieve its climate goals and thus will have a less-than-significant impact on GHG emissions. Therefore, a communitywide long-term plan must demonstrate that the community will have GHG emissions 40 percent below its 1990 levels by 2030 and support the State's goal of carbon neutrality by 2045.

5.2 CLIMATE ACTION PLANS

The Air District encourages local jurisdictions to develop climate action plans as a means of demonstrating that their communities—including existing and new buildings and infrastructure—will develop in accordance with meeting the statewide GHG reduction targets. A robust climate action plan identifies a land use design, a transportation network, goals, policies, and implementation measures that will achieve

the required GHG emissions targets of 40 percent below 1990 levels by 2030 and support the State's goal of achieving carbon neutrality by 2045. If a jurisdiction adopts such a climate action plan, it can then use that plan when it adopts its general plan updates and similar long-range planning documents to provide the basis for demonstrating that the jurisdiction's GHG emissions will decline consistent with the State's 2030 and 2045 targets. This demonstration will allow the jurisdiction to make the required CEQA determination that its general plan and similar planning documents will not have a significant climate impact, as discussed in Section 5.1, above.

Furthermore, a robust climate action plan developed and adopted in accordance with the requirements for a "plan for the reduction of greenhouse gas emissions" set forth in CEQA Guidelines Section 15183.5 will provide additional benefits related to approving specific development projects. Guidelines Section 15183.5(b)(2) provides that if a jurisdiction has adopted a climate action plan that satisfies all of the Section 15183.5 requirements, the jurisdiction can find that a project that is consistent with the plan will not make a cumulatively considerable contribution to global climate change under CEQA. Adopting a climate action plan with requirements and implementation measures governing specific types of projects—and what those projects must do to ensure that the jurisdiction's GHG emissions achieve the required targets—can provide a great deal of certainty for project applicants and agency decision makers. A proposed project that complies with all the specified requirements and implementation measures will not be found to be significant under Guidelines Section 15183.5(b)(2). Local jurisdictions also will be able to tailor the applicable requirements and mitigation measures to their specific communities rather than rely on the Air District's general thresholds for evaluating land use projects, discussed in Section 4, above.

CEQA Guidelines Section 15183.5(b)(1) lays out the specific criteria to be included in local GHG reduction strategies that can enable CEQA streamlining benefits for future land use projects. Such plans must:

- quantify GHG emissions, both existing and projected over a specified period, resulting from activities in a defined geographic area;
- establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated in the geographic area;
- specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- be adopted in a public process following environmental review.

These requirements are somewhat vague in some cases, and the Air District cautions jurisdictions developing climate action plans to take care that their plans are comprehensive and fully satisfy the letter and the spirit of the Section 15183.5 process. Climate action plans that do not satisfy all of these required

elements will not be eligible for use in approving later projects under Guidelines Section 15183.5(b)(2), and they will not provide the substantial evidence necessary to demonstrate that the jurisdiction's general plan updates and related long-range planning documents will have a less-than-significant impact as outlined in Section 5.1.

The Air District has published guidance on how a jurisdiction can develop a climate action plan that satisfies the requirements of Guidelines Section 15183.5(b)(1), which is included as Appendix C to the CEQA Air Quality Guidelines document. Jurisdictions developing climate action plans should refer to and follow that guidance to strengthen their plan's ability to comply with all Section 15183.5(b)(1) requirements and allow it to be used to evaluate climate impacts under Section 15183.5(b)(2).

The Air District strongly encourages jurisdictions to adopt local GHG reduction strategies—either as a stand-alone climate action or sustainability plans or as a part of the general plan—that meet the Section 15183.5(b)(1) criteria. Adopting a robust GHG reduction strategy that satisfies these requirements can bring many benefits to the community:

- It will identify measures that the city or county will need to take to ensure that its GHG emissions will be consistent with the statewide climate protection targets, that the jurisdiction can then use to make the consistency determination for its general plan updates.
- The city or county will be able to use the Section 15183.5(b)(1)–compliant GHG reduction strategy to approve specific land use development projects that are consistent with the strategy. This will provide a method for analyzing projects under CEQA that is tailored to the specific needs and policy goals of the individual jurisdiction, and it will allow the city or county to use that tailored methodology instead of the more general thresholds approach developed by the Air District for use regionwide.
- Cities and counties can develop Section 15183.5(b)(1) GHG reduction strategies immediately, without waiting for their next general plan update cycle.

This approach to local climate planning, tied to the SB 32 and carbon neutrality goals, promotes reductions on a plan level without impeding the implementation of GHG-efficient development, and recognizes the initiative of many Bay Area communities that have already developed or are developing a GHG reduction plan. A qualified climate action plan will provide the evidentiary basis for making CEQA findings that development consistent with the plan will result in feasible, measurable, and verifiable GHG reductions consistent with broad State goals such that projects approved under the plan will achieve their "fair share" of GHG emission reductions.

6 REFERENCES

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2021 (March). *Bay Area Electric Vehicle Acceleration Plan*. Available: https://www.baaqmd.gov/~/media/files/strategic-incentives/ev-acceleration/ev-acceleration-plan_3_2021-pdf.pdf?la=en. Accessed January 3, 2022.

BSC. *See* California Building Standards Commission.

California Air Resources Board. 2019a (November 15). EV Charging Infrastructure: Nonresidential Building Standards 2019/2020 Intervening Code Cycle: CARB Staff Technical and Cost Analysis.

———. 2019b (January). *2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*.

———. 2021a. Proposed PATHWAYS Scenario Modeling Assumptions. Presented at 2022 Scoping Plan Update – Scenario Inputs Technical Workshop, September 30, 2021. Available: https://ww2.arb.ca.gov/sites/default/files/2021-09/Draft_2022SP_ScenarioAssumptions_30Sept.pdf. Accessed December 3, 2021.

———. 2021b (October 28). *2020 Mobile Source Strategy*. Available: https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf. Accessed January 3, 2022.

———. 2021c (April 1). Attachment A: CARB Submission for EV Charging Infrastructure Provisions for Nonresidential Buildings in the California Green Building Standards (CALGreen) Code.

California Building Standards Commission. 2020. 2022 CALGreen Workshop Agenda Item 3A & 3B. Workshop held on December 9, 2020.

California Department of Housing and Community Development. 2021 (March). 45-Day Initial Statement of Reasons for Proposed Building Standards of the California Department of Housing and Community Development Regarding the 2022 California Green Building Standards Code California Code of Regulations, Title 24, Part 11.

California Energy Commission. 2021a (August). *Final Commission Report: California Building Decarbonization Assessment*. Publication Number CEC-400-2021-006-CMF.

———. 2021b. California Energy Commission Zero Emission Vehicle and Charger Statistics. Data last updated October 1, 2021. Available: http://www.energy.ca.gov/zevstats. Accessed December 30, 2021.

———. 2021c (July). Assembly Bill 2127 Electric Vehicle Charging Infrastructure Assessment: Analyzing Charging Needs to Support Zero-Emission Vehicles in 2030 – Commission Report. Publication Number CEC-600-2021-001-CMR.

CARB. *See* California Air Resources Board.

CEC. *See* California Energy Commission.

E3. *See* Energy and Environmental Economics.

Energy and Environmental Economics. 2019 (April). Residential Building Electrification in California. Available: www.ethree.com/wp-content/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf.

Governor's Office of Planning and Research. 2018 (December). *Technical Advisory on Evaluating Transportation Impacts in CEQA*.

HCD. *See* California Department of Housing and Community Development.

Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5°C*. Available: https://www.ipcc.ch/sr15/.

IPCC. *See* Intergovernmental Panel on Climate Change.

Lerman, Sam. Air resources engineer. Sustainable Transportation and Communities Division, California Air Resources Board. August 25, 2021—email to Hannah Kornfeld of Ascent Environmental regarding multifamily development electric vehicle infrastructure under the Tiers 1 and 2 of the 2022 CALGreen Standards.

OPR. *See* Governor's Office of Planning and Research.