



BOARD OF DIRECTORS
MOBILE SOURCE AND CLIMATE IMPACTS COMMITTEE

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMMITTEE MEMBERS

TERESA BARRETT – CHAIR
MARGARET ABE-KOGA
PAULINE RUSSO CUTTER
LYNDA HOPKINS
MYRNA MELGAR
LORI WILSON

DAVE HUDSON – VICE CHAIR
DAVID CANEPA
JOHN GIOIA
DAVINA HURT
KAREN MITCHOFF

**THIS MEETING WILL BE CONDUCTED UNDER PROCEDURES AUTHORIZED BY
ASSEMBLY BILL 361**

- **THE PUBLIC MAY OBSERVE THIS MEETING THROUGH THE WEBCAST BY
CLICKING THE LINK AVAILABLE ON THE AIR DISTRICT’S AGENDA WEBPAGE
AT**

www.baaqmd.gov/bodagendas

- **THE PUBLIC MAY PARTICIPATE REMOTELY VIA ZOOM AT THE
FOLLOWING LINK OR BY PHONE**

<https://bayareametro.zoom.us/j/88019039905>

(669) 900-6833 or (408) 638-0968

WEBINAR ID: 880 1903 9905

- **THOSE PARTICIPATING BY PHONE WHO WOULD LIKE TO MAKE A
COMMENT CAN USE THE “RAISE HAND” FEATURE BY DIALING “*9”. IN
ORDER TO RECEIVE THE FULL ZOOM EXPERIENCE, PLEASE MAKE SURE
YOUR APPLICATION IS UP TO DATE**

MOBILE SOURCE AND CLIMATE IMPACTS COMMITTEE MEETING AGENDA

THURSDAY, MARCH 24, 2022

9:30 AM

1. **Call to Order - Roll Call**
2. **Pledge of Allegiance**
3. **Public Meeting Procedure**

The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members.

This meeting will be webcast. To see the webcast, please visit www.baaqmd.gov/bodagendas at the time of the meeting. Closed captioning may contain errors and omissions and are not certified for their content or form.

***Public Comment on Agenda Items:** The public may comment on each item on the agenda as the item is taken up. Members of the public who wish to speak on matters on the agenda for the meeting, will have two minutes each to address the Committee. No speaker who has already spoken on that item will be entitled to speak to that item again.*

CONSENT CALENDAR (Item 4)

4. Approval of the Minutes of December 6, 2021

The Committee will consider approving the draft minutes of the Mobile Source and Climate Impacts Committee meeting of December 6, 2021.

PRESENTATIONS (Items 5-9)

5. Projects and Contracts with Proposed Grant Awards Over \$100,000

This is an action item for the Committee to consider recommending the Board of Directors approve the award of State and Local grant funding projects with proposed awards in excess of \$100,000; and consider authorizing the Executive Officer/APCO to execute grant agreements for the recommended projects. This will be presented by Alona Davis, Program Manager in Strategic Incentives Division.

6. Transportation Fund for Clean Air Funding Allocation Fiscal Year Ending 2023

This is an action item for the Committee to consider recommending the Board of Directors approve the allocation of funds and cost effectiveness thresholds for Air District-sponsored project categories that are proposed for the award of funding from the Transportation Fund for Clean Air (TFCA) in Fiscal Year Ending (FYE) 2023. This will be presented by Minda Berbeco, Manager in Strategic Incentives Division.

7. 2021 Report of the Air District's Voluntary Emissions Reduction Grant Programs

This is an action item for the Committee to consider recommending the Board of Directors authorize an increase in the Executive Officer/APCO's signature authority up to \$500,000 for the execution of individual grant agreements and amendments for voluntary emissions reduction projects that are funded by state revenues and local vehicle registration fees. This will be presented by Chengfeng Wang, Air Quality Program Manager and Karen Schkolnick, Director of Strategic Incentives Division.

8. Proposed Update to California Environmental Quality Act (CEQA) Thresholds of Significance for Climate Impacts and Associated Justification Report

This is an action item for the Committee to consider recommending the Board of Directors adopt the proposed CEQA thresholds of significance for climate impacts and associated Justification Report, and will be presented by Henry Hilken, Director of Planning and Climate Protection.

9. Proposed 2022 Mobile Source and Climate Impacts Committee Meeting Work Plan

This is an informational item only and will be presented by Damian Breen, Senior Deputy Executive Officer of Operations.

OTHER BUSINESS

10. Public Comment on Non-Agenda Matters

Pursuant to Government Code Section 54954.3

Members of the public who wish to speak on matters not on the agenda for the meeting, will have two minutes each to address the Committee.

11. Committee Member Comments

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2)

12. Time and Place of Next Meeting

Thursday, April 28, 2022, at 9:30 a.m., in person or via webcast, teleconference, or Zoom, pursuant to procedures in accordance with Assembly Bill 361 (Rivas 2021).

13. Adjournment

The Committee meeting shall be adjourned by the Chair.

CONTACT:

MANAGER, EXECUTIVE OPERATIONS
375 BEALE STREET, SAN FRANCISCO, CA 94105
vjohnson@baaqmd.gov

(415) 749-4941
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the Air District's offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District's policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District's Non-Discrimination Coordinator, Suma Peesapati, at (415) 749-4967 or by email at speesapati@baaqmd.gov.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

375 BEALE STREET, SAN FRANCISCO, CA 94105

FOR QUESTIONS PLEASE CALL (415) 749-4941

EXECUTIVE OFFICE:

MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

MARCH 2022

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Stationary Source and Climate Impacts Committee	Monday	21	9:00 a.m.	Webcast only pursuant to Assembly Bill 361
Path to Clean Air Community Emissions Reduction Plan Steering Committee	Monday	21	5:30 p.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Budget and Finance Committee	Wednesday	23	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Mobile Source and Climate Impacts Committee	Thursday	24	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Community Advisory Council Committee	Wednesday	30	6:00 p.m.	Webcast only pursuant to Assembly Bill 361

APRIL 2022

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Meeting	Wednesday	6	9:00 a.m.	1 st Floor, Board Room (In person option available) <u>and REMOTE</u> pursuant to Assembly Bill 361
Board of Directors Community Equity, Health and Justice Committee	Thursday	7	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Legislative Committee	Monday	11	1:00 p.m.	Webcast only pursuant to Assembly Bill 361
Advisory Council Meeting	Monday	11	8:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Stationary Source and Climate Impacts Committee	Monday	18	9:00 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Meeting	Wednesday	20	9:00 a.m.	1 st Floor, Board Room (In person option available) <u>and REMOTE</u> pursuant to Assembly Bill 361
Board of Directors Administration Committee	Wednesday	20	11:00 a.m.	Webcast only pursuant to Assembly Bill 361

APRIL 2022

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	ROOM
Path to Clean Air Community Emissions Reduction Plan Steering Committee	Monday	25	5:30 p.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Budget and Finance Committee	Wednesday	27	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Mobile Source and Climate Impacts Committee	Thursday	28	9:30 a.m.	Webcast only pursuant to Assembly Bill 361

HL 3/17/2022 – 4:50 P.M.

G/Board/Executive Office/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: Approval of the Minutes of December 6, 2021

RECOMMENDED ACTION

Approve the attached draft minutes of the Mobile Source and Climate Impacts Committee meeting of December 6, 2021.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the draft minutes of the Mobile Source and Climate Impacts Committee meeting of December 6, 2021.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENTS:

1. Draft Minutes of the Mobile Source and Climate Impacts Committee meeting of December 6, 2021

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
(415) 749-5073

DRAFT MINUTES

Mobile Source and Climate Impacts Committee Meeting
Monday, December 6, 2021

This meeting was conducted under procedures in accordance with Assembly Bill 361. Members of the Committee participated by teleconference.

1. CALL TO ORDER – ROLL CALL

Mobile Source and Climate Impacts Committee (Committee) Vice Chairperson Rob Rennie called the meeting to order at 1:03 p.m.

Present: Co-Chairperson Katie Rice; Vice Chairperson Rob Rennie; and Directors Margaret Abe-Koga, Pauline Russo Cutter, John Gioia, Lynda Hopkins, David Hudson, Davina Hurt, Karen Mitchoff, and Lori Wilson.

Absent: Co-Chairperson David Canepa.

2. APPROVAL OF THE MINUTES OF OCTOBER 28, 2021

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Hurt made a motion, seconded by Director Wilson, to **approve** the Minutes of the Meeting of October 28, 2021; and the motion carried by the following vote of the Committee:

AYES: Abe-Koga, Cutter, Gioia, Hopkins, Hudson, Hurt, Mitchoff, Rennie, Rice, Wilson.
NOES: None.
ABSTAIN: None.
ABSENT: Canepa.

3. PROJECTS AND CONTRACTS WITH PROPOSED GRANT AWARDS OVER \$100,000

Karen Schkolnick, Director of Strategic Incentives, introduced Alona Davis, Strategic Incentives Manager, who gave the staff presentation *Projects and Contracts with Proposed Awards over \$100,000* including: outcome; outline; requested action; Carl Moyer Program (CMP)/Mobile Source Incentive Fund (MSIF), Community Air Protection Program (CAPP), and Funding Agricultural Replacement Measures for Emission Reductions (FARMER); Transportation Fund for Clean Air (TFCA), incentive funding awarded and recommended since July 2021 by revenue source, project category, and county; and action requested.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed whether applicants are awarded grants on a first come, first serve basis, and whether there is priority for disadvantaged communities.

Committee Action

Director Hudson made a motion, seconded by Director Abe-Koga, to recommend that the Board **approve** recommended projects with proposed grant awards over \$100,000 and **authorize** the Executive Officer/Air Pollution Control Officer (APCO) to enter into all necessary agreements with applicants for the recommended projects; and the motion carried by the following vote of the Committee:

AYES: Abe-Koga, Cutter, Gioia, Hopkins, Hudson, Hurt, Mitchoff, Rennie, Rice, Wilson.
NOES: None.
ABSTAIN: None.
ABSENT: Canepa.

4. REPORT ON TRANSPORTATION FUND FOR CLEAN AIR PROJECTS EXPENDITURES AND EFFECTIVENESS FOR FISCAL YEAR ENDING (FYE) 2021

Minda Berbeco, Strategic Incentives Division Manager, gave the staff presentation *Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for FYE 2021*, including: outcome; outline; requested action; background on TFCA; summary of project and program results (FYE 2021 TFCA expenditures by category, effectiveness and emissions reductions, cost-effectiveness and key report findings); and next steps.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the comparison of the cost-effectiveness of the TFCA program, and the request for a graph that shows year-to-year cost-effectiveness for TFCA and CMP.

Committee Action

None; receive and file.

5. TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND PROJECTS - AUDIT #22 RESULTS

Ken Mak, Supervising Staff Specialist gave the staff presentation *TFCA Program Regional Fund Projects Audit #22 Results*, including: outcome; outline; requested action; background on TFCA; Audit #22 scope and results; and next steps. Mr. Mak also acknowledged the presence of Joseph Moussa of the auditor, Simpson and Simpson.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the need to refine contractual requirements and to improve communications with project sponsors regarding contractual requirements and the audit process.

Committee Action

None; receive and file.

6. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Jan Warren, Interfaith Climate Action Network of Contra Costa County.

7. COMMITTEE MEMBER COMMENTS

None.

8. TIME AND PLACE OF NEXT MEETING

Thursday, March 24, 2022, at 9:30 a.m., via webcast, pursuant to procedures in accordance with Assembly Bill 261.

9. ADJOURNMENT

The meeting adjourned at 1:40 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: Projects and Contracts with Proposed Grant Awards Over \$100,000

RECOMMENDED ACTION

Recommend Board of Directors:

1. Approve recommended projects with proposed grant awards over \$100,000 as shown in Attachment 1; and
2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

BACKGROUND

The Bay Area Air Quality Management District (Air District) has participated in the Carl Moyer Program (CMP), in cooperation with the California Air Resources Board (CARB), since the program began in fiscal year 1998-1999. The CMP provides grants to public and private entities to reduce emissions of nitrogen oxides (NOx), reactive organic gases (ROG), and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road industrial, construction, and agricultural equipment, marine vessels, locomotives, and stationary agricultural pump engines. Since 2018, this funding may also be awarded to offset a portion of the cost of installing new refueling or recharging infrastructure that supports the deployment of new zero-emissions vehicles and equipment.

Assembly Bill (AB) 923 (Firebaugh), enacted in 2004 (codified as Health and Safety Code (HSC) Section 44225), authorized local air districts to increase motor vehicle registration surcharges by up to \$2 additional per vehicle and use the revenue to fund projects eligible under the CMP guidelines. AB 923 revenue is deposited in the Air District's Mobile Source Incentive Fund (MSIF).

On January 20, 2021, the Board of Directors (Board) authorized the Air District's participation in Year 23 of the CMP, including an allocation of MSIF revenue as match funds. Per AB 1390, at least 50% of CMP funds must be allocated to projects that benefit communities with the most significant exposure to air contaminants or localized air contaminants.

In 2017, AB 617 directed the CARB, in conjunction with local air districts to establish a new community-focused action framework to improve air quality and reduce exposure to criteria air pollutants and toxic air contaminants in communities most impacted by air pollution. The AB 617 initiative calls for strategies to address air quality issues in impacted communities, including community-level monitoring, uniform emission reporting across the State, stronger regulation of pollution sources, and incentives for reducing air pollution and public health impacts from mobile and stationary sources.

Beginning in fiscal year ending (FYE) 2018, the California Legislature approved funding from the State's Greenhouse Gas Reduction Fund (GGRF), which is used to reduce criteria pollutants, toxic air contaminants, and greenhouse gases, for the Community Air Protection Program (CAPP). CAPP funds may be used to fund projects eligible under the CMP and on-road truck replacements under the Proposition 1B Goods Movement Emission Reduction Program. Following additional approvals from CARB, CAPP funds may also potentially be used to fund stationary source and mobile source projects that have been identified and prioritized by communities with a Community Emissions Reduction Program, pursuant to HSC Section 44391.2. In May 2020, the Governor's revised budget authorized up to \$200 million for a third cycle of CAPP incentive funding. On June 17, 2020, the Board authorized the Air District to accept, obligate, and expend up to \$40 million in CAPP funds. At least 80% of CAPP funds must be allocated to projects that benefit disadvantaged communities (Senate Bill (SB)535), and low-income communities (AB 1550).

In February 2018, CARB developed the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines that outline requirements for eligible equipment, i.e., agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations. On October 21, 2019, CARB's Executive Officer approved an update to the FARMER Program Guidelines to include eligibility criteria for demonstration projects. The 2020 California State Budget appropriated \$65 million in Fiscal Year 2019-20 GGRF funds to the CARB for the continued reduction of criteria, toxic, and greenhouse gas emissions from the agricultural sector through the FARMER Program. On November 20, 2019, the Board authorized the Air District's participation in the current cycle of the FARMER program.

In 1991 the California State Legislature authorized the Air District to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District's jurisdiction. The statutory authority and requirements for the Transportation Fund for Clean Air (TFCA) are set forth in the HSC Sections 44241 and 44242. Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air program) and to a program referred to as the Regional Fund. Each year, the Board allocates funding and adopts

policies and evaluation criteria that govern the expenditure of TFCA monies. The remaining forty percent of the funds are passed through to the designated Bay Area County Program Manager who in turn award TFCA funds to eligible projects within their county.

On April 7, 2021, the Board authorized funding allocations for use of the sixty percent of the TFCA revenue in FYE 2022 and cost-effectiveness limits for Air District-sponsored FYE 2022 programs. On June 16, 2021, the Board adopted policies and evaluation criteria for the FYE 2022 Regional Fund program.

Applications for grant funding received by the Air District are reviewed and evaluated for eligibility under the respective governing policies and guidelines established by CARB, the Board, and other funding sources. At least quarterly, staff provides updates to the Mobile Source and Climate Impacts Committee on the status of incentive funding for the current fiscal year, including total funding awarded, incentive fund balance available for award, funds allocated by county and by equipment category type, and percentage of funding benefitting impacted communities and low-income residents. The reported award allocations and emissions reduction benefits to counties and impacted communities, which are based on information provided by each applicant, may not include “regional” projects, where all communities receive benefits, or projects where the location of the benefit has not yet been determined.

DISCUSSION

Carl Moyer Program and Community Air Protection Program:

For the FYE 2022, the Air District had approximately \$46.3 million available in CMP, MSIF, CAPP, and FARMER funds for eligible projects, including prior year funds. This total may change as additional revenues are awarded to the Air District. The Air District accepts project applications on a rolling basis and evaluates them on a first-come, first-served basis.

As of February 22, 2022, the Air District has awarded or evaluated 69 project applications. Of the new applications that were evaluated between February 2, 2022, and February 22, 2022, three eligible projects have proposed grant awards over \$100,000. Three off-road projects will replace twelve pieces of Tier 0, 1, or 2 diesel agricultural equipment with Tier 4 equipment. These projects will reduce over 1.4 tons of NOx, ROG, and PM per year. Staff recommends the allocation of \$591,700 for these projects from a combination of CMP, FARMER, CAPP, and MSIF revenues. Attachment 1, Table 1, provides additional information on these projects.

Attachment 2 lists all of the eligible projects that have been awarded by the Air District since July 1, 2021, including information about project equipment, award amounts, estimated emissions reductions, community benefits, and project locations. To date, approximately 81% of the funds have been awarded or allocated to low-income residents or to projects that reduce emissions in CARE, disadvantaged SB 535 communities, and/or low-income AB 1550 communities. The percentage of projects in these communities will change over time as the remaining funds are awarded later in the fiscal year and as more complete information about the location of projects and program participants becomes available.

Transportation Fund for Clean Air Program:

For the FYE 2022, the Air District had approximately \$29.4 million in TFCA monies available for eligible projects and programs consisting of new and prior-year revenues. The Air District accepts project applications for certain project categories on a rolling basis and evaluates them on a first-come, first-served basis. There were no projects evaluated between February 2, 2022, and February 22, 2022, with a proposed grant award of over \$100,000 in TFCA funds.

Attachment 3, Table 1, lists all eligible TFCA projects that have been evaluated and awarded as of July 1, 2021, including information about project equipment, award amount, estimated emissions reduction, community benefits, and project locations. To date, approximately 87% of the funds have been awarded or allocated to low-income residents or to projects that reduce emissions in CARE, disadvantaged SB 535 communities, and/or low-income AB 1550 communities. The percentage of projects in these communities will change over time as the remaining funds are awarded later in the fiscal year and as more complete information about the location of projects and program participants becomes available.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. The Air District distributes the CMP, MSIF, CAPP Program, FARMER, and TFCA funding to project sponsors on a reimbursement basis. Funding for administrative costs is provided by each funding source.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Alona Davis, Jessica DePrimo, Linda Hui, Chad White
Reviewed by: Karen Schkolnick, Chengfeng Wang

ATTACHMENTS:

1. Proposed Projects Over 100k
2. CMP Projects - FYE 2022
3. TFCA Projects - FYE 2022
4. Status of Funding and Awards by County and Category

ATTACHMENT 1

Table 1 - Carl Moyer Program, Mobile Source Incentive Fund, FARMER, Community Air Protection Program, and Transportation Fund for Clean Air projects with grant awards greater than \$100k (Evaluated between 2/2/22 and 2/22/22)

Project #	Applicant Name	Project Category	Project Description	Proposed Contract Award	Total Project Cost	Emission Reductions (tons per year)			County
						NO _x	ROG	PM	
22MOY226	Sonoma-Cutrer Vineyards, Inc.	Off-Road/Ag	Replace two Tier-2 diesel ag tractors with two Tier-4 diesel ag tractors	\$ 108,400	\$ 135,564	0.295	0.017	0.017	Sonoma
22MOY251	New Pina Vineyard Management, LLC.	Off-Road/Ag	Replace three Tier-0 and one Tier-2 diesel ag tractor with four Tier-4 diesel ag tractors; replace one tier-1 diesel ag tractor with one Tier-4 diesel ag tractor/crawler; and replace one Tier-1 diesel ag wheeled carrier with one Tier-4 diesel ag tracked carrier	\$ 290,900	\$ 381,175	0.463	0.102	0.056	Napa
22MOY277	Colinas Farming Company	Off-Road/Ag	Replace two Tier-0, one Tier-1, and one Tier-2 diesel ag tractors with four Tier-4 diesel ag tractors	\$ 192,400	\$ 240,892	0.374	0.061	0.046	Napa
3 Projects				\$ 591,700	\$ 757,631	1.132	0.181	0.119	

ATTACHMENT 2

*CMP/MSIF, FARMER and Community Air Protection Program projects
(awarded and allocated between 7/1/21 and 2/22/22)*

Project #	Project Category	Project Type	Number of Engines	Proposed Contract Award	Applicant Name	Emission Reductions (tons per year)			Board Approval Date	CARE Area	AB1550/SB535 Area	County
						NOx	ROG	PM				
22SBP71***	School Bus	Equipment replacement + Infrastructure	12	\$ 3,775,186	Petaluma City Schools	0.932	0.071	0.005	7/7/2021	No	Yes	Sonoma
22MOY138	Ag/ off-road	Equipment replacement	3	\$ 525,300	Dave Soiland	2.035	0.165	0.097	7/7/2021	No	No	Sonoma
22SBP84***	School Bus	Equipment replacement + Infrastructure	4	\$ 803,786	Rincon Valley Union School District	0.228	0.015	0.003	7/7/2021	No	Yes	Sonoma
22MOY149	Ag/ off-road	Equipment replacement	1	\$ 170,500	Renati Dairy	0.522	0.068	0.048	7/7/2021	No	No	Sonoma
22MOY127	Ag/ off-road	Equipment replacement	2	\$ 107,100	Napa Select Vineyard Services, Inc.	0.187	0.012	0.011	7/7/2021	No	No	Napa
22MOY142	Ag/ off-road	Equipment replacement	2	\$ 51,750	Cobb Creek Holdings, LLC DBA CCH Ag Services	0.205	0.034	0.021	7/7/2021	No	No	Napa
22MOY135	Marine	Engine replacement	1	\$ 154,000	William E. Smith	1.831	0.018	0.069	7/7/2021	No	No	San Mateo
22SBP105	School Bus	Equipment replacement + Infrastructure	4	\$ 1,731,969	Fremont Unified School District	0.414	0.036	0.018	7/7/2021	No	Yes	Alameda
22MOY169	Ag/ off-road	Equipment replacement	2	\$ 132,260	Kenzo Estate, Inc.	0.223	0.020	0.015	7/7/2021	No	No	Napa
22SBP40***	School Bus	Equipment replacement + Infrastructure	5	\$ 889,832	Franklin-McKinley School District	0.250	0.015	0.003	7/7/2021	Yes	Yes	Santa Clara
22MOY158	Marine	Engine replacement	1	\$ 174,000	Laurence J Collins	0.790	0.018	0.028	7/7/2021	No	No	San Francisco
2102-16395	LD Infrastructure	Charge!	--	\$ 21,000	The Millennium Tower Association	0.007	0.004	0.000	7/7/2021	Yes	No	San Francisco
2103-17230	LD Infrastructure	Charge!	--	\$ 64,000	REEF Energy CA Operations LLC	0.098	0.058	0.002	7/7/2021	Yes	Yes	San Francisco
2103-17359	LD Infrastructure	Charge!	--	\$ 48,000	The Shores at Marina Bay Community Association	0.005	0.003	0.000	7/7/2021	Yes	Yes	Contra Costa
2103-17527	LD Infrastructure	Charge!	--	\$ 24,000	EVmatch, Inc.	0.003	0.002	0.000	7/7/2021	Yes	Yes	Alameda
2103-17603	LD Infrastructure	Charge!	--	\$ 32,000	Bollinger Crest Apartment Investors, LP	0.011	0.006	0.000	7/7/2021	No	No	Alameda
2103-17638	LD Infrastructure	Charge!	--	\$ 48,000	Intertie, Incorporated	0.017	0.010	0.000	7/7/2021	Yes	Yes	San Francisco
22MOY130	On-road	Equipment replacement	1	\$ 25,000	Min Jian Huang (jianhuang)	0.841	0.070	0.000	APCO	Yes	Yes	Alameda
22MOY151	Ag/ off-road	Equipment replacement	2	\$ 86,000	Hardin Vineyard Management LLC	0.257	0.055	0.023	APCO	No	No	Napa
22MOY124	On-road	Equipment replacement	1	\$ 25,000	Kulwant Khera (kskhera)	0.773	0.065	0.000	APCO	Yes	Yes	Alameda
22MOY78	Ag/ off-road	Equipment replacement	1	\$ 31,642	Cortina Vineyard Management	0.047	0.011	0.008	APCO	Yes	Yes	Napa
22MOY131	On-road	Equipment replacement	1	\$ 25,000	Karanbir Singh (karanbirsg)	0.820	0.690	0.000	APCO	No	No	Contra Costa
22MOY166	Ag/ off-road	Equipment replacement	2	\$ 96,400	Stone Bridge Cellars Inc.	0.166	0.009	0.009	APCO	No	No	Napa
22MOY174	On-road	Equipment replacement	1	\$ 25,000	Can Yuan Chen (canchen)	1.008	0.085	0.000	APCO	Yes	Yes	Alameda

ATTACHMENT 2

*CMP/MSIF, FARMER and Community Air Protection Program projects
(awarded and allocated between 7/1/21 and 2/22/22)*

Project #	Project Category	Project Type	Number of Engines	Proposed Contract Award	Applicant Name	Emission Reductions (tons per year)			Board Approval Date	CARE Area	AB1550/SB535 Area	County
						NOx	ROG	PM				
22MOY92	Ag/ off-road	Equipment replacement	1	\$ 29,550	Paul P. Bianchi, Inc	0.025	0.023	0.007	APCO	No	No	Sonoma
22SBP52	School Bus	Equipment replacement	3	\$ 435,306	Pittsburg Unified School District	0.290	0.022	0.000	10/6/2021	Yes	Yes	Contra Costa
22MOY185	Ag/ off-road	Equipment replacement	1	\$ 67,100	Domenico J. Carinalli, Jr.	0.156	0.010	0.009	APCO	No	No	Sonoma
22MOY99	Ag/ off-road	Equipment replacement	1	\$ 41,100	Daylight Vineyard Management, Inc.	0.062	0.005	0.007	APCO	No	No	Sonoma
22MOY179	Marine	Engine replacement	1	\$ 72,000	Kyle Dryer dba Diamond Sportfishing	0.705	0.009	0.028	APCO	Yes	No	Alameda/Contra Costa/San Francisco
22MOY22	Ag/ off-road	Equipment replacement	2	\$ 57,100	Joseph Pinheiro	0.047	0.018	0.010	APCO	No	No	Sonoma
22MOY160	Marine	Engine replacement	4	\$ 3,529,000	Baydelta Navigation LTD	30.665	2.726	1.021	10/6/2021	Yes	Yes	San Francisco, Alameda, Contra Costa, Marin, Solano
21SBP98*	School Bus	Equipment replacement + Infrastructure	--	\$ 242,828	Palo Alto Unified School District	--	--	--	10/6/2021	Yes	Yes	Santa Clara
22SBP14**	School Bus	Equipment replacement + Infrastructure	--	\$ 95,327	Milpitas Unified School District	--	--	--	10/6/2021	Yes	Yes	Santa Clara
22MOY128	On-road	Equipment replacement	1	\$ 15,000	Aman Khan	0.420	0.035	0.000	APCO	Yes	Yes	Alameda
22MOY187	Ag/ off-road	Equipment replacement	1	\$ 30,100	Dierke's Enterprises	0.017	0.015	0.004	APCO	No	No	Sonoma
22MOY190	Ag/ off-road	Equipment replacement	2	\$ 91,170	Anderson's Conn Valley Winery, Inc.	0.108	0.034	0.015	APCO	No	No	Napa
22MOY170	Off-road	Equipment replacement	1	\$ 106,000	Argent Materials INC	0.814	0.041	0.021	11/17/2021	Yes	Yes	Alameda
22MOY209	Ag/ off-road	Equipment replacement	1	\$ 192,600	Global Mushrooms LLC.	0.362	0.049	0.030	11/17/2021	No	Yes	Santa Clara
22MOY167	Ag/ off-road	Equipment replacement	2	\$ 285,700	Ielmorini Moody Dairy	0.871	0.107	0.052	11/17/2021	No	Yes	Sonoma
22MOY196	Marine	Engine replacement	2	\$ 256,000	A.C. Fishing Charters Inc., dba Tigerfish Sportfishing	0.576	0.000	0.031	11/17/2021	Yes	No	Alameda/Contra Costa/Marin/San Francisco
TBD	LD Infrastructure	Charge! ⁵	--	\$ 2,000,000	BAAQMD	TBD ⁸	TBD ⁸	TBD ⁸	11/17/2021	TBD ⁹	TBD ⁸	Regional
22MOY211	Ag/ off-road	Equipment Replacement	1	\$ 88,900	Pomponio Farms LLC	0.412	0.054	0.031	APCO	No	Yes	San Mateo
22SBP216***	School Bus	Equipment replacement + Infrastructure	3	\$ 887,025	Campbell Union High School District	0.192	0.011	0.001	12/15/2021	Yes	Yes	Santa Clara County
22MOY217	Marine	Engine replacement	2	\$ 380,000	Happy Hooker Sportfishing, LLC	1.340	-0.036	0.056	12/15/2021	Yes	Yes	Alameda, San Francisco, Contra Costa
22MOY206	Ag/ off-road	Equipment Replacement	1	\$ 64,000	Wente Bros. dba. Wente Vineyards	0.214	0.035	0.026	APCO	Yes	No	Alameda
22MOY157	Ag/ off-road	Equipment replacement	3	\$ 133,400	Walsh Vineyards Management Inc.	0.657	0.105	0.067	1/19/2022	No	No	Napa
22MOY220	Ag/ off-road	Equipment replacement	3	\$ 160,300	Atlas Vineyard Management, Inc.	0.301	0.046	0.036	1/19/2022	No	No	Napa/Sonoma
22MOY208	Ag/ off-road	Equipment replacement	1	\$ 117,100	Jack Neal and Son Inc	0.210	0.028	0.019	1/19/2022	No	No	Napa

ATTACHMENT 2

*CMP/MSIF, FARMER and Community Air Protection Program projects
(awarded and allocated between 7/1/21 and 2/22/22)*

Project #	Project Category	Project Type	Number of Engines	Proposed Contract Award	Applicant Name	Emission Reductions (tons per year)			Board Approval Date	CARE Area	AB1550/SB535 Area	County
						NOx	ROG	PM				
22MOY215	Marine	Engine Replacement	2	\$ 187,000	Reel Screamer Charters LLC	0.371	0.003	0.019	1/19/2022	No	No	San Mateo, San Francisco, Marin
22MOY241	Marine	Engine replacement	2	\$ 258,000	C-Gull II Sportfishing Inc.	0.934	0.000	0.050	1/19/2022	Yes	No	Alameda, San Francisco, Contra Costa, Marin
22MOY245	Marine	Engine replacement	2	\$ 301,400	C-Gull II Sportfishing Inc.	0.550	0.002	0.029	1/19/2022	Yes	No	Alameda, San Francisco, Contra Costa, Marin
22MOY224	Marine	Engine Replacement	2	\$ 133,000	Duane Winter	0.349	0.002	0.018	1/19/2022	No	No	San Mateo, San Francisco
22MOY195	Ag/ off-road	Equipment replacement	1	\$ 59,500	Ilsey Brothers Farming, LLC	0.099	0.006	0.006	APCO	No	No	Napa
22MOY180	Ag/ off-road	Equipment replacement	1	\$ 32,400	Frog's Leap Winery	0.041	0.003	0.004	APCO	No	No	Napa
22MOY235	Ag/ off-road	Equipment replacement	1	\$ 50,300	Cornerstone Certified Vineyard	0.074	0.007	0.008	APCO	No	No	Sonoma
22MOY228	Marine	Engine replacement	1	\$ 85,300	Wooden Boats for Vetrans Foundation	0.216	0.009	0.009	APCO	Yes	No	Solano/Contra Costa/San Francisco/Marin
22MOY223	Ag/ off-road	Equipment replacement	1	\$ 24,700	Ingenious Solutions Incorporated	0.013	0.011	0.003	APCO	No	No	Napa
22MOY195	Ag/ off-road	Equipment replacement	1	\$ 54,000	Ilsey Brothers Farming, LLC	0.090	0.005	0.005	APCO	No	No	Napa
22MOY227	Ag/ off-road	Equipment replacement	2	\$ 104,400	M. German & Son Partnership	0.379	0.060	0.041	3/2/2022	No	No	Solano
22MOY258	Ag/ off-road	Equipment replacement	2	\$ 119,400	Foley Family Farms, LLC	0.376	0.049	0.033	3/2/2022	No	No	Sonoma
22MOY250	Ag/ off-road	Equipment replacement	3	\$ 447,500	George Bianchi Inc	1.361	0.139	0.080	3/2/2022	No	No	Sonoma
22MOY253	Ag/ off-road	Equipment replacement	1	\$ 60,800	Alan Willey	0.099	0.015	0.009	APCO	No	No	Solano
22MOY259	Ag/ off-road	Equipment replacement	1	\$ 70,200	Morrison Ranch	0.150	0.023	0.017	APCO	No	No	Solano
22MOY270	Ag/ off-road	Equipment replacement	2	\$ 90,400	Dirt Farmer & Company, A California Corporation	0.188	0.012	0.011	APCO	No	No	Sonoma
22SBP203***	School Bus	Equipment replacement	12	\$ 3,164,239	Oak Grove School District	1.000	0.120	0.010	3/2/2022	Yes	Yes	Santa Clara
22MOY261	Marine	Engine replacement	2	\$ 140,000	Bay Marine Services, LLC	0.594	0.003	0.022	3/2/2022	Yes	Yes	Solano, Contra Costa
22MOY277	Ag/ off-road	Engine replacement	4	\$ 192,400	Colinas Farming Company	0.374	0.061	0.046	TBD	No	No	Napa
22MOY226	Ag/ off-road	Engine replacement	2	\$ 108,400	Sonoma-Cutrer Vineyards, Inc.	0.291	0.017	0.017	TBD	No	No	Sonoma
22MOY251	Ag/ off-road	Engine replacement	6	\$ 290,900	New Pina Vineyard Management, LLC.	0.463	0.102	0.056	TBD	No	No	Napa

69 Projects 134 \$ 24,417,570 58.1 5.5 2.3

*This project award reflects an approved increase of \$242,828 in CMP/MSIF/CAPP funds to allow for DC fast-charging infrastructure to be included as part of this project. This project was previously awarded \$513,500.00 of TFCA funds and \$323,778.00 of CMP/MSIF/CAPP funds on 3/4/20.

**The project award reflects an approved increase of \$95,327 in CMP/MSIF/CAPP funds to allow for DC fast-charging infrastructure to be included as part of this project. This project was previously awarded \$204,598.00 of TFCA funds and \$622,556.00 of CMP/MSIF/CAPP funds on 4/7/21.

*** This project is co-funded with TFCA funds as shown on Attachment 3.

§ Award Amount may come from either the Mobile Source Incentive Fund (MSIF) or the Transportation Fund for Clean Air (TFCA).

* Funds have been allocated to these programs and project results will be determined at the end of project period.

ATTACHMENT 3

Table 1 - TFCA projects awarded and allocated (between 7/1/21 and 2/22/22)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (tons per year)			Board/APCO Approval Date	CARE Area	AB1550/SB535 Area	County
					NO _x	ROG	PM				
2101-15735	LD Infrastructure	Install and operate 38 DC Fast chargers at 6 transportation corridor facilities in San Francisco, South San Francisco, Millbrae, Menlo Park, and San Jose.	\$ 950,000	EVgo Services LLC	0.350	0.207	0.008	7/7/21	Yes	No	Multi-County
2103-17065	LD Infrastructure	Install and operate 5 Level 2 (high) dual port chargers at 1 transit parking facility in Napa.	\$ 20,000	Napa Valley Transportation Authority	0.014	0.008	0.000	7/7/21	No	No	Napa
2103-17315	LD Infrastructure	Install and operate 135 Level 2 (high) single port chargers and 123 DC fast chargers at 40 destination, transportation corridor, and transit parking facilities in Vallejo, San Jose, Kenwood, Fairfield, Vacaville, Mountain View, and Santa Clara.	\$ 2,999,000	EV Charging Solutions, Inc.	1.446	0.853	0.035	7/7/21	Yes	Yes	Multi-County
2103-17345	LD Infrastructure	Install and operate 2 DC Fast and 2 dual port Level 2 (high) chargers at 2 destination facilities in San Ramon.	\$ 44,000	City of San Ramon	0.024	0.014	0.001	7/7/21	Yes	No	Alameda
2103-17497	LD Infrastructure	Install and operate 17 DC Fast chargers at 1 transportation corridor facility in Oakland.	\$ 425,000	East Bay Community Energy Authority	0.157	0.093	0.004	7/7/21	Yes	Yes	Alameda
2103-17499	LD Infrastructure	Install and operate 8 Level 2 (high) dual port chargers at 1 multi-unit dwelling facility in Alameda.	\$ 64,000	Alameda Multifamily Owner LLC	0.023	0.013	0.001	7/7/21	Yes	No	Alameda
2103-17520	LD Infrastructure	Install and operate 5 Level 2 (high) dual port and 2 Level 2 (high) single port chargers at 2 destination facilities in Dublin.	\$ 26,000	City of Dublin	0.019	0.011	0.000	7/7/21	No	No	Alameda
2103-17524	LD Infrastructure	Install and operate 110 Level 2 (high) single port chargers with solar and 24 Level 2 (high) single port chargers at 3 workplace and 1 destination facilities in Solano.	\$ 406,000	County of Solano	0.309	0.182	0.007	7/7/21	Yes	Yes	Solano
2103-17554	LD Infrastructure	Install and operate 2 Level 2 (high) dual port chargers with solar at 1 workplace facility in Richmond.	\$ 12,000	West County Wastewater District	0.006	0.003	0.000	7/7/21	Yes	Yes	Contra Costa
2103-17625	LD Infrastructure	Install and operate 11 Level 2 (high) dual port chargers at 1 multi-unit dwelling facility in Brentwood.	\$ 44,000	Silvergata Brentwood, LLC	0.037	0.022	0.001	7/7/21	No	No	Contra Costa
21R05	LD Infrastructure	FYE 21 Charge! Program	\$ 10,000	BAAQMD	TBD*	TBD*	TBD*	7/7/21	TBD*	TBD*	Regional
22R02	LD Vehicles	Vehicle Buy Back Program	\$ 200,000	BAAQMD	N/A**	N/A**	N/A**	6/16/21	N/A	N/A	Regional
21RSB03	School Bus	Match funding for Project #22SBP71 for the replacement of 12 diesel school buses with 12 electric school buses	\$ 1,153,346	BAAQMD	N/A**	N/A**	N/A**	7/7/21	No	Yes	Sonoma
21RSB04	School Bus	Match funding for Project #22SBP84 for the replacement of 3 diesel school buses & 1 CNG school bus with 4 electric school buses	\$ 892,045	BAAQMD	N/A**	N/A**	N/A**	7/7/21	No	Yes	Sonoma
21RSB05	School Bus	Match funding for Project #22SBP40 for the replacement of 5 diesel special needs school buses with 5 electric special needs school buses	\$ 1,232,175	BAAQMD	N/A**	N/A**	N/A**	7/7/21	Yes	Yes	Santa Clara
22SBP203	School Bus	Match funding for the replacement of 8 diesel school buses with 8 electric school buses	\$ 1,428,844	Oak Grove School District	N/A**	N/A**	N/A**	3/2/22	Yes	Yes	Sonoma
22SBP216	School Bus	Match funding for the replacement of 3 diesel school buses with 3 electric school buses	\$ 623,591	Campbell Union High School District	N/A**	N/A**	N/A**	12/15/21	Yes	Yes	Santa Clara
21R12	Trip Reduction	Pleasanton Connector Shuttles	\$ 80,000	San Joaquin Regional Rail Commission	N/A ‡	N/A ‡	N/A ‡	6/22/21	No	No	Alameda
22R01	Trip Reduction	Enhanced Mobile Source & Commuter Benefits Enforcement	\$ 150,000	BAAQMD	TBD*	TBD*	TBD*	6/16/21	N/A	N/A	Regional
22R03	Trip Reduction	Spare The Air/Intermittent Control/Flex Your Commute Programs	\$ 2,290,000	BAAQMD	TBD*	TBD*	TBD*	6/16/21	N/A	N/A	Regional
Total	20 Projects		\$13,050,001		2.384	1.408	0.057				

* Funds have been allocated to these programs and projects and results will be determined at the end of project period.

** Emission reductions are fully reported under the Carl Moyer Program to prevent double counting.

‡ Emission reductions will be reported as part of the Spare the Air program (Project #21R03).

ATTACHMENT 4

Summary of funding awarded and allocated from the following revenue sources between 7/1/21 and 2/22/22

- Carl Moyer Program (CMP)
- Community Air Protection Program (CAPP)
- Mobile Source Incentive Fund (MSIF)
- Transportation Fund for Clean Air (TFCA)
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER)

Figure 1. Status of FYE 2022 funding by source
includes funds awarded, recommended for award, and available

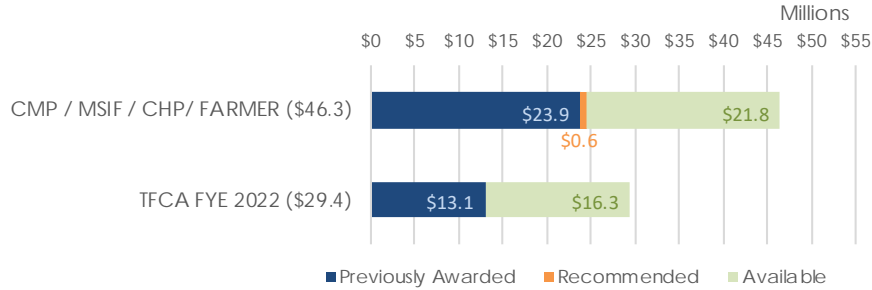


Figure 2. Funding awarded and allocated in FYE 2022 by county
includes funds awarded & recommended for award

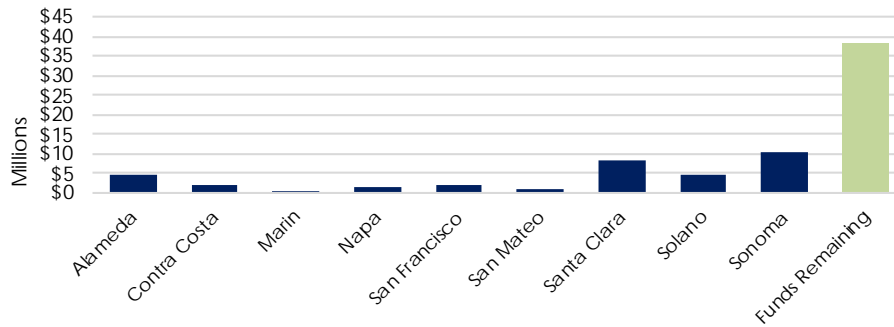
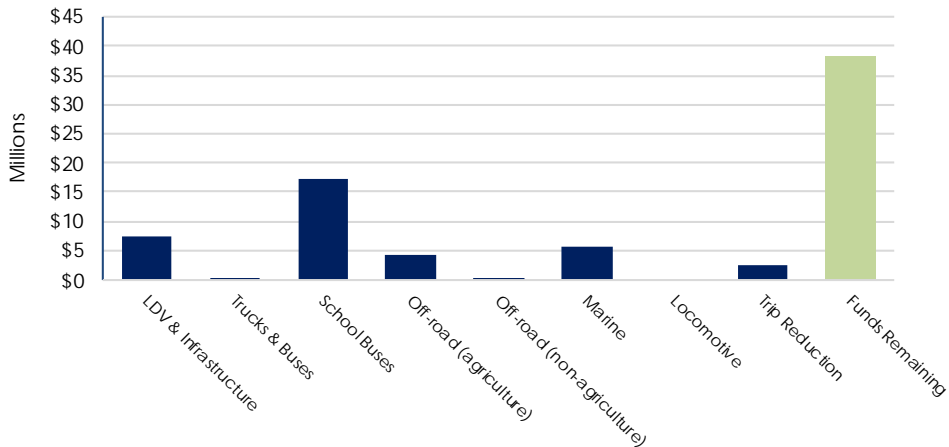


Figure 3. Funding awarded and allocated in FYE 2022 by project category
includes funds awarded & recommended for award



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: Transportation Fund for Clean Air Funding Allocation Fiscal Year Ending 2023

RECOMMENDED ACTION

Recommend Board of Directors:

1. Approve the proposed allocation of the estimated new Transportation Fund for Clean Air, or TFCA, monies to the programs and projects listed in Table 1; and
2. Authorize the proposed cost-effectiveness limits for Air District-sponsored programs and projects listed in Table 2.

BACKGROUND

The approximately six million on-road motor vehicles, including cars, trucks, and buses, in the Bay Area account for more than 40% of the criteria air pollutants and about 36% of greenhouse gases (GHG) emissions in the region^{1, 2}. These on-road motor vehicles constitute the most significant sources of air pollution in the Bay Area, including unhealthy levels of ozone (summertime "smog") and particulate matter. For this reason, emissions reductions from the on-road transportation sector are essential to attaining state and federal ambient air quality standards and meeting the region's GHG reduction commitments.

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) to impose a \$4 surcharge on motor vehicles registered in the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District's jurisdiction. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code sections 44241 and 44242. Each year, the Air District's Board of Directors (Board) allocates funding and adopts cost-effectiveness criteria that govern expenditure of the TFCA and maximize emissions reductions and public health benefits.

The authorizing legislation allows public agencies to apply for funding to undertake all of the eligible project categories authorized by statute, while non-public entities, including private

businesses, non-profits, and residents, may only be awarded funds for vehicle-based projects. Up to sixty percent of TFCA funds may be awarded by the Air District to eligible projects and programs that are implemented directly by the Air District (e.g., Spare the Air) and for distribution to other awardees through the TFCA Regional Fund. The remaining forty percent of TFCA funds are passed through to the County Program Managers based on each county's proportionate share of vehicle registration fees paid and awarded by the nine designated agencies within the Air District's jurisdiction.

This report discusses the proposed allocation of the sixty percent portion of the TFCA monies that will be available in FYE 2023 for distribution by the Air District and the proposed updates to the cost-effectiveness limits for Air District-sponsored TFCA-funded programs and projects.

¹ BAAQMD, *Bay Area Emissions Inventory Summary Report: Criteria Air Pollutants Base Year 2011, May 2014.*

² BAAQMD, *Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011, January 2015.*

DISCUSSION

In developing this recommendation, staff considered input from stakeholders along with factors such as demand for funding for certain project categories, regulatory requirements scheduled to be phased-in in the near-term for truck and bus fleets, cost-effectiveness, and the impacts from the global pandemic and supply-side shortages affecting projects that were previously awarded funds in recent cycles. Staff assessed eligible incentive program options to identify the most effective strategies at reducing emissions from the on-road sector to help achieve the air quality and climate protection goals outlined in both the Air District's 2017 Clean Air Plan and Diesel Free by '33 initiative.

For FYE 2023, approximately \$12.92 million in new TFCA monies will be available for distribution for programs and projects; approximately \$1.68 million will be available to cover Air District administrative and audit expenses. Staff is recommending that the \$12.92 million in new TFCA monies be allocated to the program categories listed below in Table 1.

Table 1 - Proposed Programs and TFCA Funding Allocation for FYE 2023 (in Millions)

Program Categories	(A)	(B)	(C)
	Estimated New TFCA Monies	Estimated Carryover	Estimated Total Funds Available in FYE 2023**
Clean Air Vehicles	\$6.00	\$14.00	\$20.00
Trip Reduction	\$4.28	\$2.00	\$6.28
Other Air District Sponsored Programs	\$2.64	\$0.00	\$2.64
Total Funding Available for Projects and Programs:	\$12.92	\$16.00	\$28.92
Admin & Audit*	\$1.68	\$0.00	\$1.68
Total Funding	\$14.60	\$16.00	\$30.60
* HSC Section 44233 authorized up to 6.25% of projected revenues can be used for administrative costs.			
**In the event a program category is undersubscribed, the Executive Officer/APCO may reallocate up to 20% of each program category's allocation to other categories based on demand, cost-effectiveness, and technology availability.			

The estimate for new revenue shown in column A is based on the amount of DMV revenue received in 2021. Column B shows approximately \$16 million in carryover funds available to augment the new monies. Carryover funds include unobligated TFCA funds from prior years as well as projects recently completed under budget or canceled.

The following narrative provides additional information on the proposed programs and projects listed in Table 1.

Clean Air Vehicles

Accelerating the adoption of zero-emission vehicles is a key strategy in reducing on-road motor vehicle emissions, improving air quality, protecting the climate, and reducing reliance on fossil fuels. Electrification of all sectors of transportation, including light-duty passenger cars and heavy-duty trucks and buses, is essential in helping the region achieve local, state, and federal criteria pollutants and GHG emissions reduction targets. Air District staff identified a key pathway to achieve the goals of Diesel Free by '33 by encouraging a phased-in replacement of diesel-fueled vehicles and equipment, including on-road vehicles with zero-emission technologies, which is advancing rapidly. Air District staff will continue to update the assessments of zero-emission options that become commercially available and ensure the availability of funding to help incentivize adoption of newly commercialized vehicles as they come on-line.

The TFCA-funded incentive programs are augmented by other Air District efforts and funds from other sources to accelerate the adoption of zero-emission vehicles and equipment. These efforts include outreach activities and forums that promote new technologies, share best practices, and encouraging local agencies to adopt supporting policies and local ordinances. The Air District's efforts, in combination with other initiatives, have contributed to the Bay Area's high adoption rate of light-duty electric vehicles (EV)s and deployment of zero-emission medium- and heavy-duty trucks and buses in the region.

TFCA funds for clean air vehicle projects may be awarded to both public agencies and non-

public entities. For FYE 2023, staff is recommending TFCA funds be allocated to support the following project categories to accelerate the region's transition to zero-emission vehicles.

- ***EV Charging Stations:*** To support adoption of passenger EVs by helping to expand access to EV chargers. In FYE 2023, the District's programs will continue to prioritize installation of EV charging stations in multi-family dwellings and impacted communities.
- ***Zero-emissions Light-Duty Fleets:*** To accelerate the adoption of light-duty zero-emission vehicles, and the installation of supporting refueling infrastructure. In FYE 2023, the District's programs will continue to prioritize high mileage public and private fleets and the installation of stations that provide publicly available charging.
- ***Zero-emission Medium- and Heavy- Duty Vehicles and Infrastructure:*** To accelerate the adoption of zero-emission trucks and buses for private and public fleets, including school districts, and the installation of supporting refueling infrastructure.
- ***Clean Cars for All:*** To augment funding from other sources to provide incentives to qualifying low-income residents to purchase new and used light-duty EVs or to transition to clean mobility options. CCFA is currently funded through the state's California Climate Investments (CCI) initiative, Volkswagen Mitigation settlement fund, and TFCA.

Trip Reduction

Reducing single-occupancy motor vehicle trips is another strategy in reducing mobile source emissions. For nearly 30 years, TFCA revenues have been used to fund services, such as last-mile connection services, to help residents and commuters mode-shift to mass transit, as well as construction of new facilities and infrastructure, to support active transportation, e.g., biking and walking as alternatives to driving for short first -and last- mile trips. The authorizing legislation requires that sponsors of trip reduction projects be public agencies.

Trip reduction projects have many co-benefits such as supporting health, safety, equity, and climate protection, however the air quality benefits of these types of projects have been steadily decreasing over time as state and federal regulations have effectively reduced the criteria pollutants emitted from light-duty passenger cars. This erosion of air quality benefits is even more pronounced in projects that replace single-passenger car trips with larger vehicles, such as last-mile commuter-connection feeder buses and shuttles, as the region's fleet of passenger vehicles has become significantly cleaner at a faster rate than the medium -and heavy- duty vehicles typically used to provide transit-connection services. Meanwhile Covid-19 has resulted in fewer people taking transit, further decreasing the effectiveness of services that work in conjunction with trips taken on mass transit.

Air District staff has been working to address these challenges, including examining the methodology used for evaluating a project's cost effectiveness and meeting with transit providers and project sponsors to understand the steps they are taking and timeline for encouraging commuters to return to transit. During this next year, staff will evaluate these projects collectively rather than individually and capture this information as part of the

evaluation of the Spare the Air program.

For FYE 2023, staff is recommending TFCA funds be allocated to support the following trip reduction project categories:

- ***Bicycle Facilities:*** To support the installation of new bikeways and secure bicycle parking to encourage and enable increased use of active modes of transportation such as walking, biking, and mode shift away from the use of motor vehicles for short first- and last-mile connections to mass transit.
- ***Infrastructure Improvements:*** To expand access and use of alternative transportation modes via design and construction of physical improvements of infrastructure such as ferry or bus terminals.
- ***Last-Mile Commuter Connections:*** To support the return of passengers to last-mile commute-connections, carpooling and rideshare services. The emission reduction benefits of these services will be evaluated as part of the Spare the Air program.

Other Air District-Sponsored Programs:

For FYE 2023, staff is recommending that TFCA funds also be used to reduce motor vehicle trips and increase the adoption of clean air vehicles via Air District-sponsored programs.

- ***Spare the Air:*** To provide funding to support this public outreach program for the summer ozone season to conduct advertising, media, and educational activities aimed at reducing vehicle miles traveled and emissions by behavior modification.
- ***Commuter Benefits Program:*** To support the Air District's conducting compliance assistance and outreach to companies and government agencies, including education, outreach, monitoring, and tracking of Bay Area employers subject to the legislative requirements.
- ***Enhanced Mobile Source Inspections:*** To support the enhanced inspection patrols for reporting smoking vehicles and enforcement of the state's drayage truck regulation and related truck/mobile source regulations conducted at and adjacent to the Port of Oakland.
- ***Vehicle Buy Back:*** To support administrative and marketing efforts undertaken by the Air District's contractors to implement this voluntary early retirement program and to pay for incentives paid to program participants that are not covered by other state funds. This funding augments approximately \$7 million annually in funding from the Carl Moyer and Mobile Source Incentive Fund programs, which provide the majority of funding that is used for payment to program participants.

TFCA Cost-Effectiveness

The TFCA authorizing legislation requires the Air District to adopt cost-effectiveness criteria to maximize emissions reductions and public health benefits. Cost-effectiveness (C/E) is one of the key criteria used to evaluate and select projects to be funded by TFCA³. In addition to reducing

pollutants, TFCA-funded projects provide other co-benefits such as conserving energy and reducing GHG emissions; reducing traffic congestion; improving quality of life for residents and commuters by expanding access to services that provide first- and last-mile connections to rail, ferry, and mass transit; and improving physical fitness and public safety by facilitating active modes of transportation such as walking and biking.

Due to their overlapping target audience and shared goals, staff will be evaluating the emissions reduction benefits from all Air District-sponsored outreach and education programs collectively under the Spare the Air umbrella, including the Commuter Benefits and last-mile commuter connection programs. Further, staff recommends a continued increase to the maximum C/E from \$90,000 to \$500,000 for these programs until ridership on last-mile connection shuttles, rideshare and similar projects returns to pre-pandemic levels. Staff proposes maintaining the same maximum C/E limit as the prior year for Clean Cars for All but increasing C/E for Vehicle Buy Back to \$500,000 for projects that are entirely funded by TFCA. The proposed cost-effectiveness limits and project operational period (POP) for each of the Air District-sponsored programs is shown in Table 2:

Table 2 – Proposed Cost-Effectiveness and POP for Air District-Sponsored Programs

Program Categories	Max. C/E	POP
	(per ton of emissions reduced)	(in Years)
Spare the Air & Commuter Benefits	\$500,000*	1
Enhanced Mobile Source Inspections	\$500,000	1
Clean Cars for All	\$500,000	3
Vehicle Buy Back**	\$500,000/NA	NA
* Increase due to on-going impacts from Global Pandemic		
**Projects that are entirely funded by TFCA would not exceed the \$500,000 C/E limit. The majority of projects are funded through state funds and for those, emission reductions would be entirely credited to the Carl Moyer Program.		

For programs and projects offered under the Regional Fund, staff will return to the Mobile Source Committee with a recommendation for C/E limits later this Spring.

³ C/E is calculated by dividing TFCA funds awarded by the sum of surplus emissions reduced of reactive organic gases (ROG), nitrogen oxides (NOx), and weighted particulate matter (PM10) over the POP.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. The Air District distributes “pass-through” funds to grantees on a reimbursement basis. Administrative costs for the TFCA Regional Fund program are provided by the funding source.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Minda Berbeco and Ken Mak
Reviewed by: Karen Schkolnick

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: 2021 Report of the Air District's Voluntary Emissions Reduction Grant Programs

RECOMMENDED ACTION

Recommend the Board of Directors to authorize an increase in the Executive Officer/APCO's signature authority up to \$500,000 for the execution of individual grant agreements and amendments for voluntary emissions reduction projects that are funded by state revenues and local vehicle registration fees.

BACKGROUND

The Bay Area Air Quality Management District (Air District) aims to create a healthy breathing environment for every Bay Area resident while protecting and improving public health, air quality, and the global climate. Since its formation in 1955, as the first regional air quality agency in the nation, the Air District has led the effort to reduce air pollution and greenhouse gases (GHG) emissions and to protect public health in the Bay Area.

Based on the Air District's Emissions Inventory for 2015, mobile sources account for more than half of reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter (PM) emissions, and over 40% of the GHG generated in the Bay Area. For this reason, reducing emissions from mobile sources is essential to helping the Bay Area attain State and Federal ambient air quality standards and meet the Air District's GHG reduction goals.

While the Air District is tasked with and has the authority to regulate stationary sources of air pollution within its jurisdiction, it lacks authority to regulate emissions from mobile sources. These sources are regulated by federal and state agencies, US Environmental Protection Agency and California Air Resources Board (CARB), respectively. Since 1992, the Air District has been achieving emissions reductions from mobile sources beyond those required by regulations primarily through its grant programs, which work to incentivize the accelerated deployment of clean air vehicles and equipment, to encourage commuters to shift modes to public transit and active transportation, and to demonstrate advanced zero- and near-zero emissions technologies. The table below shows examples of mobile source equipment by category that are potentially eligible for funding through the Air District's voluntary incentive programs.

Table 1 - Examples of Mobile Source Equipment by Category that are Potentially Eligible for funding through the Air District’s Voluntary incentive Programs

On-Road (heavy-duty)	On-Road (light-duty)	Off-Road (large)	Off-Road (small)
School buses	Passenger cars	Port cargo equipment	Portable engines
Transit buses	Pickup trucks	Marine vessels	Forklifts
Trucks	Mini vans	Locomotives	Ground support equipment
Waste collection vehicles	Motorcycles	Construction/Industrial equipment	Agricultural equipment

This report summarizes the results of the funding sources that were awarded in calendar year 2021 by the Air District to achieve emissions reductions from mobile sources:

- Transportation Fund for Clean Air (TFCA)
- Mobile Source Incentive Fund (MSIF)
- Carl Moyer
- Community Air Protection (CAP)
- Funding for Agricultural Replacement Measures for Emission Reductions (FARMER)
- Clean Cars for All/California Climate Investments (CCI)
- California I-Bond Goods Movement (I-Bond)
- Volkswagen NOX Mitigation (VW)

Staff is also recommending an increase to the Executive Officer/APCO’s signature authority for individual grant agreements and amendments that are funded by state revenues, including Carl Moyer, CAP, FARMER, and local vehicle registration fees, including TFCA and MSIF. Background information on these revenue sources is available in a March 24th Mobile Source and Climate Impacts Committee item entitled *Projects and Contracts with Proposed Grant Awards Over \$100,000*.

DISCUSSION

2021 Annual Report

In calendar year 2021, the Air District awarded more than \$76 million to eligible projects that improve air quality and reduce greenhouse gases. These projects will achieve emission reductions estimated conservatively to be over 350 tons per year (TPY) of criteria pollutant emissions, including ROG, NOx, and PM, and over 11,800 TPY of CO2.

These projects achieve emissions reduction benefits by incentivizing the scrap and replacement of older and polluting equipment with newer and cleaner alternates, the early retirement of old

vehicles, the acceleration of the adoption of zero- and near zero-emission technologies, and the reduction of single-occupancy-vehicle trips. The emission reductions are surplus to what the air quality regulations and other obligations, e.g., settlement, require. California Air Resources Board's (CARB) methodology is used to estimate emissions reduced from scrap and replace and for vehicle retirement projects. CARB's methodology is also used as the underlying basis to estimate emissions reduced from trip reduction and fleet expansion projects. Attachment 1 lists the voluntary incentive grant programs and projects awarded by the Air District in 2021 for the reduction of emissions from mobile sources and provides additional information on the methodology used for evaluating emission reductions from the projects discussed in this report.

The Air District's grant programs support its mission by prioritizing awards to projects that promote equity and reduce diesel pollution, air toxics, and exposure to air pollutants in neighborhoods that are most impacted by air pollution. In 2021, over 86% of the funds awarded by the Air District were awarded to projects benefiting

- disadvantaged and low-income communities,
- Air District designated Community Air Risk Evaluation (CARE) areas, and
- low-income residents.

The Air District's grant programs also work to prioritize the accelerated adoption of zero-emission and cleanest available technology. In 2021, more than \$21 million of the funds awarded directly by the Air District were awarded to projects to support the adoption of nearly 300 pieces of new zero-emission vehicles, equipment, and supporting infrastructure, and the installation of over 560 publicly available charging stations.

Request to Increase Delegated Signing Authority

Given the urgency required of voluntary incentive grant programs and timeliness relied upon by local businesses, residents, and other stakeholders to make clean-air investments, staff is requesting an increase to the Executive Officer/APCO's signing authority for the execution of contracts and amendments of projects requesting individual awards of up to \$500,000 in TFCA Regional Fund, MSIF, Carl Moyer, CAP, and FARMER funding. Administration of state-funded incentive programs requires strict adherence to policies, guidelines, and contractual obligations, including highly prescriptive and aggressive deadlines for contracting of funds and completion of all work associated with a revenue source. Although there is more flexibility with local funds, these are often used as a match to support state-funded projects, and are subject to the same strict requirements. Streamlining processes and minimizing delays is necessary for the Air District to meet its obligations.

In 2009, the Executive Officer/APCO was authorized to execute incentive grant contracts and amendments up to \$100,000. In 2009, the Air District also switched from awarding funds only once annually through competitive solicitations to a continuous first come, first served process, in which staff anticipated bringing funding updates to the Committee and Board on a quarterly basis. While the change to accept applications on an on-going basis has greatly improved flexibility for applicants, it has added considerable unintended work for staff who have been preparing routine recommendations as often as monthly. With increased federal, state and local funding, increases in the cost of new clean-air vehicles and technology, and recent changes to

incentive program guidelines that allow higher-dollar award amounts for zero-emission equipment, the number of grant contracts exceeding this \$100,000 cap is expected to increase.

The Air District continuously works to identify and implement strategies and tools to streamline our administrative processes. Practices such as electronic document signature options (DocuSign) and the transition toward full electronic workflow have reduced the overall administrative time to process contracts and vouchers. However, with the additional step of obtaining Board of Director approval at the current cap for standard incentive grant contracts and vouchers, it adds additional time to the contract and amendment execution process, which is already lengthy due to internal review of board memos, scheduling of items, and time between committee and board meetings. Projects requiring Board of Director approval can take up to three months to be contracted from the time the application is completed, while a project approved by the EO/APCO can be contracted within two or three weeks.

In calendar year 2022, the funding estimated to be available for award totals more than \$180 million. This includes: new revenue to be received in 2022, monies remaining from prior years/cycles, recaptured funds from projects that closed-out under-budget, were withdrawn, or terminated, and interest accrued. Staff analyzed the results of awards made since 2018 and found that 58% of projects requested up to \$100,000, 42% of projects were awarded over \$100,000 (requiring Board approval) and 12% of projects (representing 70% of total funds allocated in that time period) requested over \$500,000. By increasing the Executive Officer/APCO's signature authority up to \$500,000, there would be a significant improvement in contracting speed for the majority of applicants, savings in staff time preparing frequent Board recommendations and the Board of Directors would still maintain approval over the majority of funding allocated through this program. Attachment #2 contains the results of the analysis of awards made between 2018 and 2021 and a summary of the key tasks and processes required for the administration of voluntary incentive grant programs.

The presentation to the Committee will include a summary of the results of the Air District's grant programs in 2021, grant program revenue and priorities for calendar year 2022, and the challenges and opportunities. Staff will also discuss the justification for the recommended action.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Alona Davis and Chengfeng Wang
Reviewed by: Karen Schkolnick

ATTACHMENTS:

1. List of Projects Awarded in 2021 and Overview of Emission Reduction Estimation Methodologies
2. Background Information for Recommendation to Increase Signing Authority

List of Projects Awarded in 2021 and Overview of Emissions Reduction Estimation Methodologies

List of Projects Awarded in 2021

Project Number	Type	Category	Description	Award	Grantee Name	County	Priority*	Zero Emission**	Count***
21MOY134	Agricultural	Off-Road	Equipment Replacement	\$ 34,000	Dutton Ranch Corp.	Sonoma			1
21MOY185	Agricultural	Off-Road	Equipment Replacement	\$ 57,300	Wente Bros. dba. Wente Vineyards	Solano	v		1
21MOY222	Agricultural	Off-Road	Equipment Replacement	\$ 40,950	Jack Neal and Son Inc	Napa			1
22MOY100	Agricultural	Off-Road	Equipment Replacement	\$ 166,700	Poncia Fertilizer, Inc.	Sonoma	v		1
22MOY104	Agricultural	Off-Road	Equipment Replacement	\$ 113,400	Bains Farms LLC	Solano			2
22MOY127	Agricultural	Off-Road	Equipment Replacement	\$ 214,200	Napa Select Vineyard Services, Inc.	Napa			2
22MOY138	Agricultural	Off-Road	Equipment Replacement	\$ 525,300	Dave Soiland	Sonoma			3
22MOY142	Agricultural	Off-Road	Equipment Replacement	\$ 51,750	Cobb Creek Holdings, LLC DBA CCH Ag Services	Napa			2
22MOY145	Agricultural	Off-Road	Equipment Replacement	\$ 51,800	Petaluma Livestock Auction Yard INC	Sonoma			1
22MOY149	Agricultural	Off-Road	Equipment Replacement	\$ 170,500	Renati Dairy	Sonoma			1
22MOY151	Agricultural	Off-Road	Equipment Replacement	\$ 86,000	Hardin Vineyard Management LLC	Napa			2
22MOY157	Agricultural	Off-Road	Equipment Replacement	\$ 133,400	Walsh Vineyards Management Inc.	Napa			3
22MOY166	Agricultural	Off-Road	Equipment Replacement	\$ 96,400	Stone Bridge Cellars Inc.	Napa			2
22MOY167	Agricultural	Off-Road	Equipment Replacement	\$ 285,700	Ielmorini Moody Dairy	Sonoma	v		2
22MOY169	Agricultural	Off-Road	Equipment Replacement	\$ 264,520	Kenzo Estate, Inc.	Napa			2
22MOY17	Agricultural	Off-Road	Equipment Replacement	\$ 103,100	Robledo Inc.	Solano			2
22MOY18	Agricultural	Off-Road	Equipment Replacement	\$ 259,100	Willotta Ranch	Solano			2
22MOY180	Agricultural	Off-Road	Equipment Replacement	\$ 32,400	Frog's Leap Winery	Napa			1
22MOY185	Agricultural	Off-Road	Equipment Replacement	\$ 67,100	Domenico J. Carinalli, Jr.	Sonoma	v		1
22MOY187	Agricultural	Off-Road	Equipment Replacement	\$ 30,100	Dierke's Enterprises	Sonoma			1
22MOY190	Agricultural	Off-Road	Equipment Replacement	\$ 91,170	Anderson's Conn Valley Winery, Inc.	Napa			2
22MOY195	Agricultural	Off-Road	Equipment Replacement	\$ 59,500	Ilisley Brothers Farming, LLC	Napa			1
22MOY206	Agricultural	Off-Road	Equipment Replacement	\$ 64,000	Wente Bros. dba. Wente Vineyards	Alameda	v		1
22MOY208	Agricultural	Off-Road	Equipment Replacement	\$ 146,475	Jack Neal and Son Inc	Napa			1
22MOY209	Agricultural	Off-Road	Equipment Replacement	\$ 192,600	Global Mushrooms LLC.	Santa Clara	v		1

Project Number	Type	Category	Description	Award	Grantee Name	County	Priority*	Zero Emission**	Count***
22MOY211	Agricultural	Off-Road	Equipment Replacement	\$ 88,900	Pomponio Farms LLC	San Mateo	v		1
22MOY22	Agricultural	Off-Road	Equipment Replacement	\$ 57,100	Joseph Pinheiro	Sonoma			2
22MOY220	Agricultural	Off-Road	Equipment Replacement	\$ 160,300	Atlas Vineyard Management, Inc.	Multi-County			3
22MOY223	Agricultural	Off-Road	Equipment Replacement	\$ 24,700	Ingenious Solutions Incorporated	Napa			1
22MOY235	Agricultural	Off-Road	Equipment Replacement	\$ 50,300	Cornerstone Certified Vineyard	Sonoma			1
22MOY27	Agricultural	Off-Road	Equipment Replacement	\$ 223,500	Mark and Lisa Shelley	Sonoma			1
22MOY33	Agricultural	Off-Road	Equipment Replacement	\$ 153,600	Cornerstone Certified Vineyard	Sonoma			3
22MOY37	Agricultural	Off-Road	Equipment Replacement	\$ 347,400	Morrison Chopping, LLC	Sonoma			1
22MOY43	Agricultural	Off-Road	Equipment Replacement	\$ 128,300	Atlas Vineyard Management, Inc.	Napa			3
22MOY46	Agricultural	Off-Road	Equipment Replacement	\$ 93,800	Shafer Vineyards	Napa			2
22MOY51	Agricultural	Off-Road	Equipment Replacement	\$ 30,100	Robert Lauritsen	Napa			1
22MOY55	Agricultural	Off-Road	Equipment Replacement	\$ 56,200	Thomas W. Crane	Sonoma			1
22MOY58	Agricultural	Off-Road	Equipment Replacement	\$ 42,000	Sweetlane Nursery and Vineyards, Inc. dba Grossi Farms	Sonoma			1
22MOY60	Agricultural	Off-Road	Equipment Replacement	\$ 33,800	Karl Bucher	Napa	v		1
22MOY61	Agricultural	Off-Road	Equipment Replacement	\$ 141,600	Larry's Produce LLC	Solano			1
22MOY64	Agricultural	Off-Road	Equipment Replacement	\$ 166,500	Joseph Rider	Napa			2
22MOY65	Agricultural	Off-Road	Equipment Replacement	\$ 28,000	Anthony Rossi	Napa			1
22MOY67	Agricultural	Off-Road	Equipment Replacement	\$ 107,400	Morrison Dairy	Sonoma			2
22MOY68	Agricultural	Off-Road	Equipment Replacement	\$ 20,000	Roger King	Solano			1
22MOY69	Agricultural	Off-Road	Equipment Replacement	\$ 276,450	Ielmorini Custom Spreading, LLC	Multi-County	v		2
22MOY72	Agricultural	Off-Road	Equipment Replacement	\$ 318,200	West Marin Compost LLC	Marin	v		1
22MOY77	Agricultural	Off-Road	Equipment Replacement	\$ 38,750	Marc Mondavi	Napa			1
22MOY78	Agricultural	Off-Road	Equipment Replacement	\$ 31,642	Cortina Vineyard Management	Napa	v		1
22MOY79	Agricultural	Off-Road	Equipment Replacement	\$ 43,500	Loma del sol farming inc.	Sonoma			1
22MOY80	Agricultural	Off-Road	Equipment Replacement	\$ 300,900	Renteria Vineyard Management LLC	Multi-County			5
22MOY81	Agricultural	Off-Road	Equipment Replacement	\$ 101,800	Stephen Tenbrink	Solano			2
22MOY82	Agricultural	Off-Road	Equipment Replacement	\$ 34,000	Gilardi's Family Farm	Sonoma			1
22MOY85	Agricultural	Off-Road	Equipment Replacement	\$ 218,350	Bordessa Family Dairies	Sonoma			1

Project Number	Type	Category	Description	Award	Grantee Name	County	Priority*	Zero Emission**	Count***
22MOY87	Agricultural	Off-Road	Equipment Replacement	\$ 60,000	Mike K. Waller	Solano			1
22MOY88	Agricultural	Off-Road	Equipment Replacement	\$ 43,500	Anselmo Farms LLC	Solano			1
22MOY92	Agricultural	Off-Road	Equipment Replacement	\$ 29,550	Paul P. Bianchi, Inc	Sonoma			1
22MOY94	Agricultural	Off-Road	Equipment Replacement	\$ 132,500	Lunny Ranch, LLC	Marin	√		1
22MOY98	Agricultural	Off-Road	Equipment Replacement	\$ 44,000	St. Supery Inc.	Napa			1
22MOY99	Agricultural	Off-Road	Equipment Replacement	\$ 41,100	Daylight Vineyard Management, inc.	Sonoma			1
22MOY24	Agricultural	Off-Road	Equipment Repower	\$ 139,900	Stanley J Poncia	Sonoma	√		1
20GMCH09	Cargo Handling	Off-Road	Equipment Replacement	\$ 330,000	Bolthouse Farms	Other	√	√	3
22MOY101	Marine	Off-Road	Equipment Repower	\$ 2,886,000	Foss Maritime Company LLC	Multi-County	√		2
22MOY118	Marine	Off-Road	Equipment Repower	\$ 3,700,000	Northwest Tug Leasing	Multi-County	√		2
22MOY129	Marine	Off-Road	Equipment Repower	\$ 310,000	Mr. Morgan Fisheries Inc.	San Mateo			2
22MOY135	Marine	Off-Road	Equipment Repower	\$ 154,000	William E. Smith	San Mateo			1
22MOY136	Marine	Off-Road	Equipment Repower	\$ 105,000	Zachary Jason Medinas	Multi-County	√		1
22MOY158	Marine	Off-Road	Equipment Repower	\$ 174,000	Laurence J Collins	San Francisco			1
22MOY160	Marine	Off-Road	Equipment Repower	\$ 3,529,000	Baydelta Navigation LTD	Multi-County	√		4
22MOY179	Marine	Off-Road	Equipment Repower	\$ 72,000	Kyle Dryer dba Diamond Sportfishing	Multi-County	√		1
22MOY19	Marine	Off-Road	Equipment Repower	\$ 3,715,000	San Francisco Water Emergency Transportation Authority	Multi-County	√		6
22MOY196	Marine	Off-Road	Equipment Repower	\$ 256,000	A.C. Fishing Charters Inc.	Multi-County	√		2
22MOY21	Marine	Off-Road	Equipment Repower	\$ 120,000	Jerry Harold Pemberton	San Mateo			1
22MOY217	Marine	Off-Road	Equipment Repower	\$ 380,000	Happy Hooker Sportfishing, LLC	Multi-County	√		2
22MOY228	Marine	Off-Road	Equipment Repower	\$ 85,300	Wooden Boats for Veterans Foundation	Multi-County	√		1
22MOY30	Marine	Off-Road	Equipment Repower	\$ 298,000	A.C. Fishing Charters Inc., dba Tigerfish Sportfishing	Alameda			2
22MOY5	Marine	Off-Road	Equipment Repower	\$ 293,000	Golden Eye 2000	Alameda	√		2
22MOY170	Off-Road (other)	Off-Road	Equipment Replacement	\$ 106,000	Argent Materials INC	Alameda	√		1
N/A	County Program Manag	On-Road	TFCA Pass Through	\$ 10,210,000	Bay Area County Transportation Agencies	Regional	N/A		N/A
20GM0007	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 200,000	P & R Trucking, Inc.	Alameda			2
20GM0010	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 1,400,000	Sandman Inc. dba Star Concrete	Santa Clara	√		14
22MOY111	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 20,000	SAHIB SAFELINE	Alameda	√		1

Project Number	Type	Category	Description	Award	Grantee Name	County	Priority*	Zero Emission**	Count***
22MOY115	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 40,000	SHG Transportation	Alameda	√		1
22MOY119	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 50,000	BABAL TRANS INC	Santa Clara	√		1
22MOY123	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 50,000	LDH Transportation Inc	Alameda	√		1
22MOY124	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 50,000	Kulwant Khera (kskhera)	Alameda	√		1
22MOY128	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 30,000	Aman Khan	Alameda	√		1
22MOY130	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 50,000	Min Jian Huang (jianhuang)	Alameda	√		1
22MOY131	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 25,000	Karanbir Singh (karanbirsg)	Contra Costa			1
22MOY132	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 20,000	Weiliang Trucking Inc	Alameda	√		1
22MOY174	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 25,000	Can Yuan Chen (canchen)	Alameda	√		1
22MOY75	Heavy-Duty Truck	On-Road	Equipment Replacement	\$ 25,000	Gill Brothers Express Inc	Alameda	√		1
20GM0006	Heavy-Duty Truck	On-Road	Equipment Replacement + Infrastructure	\$ 690,000	Mutual Express Company	Alameda	√	√	3
20GM0008	Heavy-Duty Truck	On-Road	Equipment Replacement + Infrastructure	\$ 230,000	Habtezgi Girme	Contra Costa	√	√	1
20GM0012	Heavy-Duty Truck	On-Road	Equipment Replacement + Infrastructure	\$ 230,000	Esayas Gebrezgabiher	Alameda	√	√	1
20GM0013	Heavy-Duty Truck	On-Road	Equipment Replacement + Infrastructure	\$ 230,000	Bemnet Habteselassie	Alameda	√	√	1
21R07 †	Heavy-Duty Truck	On-Road	Fleet Expansion + Infrastructure	\$ 3,360,000	Center for Transportation and the Environment	Alameda	√	√	30
Clean Cars for All	Light-Duty Cars	On-Road	Equipment Replacement	\$ 6,413,262	Eligible Bay Area Residents	Multi-County	√	N/A	738
Vehicle Buyback	Light-Duty Cars	On-Road	Equipment Replacement	\$ 2,637,197	Eligible Bay Area Residents	Multi-County	N/A	N/A	2,066
2101-15735	Light-Duty EV	On-Road	Infrastructure	\$ 950,000	EVgo Services, LLC	Regional	√	√	38
2102-16395	Light-Duty EV	On-Road	Infrastructure	\$ 21,000	The Millennium Tower Association	San Francisco	√	√	3
2103-17065	Light-Duty EV	On-Road	Infrastructure	\$ 20,000	Napa Valley Transportation Authority	Napa		√	5
2103-17230	Light-Duty EV	On-Road	Infrastructure	\$ 64,000	REEF Energy CA Operations, LLC	San Francisco	√	√	8
2103-17315	Light-Duty EV	On-Road	Infrastructure	\$ 2,999,000	EV Charging Solutions, Inc.	Regional	√	√	264
2103-17345	Light-Duty EV	On-Road	Infrastructure	\$ 44,000	City of San Ramon	Alameda	√	√	4
2103-17359	Light-Duty EV	On-Road	Infrastructure	\$ 48,000	The Shores at Marina Bay Community Association	Contra Costa	√	√	6
2103-17497	Light-Duty EV	On-Road	Infrastructure	\$ 425,000	East Bay Community Energy Authority	Alameda	√	√	17
2103-17499	Light-Duty EV	On-Road	Infrastructure	\$ 64,000	Alameda Multifamily Owner, LLC	Alameda	√	√	8
2103-17520	Light-Duty EV	On-Road	Infrastructure	\$ 26,000	City of Dublin	Alameda		√	7
2103-17524	Light-Duty EV	On-Road	Infrastructure	\$ 406,000	County of Solano	Solano	√	√	134

Project Number	Type	Category	Description	Award	Grantee Name	County	Priority*	Zero Emission**	Count***
2103-17527	Light-Duty EV	On-Road	Infrastructure	\$ 24,000	EVmatch, Inc.	Alameda	√	√	3
2103-17554	Light-Duty EV	On-Road	Infrastructure	\$ 12,000	West County Wastewater District	Contra Costa	√	√	2
2103-17603	Light-Duty EV	On-Road	Infrastructure	\$ 32,000	Bollinger Crest Apartment Investors, LP	Alameda		√	4
2103-17625	Light-Duty EV	On-Road	Infrastructure	\$ 44,000	Silvergate Brentwood, LLC	Contra Costa		√	11
2103-17638	Light-Duty EV	On-Road	Infrastructure	\$ 48,000	Intertie, Inc.	San Francisco	√	√	6
N/A	Light-Duty EV	On-Road	Infrastructure	\$ 720,264	Awards of VW funds to Bay Area projects	Multi-County	√	√	43
22SBP52	School Bus	On-Road	Equipment Replacement	\$ 435,306	Pittsburg Unified School District	Contra Costa	√		3
22SBP9	School Bus	On-Road	Equipment Replacement	\$ 827,820	Napa Valley Unified School District	Napa	√		4
21SBP211	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 1,293,126	Menlo Park City School District	San Mateo	√		3
22SBP105	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 1,731,969	Fremont Unified School District	Alameda	√	√	4
22SBP14	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 827,154	Milpitas Unified School District	Santa Clara	√		2
22SBP216	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 1,510,616	Campbell Union High School District	Santa Clara	√	√	3
22SBP40	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 2,122,007	Franklin-McKinley School District	Santa Clara	√	√	5
22SBP71	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 4,928,532	Petaluma City Schools	Sonoma	√	√	12
22SBP84	School Bus	On-Road	Equipment Replacement + Infrastructure	\$ 1,695,831	Rincon Valley Union School District	Sonoma	√	√	4
21SBP98	School Bus	On-Road	Infrastructure	\$ 242,828	Palo Alto Unified School District	Santa Clara	√	√	N/A
22SBP14	School Bus	On-Road	Infrastructure	\$ 95,327	Milpitas Unified School District	Santa Clara	√	√	N/A
22R01	Trip Reduction	Trip Reduction	Commuter Benefits & Enforcement	\$ 150,000	BAAQMD	Regional	N/A	N/A	N/A
21R08	Trip Reduction	Trip Reduction	Last Mile Commute Shuttle	\$ 160,000	Peninsula Corridor Joint Powers Board	San Mateo		N/A	N/A
21R09	Trip Reduction	Trip Reduction	Last Mile Commute Shuttle	\$ 280,000	San Jose State University	Regional	√	N/A	N/A
21R10	Trip Reduction	Trip Reduction	Last Mile Commute Shuttle	\$ 240,000	Predisio Trust	San Francisco	√	N/A	N/A
21R11	Trip Reduction	Trip Reduction	Last Mile Commute Shuttle	\$ 1,818,660	Santa Clara Valley Transit Authority	Santa Clara	√	N/A	N/A
21R12	Trip Reduction	Trip Reduction	Last Mile Commute Shuttle	\$ 80,000	San Joaquin Regional Rail Commission	Alameda		N/A	N/A
22R03	Trip Reduction	Trip Reduction	Spare The Air	\$ 2,290,000	BAAQMD	Regional	N/A	N/A	N/A
Grand Total				\$ 76,320,306					3,594

* "Priority" indicates projects benefiting disadvantaged and low-income communities, Air District designated Community Air Risk Evaluation (CARE) areas, and low-income residents.

** "Zero Emission" indicates projects that deploy vehicle/equipment with no exhaust emissions or install publicly accessible charging infrastructure.

*** "Count" represents the number of vehicles, engines, or pieces of equipment, or number of publicly accessible charging stations. Infrastructure associated with heavy-duty vehicles/equipment is not counted.

Overview of Emissions Reduction Benefit Estimation Methodologies for the Air District's Voluntary Emission Reduction Grant Programs

This document provides an overview of the methodologies used to evaluate emissions reduction benefit estimation methodology for the Bay Area Air Quality Management District's voluntary emission reduction grant programs

California Air Resources Board's (CARB) methodology is used to evaluate emissions reduction benefits for scrap and replace and for vehicle retirement projects. CARB's methodology is also used as the underlying basis to evaluate emissions reduction benefits from trip reduction and fleet expansion projects, which are not project categories authorized in Moyer guidelines.

- For **scrap and replace projects**, emissions reduction benefits are calculated by evaluating the difference in emission rates between the retired vehicle and the replacement vehicle multiplied by the average vehicle miles traveled by retired vehicles in the year of vehicle retirement.
- For **fleet expansion projects** that voluntarily choose the equipment that is cleaner than required by air quality regulations, emissions reduction benefits are calculated by evaluating the difference in emission rates between fleet average and the clean technology equipment multiplied by miles-traveled or hours of operation of the equipment.
- For **trip reduction projects**, emissions reduction benefits are calculated by evaluating the estimated number of trips reduced multiplied by average trip length and then multiplied average emission rates of light-duty passenger vehicles.
- For **light-duty infrastructure projects** that are accessible to the public, emissions reduction benefits are calculated by evaluating the difference in emission rates between fleet average and the clean technology equipment multiplied by miles-traveled based on electricity delivered or fuel dispensed.
- For **heavy-duty infrastructure projects** that are associated with heavy-duty equipment, emissions reduction benefits are entirely attributed to the equipment to avoid double counting.

Background Information for a Recommendation to Increase Signing Authority for Voluntary Emission Reduction Grant Programs

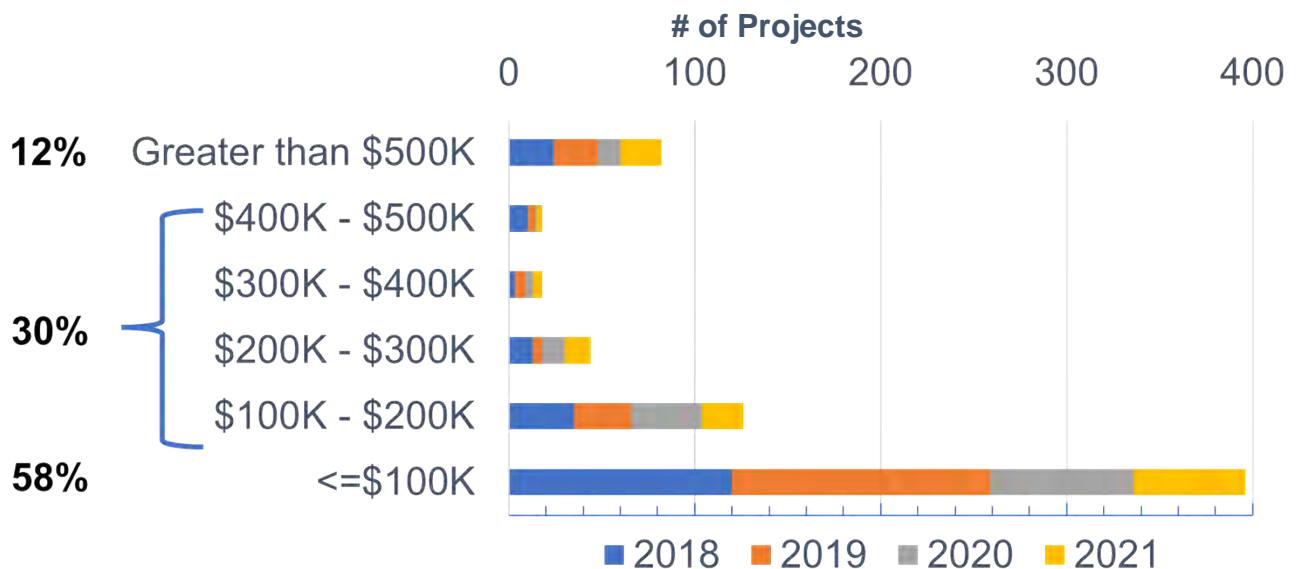
This document provides background information related to a recommendation for the Bay Area Air Quality Management District’s Board of Directors to authorize an increase in the Executive Officer/APCO’s signature authority up to \$500,000 for the execution of individual grant agreements and amendments for voluntary emissions reduction projects that are funded by state revenues and local vehicle registration fees.

This document summarizes the 1) results of awards made between 2018 and 2021 and 2) shows the key tasks & processes required for the administration of voluntary incentive grant programs.

1) Analysis of Awards Made between 2018 – 2021

Number of Projects Awarded Between 2018 – 2021, by Funding Level

Between 2018 – 2021, the Air District awarded approximately \$216 million to more than 680 projects and programs, through the Transportation Fund for Clean Air (TFCA) Regional Fund, Carl Moyer, Community Air Protection, Funding Agricultural Replacement Measures for Emission Reductions (FARMER), Mobile Source Incentive Fund (MSIF), and Reformulated Gasoline programs¹. Of these, 288 projects (about 42%) had proposed awards above \$100,000. The chart below shows the distribution of these projects by calendar year.

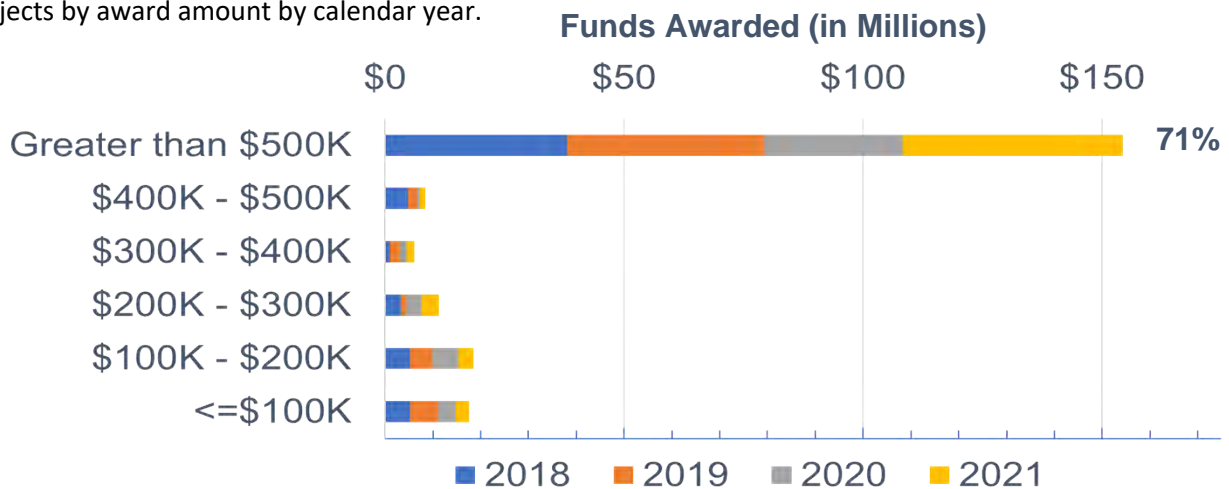


¹ These charts do not include data for funding that was brought to the Mobile Source and Climate Impacts Committee for consideration separate from the report “Projects and Contracts Over \$100,000”, such as Air District-sponsored programs (e.g., Spare the Air) that are approved through the budgeting process, funding that is awarded as a separate Air District Board action e.g., Charge! and pass-through funding for the TFCA County Program Manager programs, and projects that require approval by the California Air Resources Board (CARB) including the statewide Volkswagen Environmental Mitigation Trust Program and Goods Movement programs.

Background Information for a Recommendation to Increase Signing Authority for Voluntary Emission Reduction Grant Programs

Distribution of Funds Awarded Between 2018 – 2021, by Funding Level

The analysis also shows that during this same period out of the \$216 million 92% of the funds were awarded to projects requesting above \$100,000. The chart below shows the distribution of these projects by award amount by calendar year.



2) Summary of Key Tasks & Requirements for Administration of Incentive Funding

Although each funding source has its own specific and unique requirements, the following list describes the work that is typically required for each funding source.

- a) Develop program materials for solicitation (e.g., website, guidance, application materials).
- b) Develop and maintain data management systems that will be used throughout the life of each new revenue stream and program.
- c) Conduct community engagement and outreach to potential grantees to solicit projects.
- d) Evaluate application materials and project cost-effectiveness.
- e) Prepare ranking lists and/or recommendations for board/state consideration.
- f) Generate and route contracts, and amendment(s) as needed.
- g) Conduct inspections of existing, new, and in some cases destroyed old equipment.
- h) Review fiscal information and process reimbursement requests.
- i) Monitor projects and review progress and annual operational reports for the duration of each project's contracted term (Project Useful Life), typically 3-10 years.
- j) Create and maintain records in data management systems and hardcopy files.
- k) Report program fiscal and project status to revenue source (e.g., monthly, annually, etc.).
- l) Address all non-performing projects and conduct enforcement action, as needed.
- m) Reallocate (award again) remaining / recaptured funds as projects are closed-out under-budget, withdrawn, or terminated.
- n) Cooperate in fiscal and programmatic audits conducted by the Department of Finance, Bureau of State Audits, CARB, and Environmental Protection Agency and independent audits that are required by statute for the TFCFA.
- o) Maintain project records for a minimum of seven years pursuant to the Air District's records retention policy (for public record requests and audit purposes). Some programs have longer retention periods, such as the I-Bond program, that requires that files be maintained for 35 years.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: Proposed Update to California Environmental Quality Act (CEQA) Thresholds of
Significance for Climate Impacts and Associated Justification Report

RECOMMENDED ACTION

Staff requests that the Committee recommend the Board of Directors adopt the proposed Thresholds of Significance for Climate Impacts and the associated Justification Report.

BACKGROUND

The California Environmental Quality Act (CEQA) was signed into law in 1970. CEQA requires that California public agencies study and disclose the environmental impacts of proposed development projects and plans, and limit those impacts to the extent feasible. These environmental impacts include climate change (through greenhouse gas emissions), and air quality, as well as impacts not directly related to the Air District's purview, such as water quality, transportation, and biological resources, among others.

Greenhouse gas emissions from land use development can occur directly, e.g., emissions from combustion devices such as boilers and generators, and indirectly, e.g., from transportation activity associated with a project. Although Air District permits protect public health by assuring that stationary sources of air pollution comply with all applicable Air District regulations, the Air District does not have authority to issue permits for GHG emissions from local land use development. City or county land use permits determine whether and where a GHG-emitting project may be located, and local land use permits sometimes do not adequately consider GHG emissions. Although Air District air quality permits may impose conditions on stationary source operations that could also result in GHG co-benefits, Air District permits do not address GHG emissions from transportation, fossil fuel combustion, or other activities. As such, the Air District's ability to influence GHG emissions from land use projects is limited. And while many land use developments result in public concern, with calls for the Air District to take action, limited authority with respect to local land use decisions limits our options.

The Air District's CEQA Thresholds of Significance for Climate Impacts and the associated Justification Report are tools the Air District employs to further its and the State's goals of meeting GHG emissions reduction targets. The Air District's CEQA Thresholds of Significance for Climate Impacts and Justification Report are intended to assist cities, counties, and other lead agencies in analyzing and reducing climate impacts of local projects and plans. The thresholds provide lead agencies with recommended benchmarks for determining whether a project's or plan's GHG emissions rise to a level of significance. The Proposed "*Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*" (Justification Report) provides the rationale and substantial evidence supporting the Thresholds of Significance for Climate Impacts due to GHG emissions. Staff is also developing updated CEQA Guidelines that will provide additional support to local project developers and lead agencies in implementing the thresholds; the updated CEQA Guidelines will be released in Spring 2022.

Substantive changes have occurred with respect to the data and assumptions underlying the analytical methodologies, thresholds, and guidance since the Air District's last update of its GHG thresholds in June 2010. In addition, the State has taken strong legislative and programmatic action to achieve GHG reductions beyond 2020. Further, noteworthy court decisions related to CEQA litigation have occurred since 2010, creating new parameters that influence how climate impacts due to GHG emissions can be determined and mitigated under CEQA. Accordingly, Air District staff proposes to update the CEQA GHG thresholds to reflect current State legislation, policy guidance and GHG reduction targets, new and revised requirements in the State CEQA Guidelines, case law, improved analytical methodologies, and updated GHG reduction strategies and technologies.

DISCUSSION

Staff has investigated proposed updates to the CEQA Thresholds of Significance for Climate Impacts due to GHG emissions. Key motivations of this effort include the need to update the recommended thresholds to align with the latest State GHG reduction targets for 2030 and 2045, and to support local planning efforts. The current thresholds are outdated, based on the State's 2008 Scoping Plan and 2020 GHG reduction target, and require updating to reflect current statewide policy, targets and time horizons. Staff proposes updated Thresholds of Significance for Climate Impacts for: 1) Land-use Projects, and 2) Land-use Development Plans.

1. Land-use Projects

For a land-use project's GHG emissions to be determined to be less than significant, it is proposed that the project must: a) include certain project design elements, *or*; b) be consistent with a local GHG Reduction Strategy. Project design elements include aspects of the project that are within the control of the project developer and that have the potential to "lock in" GHG emissions for the duration of the project-life. The design elements included in the proposed thresholds address GHG emissions from building operations and transportation.

Alternatively, the evaluation of a land-use development project’s GHG impacts could focus on a demonstration that the project is consistent with a local GHG Reduction Strategy, such as a climate action plan, which in turn conforms to State and Air District guidance. Criteria for a GHG Reduction Strategy that supports this type of streamlining is specified in the State of California CEQA Guidelines (section 15183.5(b)). In addition, the Air District is developing further supportive guidance for local GHG Reduction Strategies on how to reflect consistency with the State Guidelines. This supportive guidance will be included in the Air District’s CEQA Guidance to be released later this Spring. The proposed thresholds for land use development projects are summarized in the following table.

Thresholds for Land Use Projects (Must Include A or B)
<p>A. Projects must include, at a minimum, the following project design elements:</p> <ol style="list-style-type: none"> 1. Buildings <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> a. Achieve compliance with electric vehicle requirements in the most recently adopted version of <u>CALGreen Tier 2</u>. b. 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: <ol style="list-style-type: none"> 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
<p>B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).</p>

2. Land Use Development Plans

For long-term communitywide planning documents (e.g., general plans, long-range development plans, climate action plans) to be determined to have a less-than-significant climate impact, they must demonstrate that GHG emissions from the jurisdiction will decline in accordance with California’s GHG reduction targets of 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. A local jurisdiction that plans to develop in a manner that will meet those targets will support the State’s ability to achieve its climate goals and thus would be considered to have a less-than-significant impact on GHG emissions. If a jurisdiction has adopted a climate action plan that meets the criteria for a GHG Reduction Strategy under the State CEQA Guidelines and pursuant to Air District’s guidance, it can use that climate action plan to provide the basis for demonstrating that the jurisdiction’s GHG emissions will meet the 2030 and 2045 targets when it adopts a general plan update and similar long-range planning document.

The proposed threshold for plans is summarized in the table below.

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

Staff prepared a report to explain and support the recommended thresholds. This report, “*Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*,” is included as Attachment A. This Justification Report provides the substantial evidence to support adoption of these thresholds by the Board of Directors, as well as the substantial evidence needed by Lead Agencies that choose to use these thresholds to make significance determinations.

Staff is evaluating the recommended thresholds of significance for climate impacts for stationary sources, and will report back to the Board on those thresholds later in 2022. As part of this process, staff will bring early concepts to the Board and will conduct a robust outreach and engagement process.

Staff convened numerous focus groups with local government planning staff, builders, affordable housing developers, environmental advocates and community organizations to discuss this approach for updating the CEQA GHG thresholds and to receive feedback and suggestions. Staff also convened a public workshop on December 9, 2022, opened a 30-day public comment period starting on February 16, 2022, and convened a second public workshop on March 10, 2022.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. Resources to update and implement the CEQA Thresholds and Guidelines are included in the FYE 2022 and proposed FYE 2023 budgets.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Abby Young
Reviewed by: Henry Hilken

ATTACHMENT:

1. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans



**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

Draft Justification Report:
**CEQA Thresholds for Evaluating
the Significance of Climate Impacts
From Land Use Projects
and Plans**

February 2022





BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Draft Justification Report

CEQA Thresholds for Evaluating the Significance of Climate Impacts

Jack P. Broadbent

Chief Executive Officer/Air Pollution Control Officer

Veronica Eady

Senior Deputy Executive Officer

Greg Nudd

Deputy Air Pollution Control Officer – Policy

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:



Honey Walters

Principal-in-Charge

Poonam Boparai

Principal

Hannah Kornfeld, AICP

Project Manager

February 2022

TABLE OF CONTENTS

Section	Page
List of Abbreviations	iii
1 Introduction and Executive Summary	1
1.1 Thresholds for Land Use Projects	1
1.2 Thresholds for General Plans and Related Planning Documents	3
1.3 Important Considerations for Using These Thresholds	3
2 Framework for Analyzing Impacts under CEQA	4
3 Analyzing Impacts on Global Climate Change	6
4 Thresholds For Land Use Development Projects	7
4.1 The Supreme Court’s “Fair Share” Analysis and Consistency with California’s Long-Term Climate Goals	7
4.2 Using the Executive Order B-55-18 and the 2045 Carbon Neutrality Goal in the “Fair Share” Analysis	8
4.3 Determining a Land Use Project’s “Fair Share” for Getting to Carbon Neutrality by 2045	9
4.3.1 Building Energy Use	10
Electricity	11
Natural Gas	12
4.3.2 Transportation	13
EV Charging Infrastructure	14
Vehicle Miles Traveled	16
5 Thresholds for General Plans and Similar Long-Term Community-Wide Planning Documents	19
5.1 Reducing GHG Emissions to Meet GHG Reduction Targets	19
5.2 Climate Action Plans	19
6 References	22



Figures

Figure 1 Effectiveness of CEC-Modeled Electrification Scenarios at Achieving Carbon Neutrality by 2045.....13

Figure 2 Statewide Light-Duty Vehicle Technology Penetration in the On-Road Fleet15

Tables

Table 1 Per-Capita VMT Reductions Necessary to Attain 2050 GHG Reduction Target18



LIST OF ABBREVIATIONS

°C	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].) 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).



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 neutrality¹ 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 electrical 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 compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- b. 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. 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.

¹ "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 achieve 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 ensure that they will 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.²

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

² 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][4].)

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. (*Ibid.*)

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 (°C) in order to maintain a sustainable global climate. Aiming to limit global warming to 1.5 °C 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 1.5 °C 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 1.5 °C. 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.³ The

³ 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 1.0 °C compared to a preindustrial baseline, and IPCC projects that continued growth in GHG emissions will cause that warming to reach 1.5 °C 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 contribution of greenhouse gases is ‘cumulatively considerable’ in light of the global problem, and thus significant” (*Center for Biological Diversity v. Department of Fish & Wildlife* [2015b] 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).

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)⁴).

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 issue there "expresses the pace and magnitude of reduction efforts that the scientific community believes

⁴ 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.



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 electricity 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.

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)
<p>A. Projects must include, at a minimum, the following project design elements:</p> <ol style="list-style-type: none"> 1. Buildings <ol style="list-style-type: none"> 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 electrical 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 <ol style="list-style-type: none"> a. Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. b. 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: <ol style="list-style-type: none"> 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
<p>B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).</p>

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 electricity 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 electricity 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.⁵ 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.

⁵ 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.



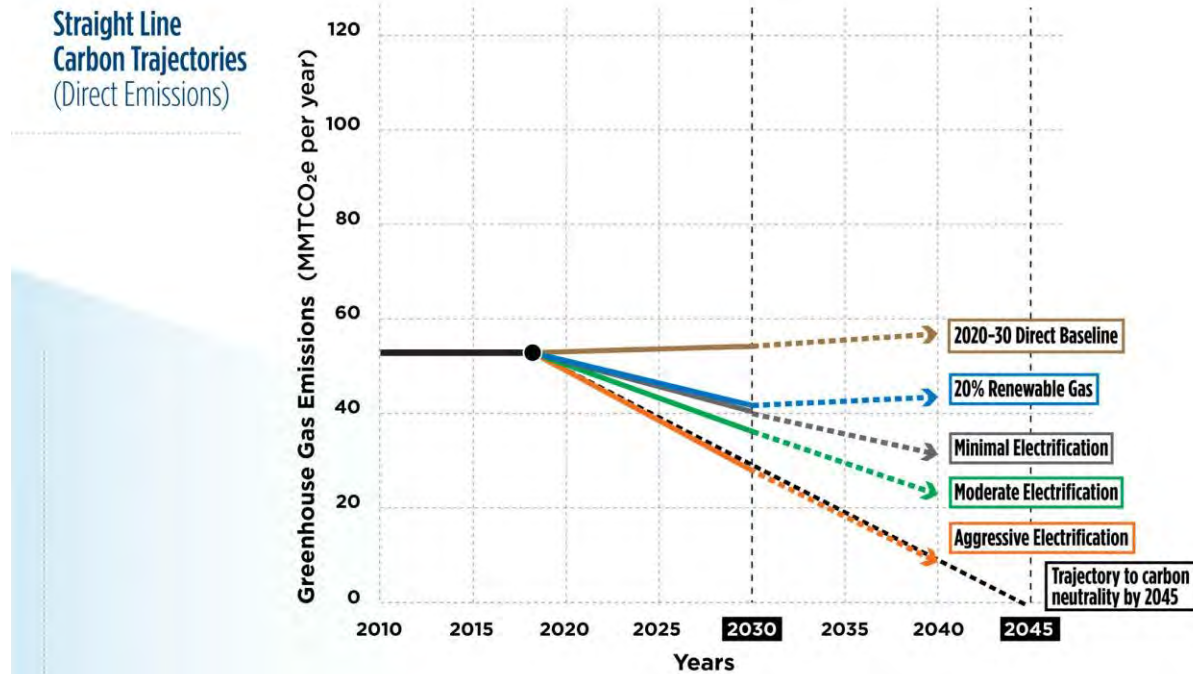
NATURAL GAS

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.

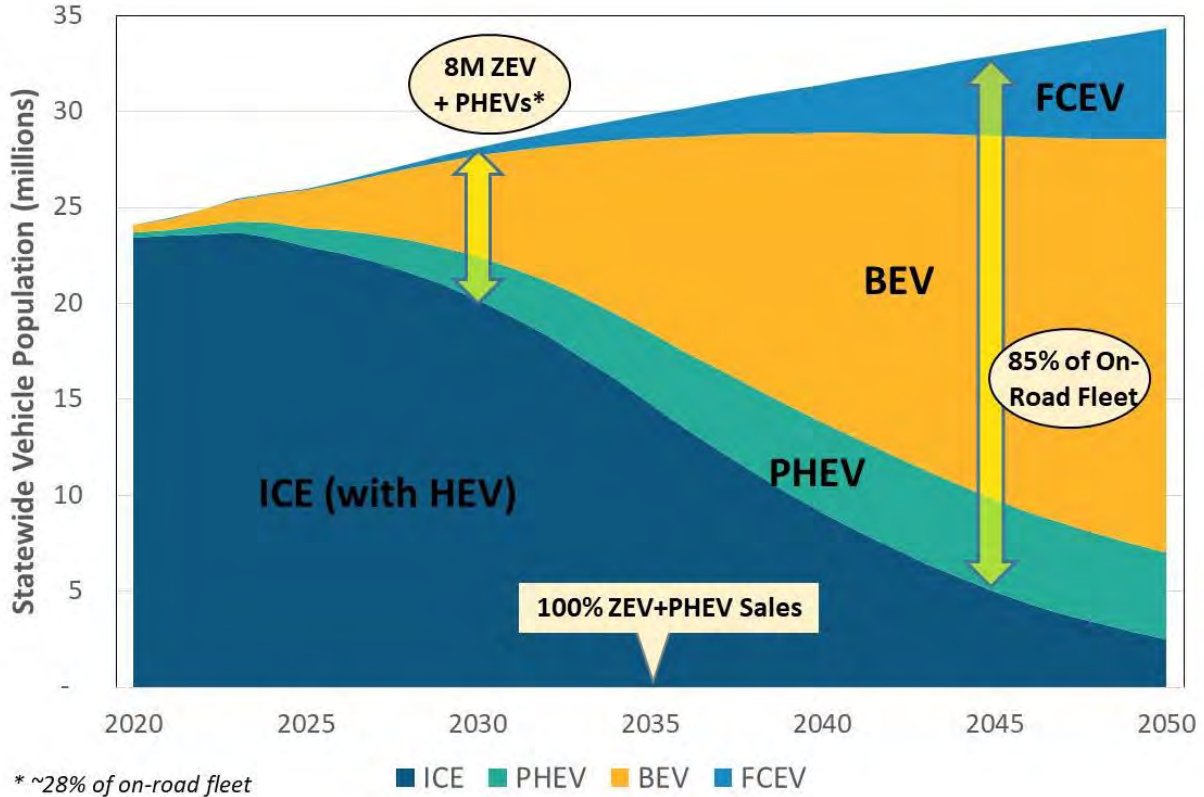
Second, new land use projects can influence transportation-related GHG emissions by reducing the amount of VMT associated with the project. Motor vehicle transportation does not need to be eliminated entirely in order for the land use sector to achieve carbon neutrality, as carbon-free vehicle technology 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



* ~28% of 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 adopted 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 in accordance 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 carbon neutrality by 2045 through the full implementation of the plan.

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 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 meet the 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.



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Alexander Crockett
Interim Acting Executive Officer/APCO

Date: March 24, 2022

Re: Proposed 2022 Mobile Source and Climate Impacts Committee Meeting Work Plan

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Mobile Source and Climate Impacts Committee (Committee) considers and recommends policies and positions of the District relating to transportation planning and funding, on-road and off-road mobile sources, and mobile source fuels. The Committee keeps itself informed on actions or proposed actions by local, regional, state and federal agencies affecting air pollutant emissions from mobile sources.

The Committee also considers and recommends to the Board of Directors policies and positions of the District relating to climate protection activities and funding relative to mobile sources. The Committee will also keep itself informed on actions and proposed actions by local, regional, state, federal, and international agencies and organizations relating to climate protection relative to mobile sources.

DISCUSSION

In order to facilitate the operations of the Committee, staff will share a proposed work plan for the meetings of the Committee in 2022.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Alexander Crockett
Interim Acting Executive Officer/APCO

Prepared by: Aloha de Guzman

Reviewed by: Damian Breen

ATTACHMENT:

1. Mobile Source and Climate Impacts Committee 2022 Workplan

Proposed 2022 Mobile Source and Climate Impacts Committee Meeting Workplan

Meeting Schedule	Topics
March	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • FYE 2023 TFCA Funding Allocation • Air District Grant Programs Overview
April	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • FYE 2022 TFCA County Program Manager Expenditure Plans
May	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • Updates to the TFCA Regional Fund Policies and Evaluation Criteria for FYE 2023 • TIO – Charge! recommendations • TIO – EV Council contractor recommendation
June	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000
July	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000
August	No meeting
September	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • Diesel Free by '33
October	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • Proposed Updates to the TFCA County Program Manager Fund Policies for FYE 2024
November	<ul style="list-style-type: none"> • No meeting
December	<ul style="list-style-type: none"> • Projects and Contracts with Proposed Grant Awards Over \$100,000 • Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for FYE 2021 • Transportation Fund for Clean Air Program Regional Fund Projects - Audit #22 Results