MEETING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BYRON SHER AUDITORIUM

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, NOVEMBER 17, 2022

9:03 A.M.

JAMES F. PETERS, CSR
CERTIFIED SHORTHAND REPORTER
LICENSE NUMBER 10063

APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

Sandra Berg, Vice Chair

John Balmes, MD

Hector De La Torre

John Eisenhut

Senator Dean Florez

Davina Hurt

Gideon Kracov

Senator Connie Leyva

Tania Pacheco-Werner, PhD

Barbara Riordan

Supervisor Phil Serna

Professor Dan Sperling, PhD

Diane Takvorian

STAFF:

Steve Cliff, PhD, Executive Officer

Edie Chang, Deputy Executive Officer, Planning, Freight, and Toxics

Chanell Fletcher, Deputy Executive Officer, Environmental Justice

Annette Hébert, Deputy Executive Officer, Southern California Headquarters and Mobile Source Compliance

APPEARANCES CONTINUED

STAFF:

Edna Murphy, Deputy Executive Officer, Internal Operations

Rajinder Sahota, Deputy Executive Officer, Climate Change and Research

Craig Segall, Deputy Executive Officer, Mobile Sources and Incentives

Ellen Peter, Chief Counsel

Peter Christensen, Branch Chief, Innovative Strategies Branch, Mobile Source Control Division (MSCD)

Nathan Dean, Air Pollution Specialist, Heavy Duty Off-Road Strategies Branch, MSCD

Graciela Garcia, Air Pollution Specialist, MSCD

Alexandra Kamel, Senior Attorney, Legal Office

Johanna Levine, Manager, Off-Road Implementation Section, MSCD

Rebecca Maddox, Senior CEQA Attorney, Legal Office

Lisa Macumber, Innovative Light-Duty Strategies Section, MSCD

April Molinelli, Senior Attorney, Legal Office

Lucina Negrete, Assistant Division Chief, MSCD

Scott Rowland, Branch Chief, Incentives and Technology Advancement Branch, MSCD

Maritess Sicat, Branch Chief, Heavy Duty Off-Road Strategies Branch, MSCD

Sydney Vergis, Division Chief, MSCD

APPEARANCES CONTINUED

ALSO PRESENT:

Angela Abuda, Environment California

Nicholas Armstrong, Teichert Materials

Lorna Avila, T.R.U.S.T. South LA

David Avina, Los Angeles Cleantech Incubator

Graham Balch, Green Yachts

Daniel Barad, Sierra Club California

Will Barrett, American Lung Association

Rebecca Baskins, California Advanced Biofuels Alliance, Clean Fuels Alliance America

Todd Bloomstine, Southern California Alliance for Jobs

Mike Buckantz, Associates Environmental

Teresa Bui, Pacific Environment

Michael Caprio, Republic Services

Christopher Chavez, Coalition for Clean Air

Brent Coffey, Sunbelt Rentals

Kristian Corby, California Electric Transportation Coalition

Matt Cremins, California-Nevada Conference of Operating Engineers

Tyson Eckerle, Governor's Office of Business and Economic Development

Denee Evans, City of Richmond

Jerry Fernandez, C&J Well Services, LLC

Sara Fitzsimon, California Hydrogen Business Council

Ashley Gerrity, The Greenlining Institute

APPEARANCES CONTINUED

ALSO PRESENT:

Omar Gonzales, Nikola Motor

Adam Harper, California Construction and Industrial Materials Association

Greg Hurner, Sportsfishing Association of California, Golden Gate Fishermen's Association

Manny Leon, California Alliance for Jobs

Rey Leon, The LEAP Institute

Michael Lewis, Construction Industry Air Quality Coalition

Bill Magavern, Coalition for Clean Air

Terry Manies, Orange EV

Ed Manning, Catalina Channel Express

Adrian Martinez, Earthjustice

Brian McDonald, Marathon

Alexia Mendez Martineau, Plug In America

Ivana Munguia, Thai Community Development Center

Annie Nam, Southern California Association of Governments

Natalie Nax, California Vanpool Authority

Amanda Parsons DeRosier, Global Clean Energy

Raef Porter, Sacramento Metropolitan Air District

Mary Alyssa Rancier, Associated General Contractors of California

Hannon Rasool, California Energy Commission

Greg Reading, U.S. Hybrid

Mark Roest, Sustainable Energy, Inc., Silicon Valley Clean Cities Coalition

APPEARANCES CONTINUED

ALSO PRESENT:

Parth Ruparel, ConMet eMobility

Nick Russo, Pedal Movement

Sasan Saadat, Earthjustice

Matt Schrap, Harbor Trucking Association

Andy Schwartz, Tesla

Bob Shepherd, Caterpillar

Chris Shimoda, California Trucking Association

Michael Sigala, Miocar

Keshia Thomas, Clean Shared Mobility Network

Orville Thomas, CALSTART

Tom Van Heeke, Rivian

Madison Vander Clay, Silicon Valley Leadership Group

Colin Wilhelm, Lightning eMotors

LaDonna Williams, All Positives Possible

Christine Wolfe, California Council for Environmental and Economic Balance

INDEX

INDEX CONTINUED

INDEX CONTINUED

PROCEEDINGS

CHAIR RANDOLPH: Okay. Good morning, everyone. The November 17th public meeting of the California Air Resources Board will come to order.

Board Clerk, will you please call the roll

BOARD CLERK GARCIA: Yes.

Dr. Balmes?

BOARD MEMBER BALMES: Here.

BOARD CLERK GARCIA: Mr. De La Torre?

Mr. Eisenhut?

BOARD MEMBER EISENHUT: Here.

BOARD CLERK GARCIA: Senator Florez?

BOARD MEMBER FLOREZ: Florez here.

BOARD CLERK GARCIA: Assembly Member Garcia?

Mrs. Hurt?

BOARD MEMBER HURT: Present.

BOARD CLERK GARCIA: Mr. Kracov?

BOARD MEMBER KRACOV: Here.

BOARD CLERK GARCIA: Senator Leyva?

Dr. Pacheco-Werner?

BOARD MEMBER PACHECO-WERNER: Here.

BOARD CLERK GARCIA: Mrs. Riordan?

BOARD MEMBER RIORDAN: Here.

BOARD CLERK GARCIA: Supervisor Serna?

BOARD MEMBER SERNA: Here.

BOARD CLERK GARCIA: Professor Sperling?
BOARD MEMBER SPERLING: Here.
BOARD CLERK GARCIA: Ms. Takvorian?
BOARD MEMBER TAKVORIAN: Here.
BOARD CLERK GARCIA: Supervisor Vargas?
Vice Chair Berg?
VICE CHAIR BERG: Here.
BOARD CLERK GARCIA: Chair Randolph?
CHAIR RANDOLPH: Here.
BOARD CLERK GARCIA: Madam Chair, we have a quorum.
CHAIR RANDOLPH: All right. Thank you. I will now cover a few housekeeping items before we get started. We are conducting today's meeting in person as well as offering remote options for public participation, both by phone and in Zoom. Anyone who wishes to testify in person should fill out a request to speak card available in the foyer outside the Board room. Please turn it into a Board assistant prior to the commencement of the item. If you are participating remotely, you will raise your hand in Zoom or dial star nine if calling in by phone. The Clerk will provide further details regarding how public participation will work in just a moment.
For safety reasons, please note the emergency exit to the rear of the room through the foyer. In the

event of a fire alarm, we are required to evacuate this room immediately and go down the stairs to the lobby and out of the building. When the all-clear signal is given, we will return to the auditorium and resume the hearing. A closed captioning feature is available for those of you joining us in the Zoom environment. In order to turn on subtitles, please look for button labeled "CC" at the bottom of the Zoom window and shown in the example on the screen now. I would like to take this opportunity to remind everyone to speak clearly and from a quiet location, whether you are joining us in Zoom or calling in by phone.

Interpretation services will be provided today in Spanish. If you are joining us using Zoom, there is a button labeled "Interpretation" on the Zoom screen. Click on that interpretation button and select Spanish to hear the meeting in Spanish. If you are joining us here in person and would like to listen to the meeting in Spanish, please notify a Board assistant and they will provide you with further instructions. I want to remind all of our speakers to speak slowly and pause intermittently to allow the interpreters the opportunity to accurately interpret your comments.

(Interpreter translated in Spanish).

CHAIR RANDOLPH: I will now ask the Board Clerk to provide more details regarding public participation.

BOARD CLERK GARCIA: Thank you, Chair Randolph. Good morning, every one. My name is Lindsay Garcia and I'm one of the Board clerks here at CARB.

I will be providing additional information on how public participation will be organized for today's meeting. We will first be calling on any in-person commenters who have turned in a request to speak card and then I will be calling on commenters who are joining us remotely. If you are joining us remotely and wish to make a verbal comment on one of today's Board items, you will need to be using Zoom webinar or calling in by telephone. If you are currently watching the webcast on CAL-SPAN but you wish to comment remotely, please register for the Zoom webinar or call in. Information for both of these can be found on the public agenda for today's meeting.

To make a verbal comment, we will be using the raise hand feature in Zoom. If you wish to speak on a Board item, please virtually raise your hand as soon as the item has begun to let us know you wish to speak. To do this, if you are using a computer or tablet, there is a raise hand button. And if you are calling in on the telephone, dial start nine to raise your hand. Even if you've previously indicated which item you wish to speak on when you registered, you must still raise your hand at the beginning of the item, so that you can be added to the queue.

And if you will be giving your verbal comment today in Spanish and require an interpreter's assistance, please indicate so at the beginning of your testimony and our translator will assist you. During you comment please pause after each sentence to allow for the interpreter to translate your comment into English.

When the comment period starts, the order of commenters will be determined by who raises their hand first. We will call each commenter by name and will activate each commenter's audio when it is their turn to speak. And for those calling in, we will identify you by the last three digits of your phone number. We will not show a list of remote commenters. However, we will be announcing the next three or so commenters in the queue, so you are ready to testify and know who is coming up next. Please note that you will not appear by video during your testimony. I would also like to remind everyone to please state your name for the record before you speak and this is especially important for those calling in by phone to testify on an item.

We will have a time limit for each commenter and we'll begin the comment period with a three-minute time limit, although this could change at the Chair's discretion. During public testimony, you will see a timer on the screen. For those calling in by phone, we will run the timer and let you know when you have 30 seconds left and when your time is up. If require Spanish interpretation for your comment, you time will be doubled.

If you wish to submit written comments today, please visit CARB's send us your comments page or look at the public agenda on our webpage for links to send these documents electronically. Written comments will be accepted on each item until the Chair closes the record for that Board item.

And if you experience any technical difficulties, please call (805)772-2715 so that an IT person can assist. This number is also noted on the public agenda.

Thank you. I'd like to turn the microphone back to Chair Randolph now.

CHAIR RANDOLPH: All right. Thank you. Before we begin today's proceedings, I wanted to make a brief announcement about the upcoming Haagen-Smit Clean Air Award. Considered the Nobel Prize in air quality achievement, CARB has given the awards annually since 2001 to individuals who have made transformative contributions to improving air quality and/or addressing climate change. The award is named after Dr. Arie Haagen-Smit whose pioneering research established the link between smog and the vehicle and industrial exhaust underlying it and led to a complete transformation of air pollution control, not only in California, but also around the world.

Dr. Haagen-Smit's leadership as CARB's first Chair helped establish health protective air quality policies and standards. The Clean Air Awards recognize those who embody Dr. Haagen-Smit's legacy, with work that has similar substantial and lasting impacts on the fight against air pollution and climate change, whether by advancing science and technology itself or through leadership in environmental policy. In keeping with Dr. Haagen-Smit's global legacy along with CARB's ongoing international leadership, the awards honor both those with international accomplishments and those who have acted locally.

We are excited to be accepting nominations from the public for the Haagen-Smit Clean Air Awards from now through December 16th. Please visit our website at the address shown on the slide to submit a nomination. Awards will be presented in late spring of 2023. So please nominate your clean air hero.

Finally, I want to acknowledge that today is Senator Leyva's final Board meeting. Senator Leyva represents the 20th State Senate District and was appointed as ex officio Board member by the Senate in June

2021. Both during her time on the Board and over the course of her year in the Senate, Senator Leyva has worked to promote clean air and a healthy environment with a particular focus on environmental justice and low-income communities.

A particular highlight of Senator Leyva's time on the board was the passage of the Heavy-Duty Inspection and Maintenance Regulation last year, better known as the Smog Check for Trucks, which CARB developed under the direction of her bill SB 210. We are so grateful to Senator Leyva for her service during her time on the Board. We are grateful for her leadership, her deep care for communities impacted by air pollution, and for her wonderful sense of humor. And so we will miss her very much on the Board and we wish her well in her future endeavors.

Senator Leyva, I don't know if you want to just say a few words.

SENATOR LEYVA: I would love to. Thank you, Madam Chair. This has just been an absolute honor and pleasure for me to serve on the CARB board. All of the members of the Board are just amazing and I just appreciate that I've gotten to be with all of you, learn from all of you, and I will miss so much not being a part of this Board, because I, too, have learned so much. And you just do great work.

And I thank you, because I think of the communities that I have represented in Senate District 20. And we don't have electeds there that really care about the air quality, but you do. And you're doing great things and making changes that will help all of my constituents, because even though I'll be gone, they will still be my people. So I just thank you and it's been a real honor to serve with all of you.

Keep up the great work.

(Applause).

BOARD MEMBER BALMES: And Senator Leyva, I just want to add a personal note of thanks for your time on the Board. I've really appreciated your enthusiasm and passion for the air quality and climate change policies that we are trying to move forward. It's -- I wish all legislators were as passionate about those issues as you are.

Thank you.

SENATOR LEYVA: Thank you, Dr. Balmes.

CHAIR RANDOLPH: All right.

BOARD MEMBER TAKVORIAN: Can I just --

CHAIR RANDOLPH: Oh, sorry. Yes.

BOARD MEMBER TAKVORIAN: I'm sorry. I just -- I can't let you go, Senator, without saying I remember our first meeting, which was before you were an elected official, and you were just as passionate and just as articulate on a toxic tour that we did in the Inland Valley. So thank you for bringing all of that passion, and inspiration, and smarts to the California Legislature and to CARB. Really appreciate having the opportunity to work with you.

SENATOR LEYVA: Thank you, Board Member Takvorian. I remember that too.

CHAIR RANDOLPH: All right. Okay.

The first item on today's agenda is Item number 22-15-1, public meeting to consider the Coachella Valley 75 ppb 8-hour ozone reasonable further progress State Implement Plan. If you are here with us in the room and wish to comment on this item, please fill out a request to speak card as soon as possible and submit it to a Board assistant. If you are joining us remotely and wish to comment on this item, please click the raise hand button or dial star nine now. We will call on both in-person and remote commenters when we get to the public comment portion of this item.

Dr. Cliff, would you please summarize the item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. And if you would allow me, I'd also like to thank Senator Leyva before I start this. Senator Leyva, really appreciate your service and excellent, excellent work on SB 210. Really enjoyed working with you on getting that through.

Thank you.

SENATOR LEYVA: Thank you. And appreciate all your help. Couldn't have done it without you.

EXECUTIVE OFFICER CLIFF: In 2017, this Board adopted the 2016 South Coast Air Quality Management Plan that included the Coachella Valley 75 parts per billion 8-hour ozone severe SIP. Along with the attainment demonstration, it included a reasonable further progress demonstration and corresponding motor vehicle emission budgets. U.S. EPA approved it in October 2020.

Motor vehicle budgets are established so transportation activities, such as regional transportation plans, do not interfere with attainment or maintenance of air quality standards. The severe SIP relied on budgets developed using CARB's On-Road Mobile Source Emissions Factor model, EMFAC2014.

On August 15th, 2019, U.S. EPA approved the updated version of our model EMFAC2017. Due to updated emissions rates identified through CARB testing EMFAC2017 reflects higher emissions from heavy-duty trucks than previously estimated. Thus, future year mobile emissions are estimated to be higher than estimated by EMFAC2014 in many areas of the state, including the Coachella Valley, even though vehicle miles traveled have not increased.

Transportation agencies are now required to use EMFAC2017 to estimate emissions, and given these higher emission rates, it's no longer possible to demonstrate conformity to the EPA approved Coachella Valley severe SIP. This has resulted in a conformity lockdown in the Southern California region and the delay of federal transportation funding.

To update the 75 ppb ozone budgets with EMFAC2017 and to align the area's classification with its classification under other ozone standards, the South Coast Air Quality Management District has requested that the Coachella Valley be classified as extreme for the 75 ppb ozone standard. The new classification requires that we submit a new SIP meeting Clean Air Act requirements for an extreme ozone area. While the District will develop the attainment demonstration next year, to stop the conformity lockdown and allow new transportation plans to be developed in the Coachella Valley, the District adopted a SIP revision updating the motor vehicle budgets with EMFAC2017 and demonstrating the area as progressing toward attainment of the standard.

CARB staff recommends the Board adopt the Coachella Valley 75 Ppb 8-hour ozone reasonable further progress State Implementation Plan as a revision to the

California SIP and direct staff to submit it to U.S. EPA.

This concludes my summary of the item. Thank you.

CHAIR RANDOLPH: All right. Thank you.

We will now hear from the public who raised their hand to speak on this item. Board Clerk, do you have commenters to call?

BOARD CLERK GARCIA: Thank you. We don't have any in-person commenters for this item. We have two remote commenters. So we'll hear from Christopher Chavez and Annie Nam.

So, Christopher, I have activated your microphone. Please unmute and begin.

CHRISTOPHER CHAVEZ: Great. Thank you very much. My name is Chris Chavez I'm the deputy policy director at Coalition for Clean Air. First, before beginning, definitely want to join in in thanking Senator Leyva and thanking her for partnership with SB 210. I know our organization greatly appreciates the very good working relationship that we've had over the years.

Regarding the item specifically, certainly we understand that transportation funding is at risk and that it would have a significant impact on Souther California's transportation planning. However, I think it's so important that we recognize that the pollution in the

Coachella valley is higher than what we were originally anticipating, which means that people living in that region are breathing in more pollution and having their health impacted all the more.

Further, I think it's important to recognize that the -- that reclassifying the use of Coachella Valley in being in extreme nonattainment will give the Southern California Association of Governments, our local MPO, or Metropolitan Planning Organization, a larger emissions budget to work with. Additionally, it will give the South Coast AQMD, Air Quality Management District, more time to meet the standards. I believe the -- it moves up the attainment deadline to 2031, which, you know, originally was around 2037 -- or 2027, 2028.

So I think all those things are -- need to be up -- lifted up, need to be recognized that while this is a really, in some ways, a technical move, it also does have implications for the State's ability to meet attainment in the near future, as well as implications for the folks living in the Eastern Coachella Valley region.

As we know Southern California is home to the smoggiest air in the country and some of the most polluted in terms of particulate matter. So it really represents that attainment is even further away for California than what we originally anticipated.

So thank you for your time.

BOARD CLERK GARCIA: Thank you.

Next, we'll hear from Annie Nam. Annie, I've activated your microphone. Please unmute and begin.

ANNIE NAM: Hi. Good morning. My name is Annie Nam, Deputy Director of Planning for the Transportation at the Southern California Association of Governments.

On behalf of SCAG, I'd like to offer our strong support for the South Coast Air Quality Management District Coachella Valley RFP SIP, including the motor vehicle emission budgets as presented by your staff. I also respectfully request your approval of your staff recommendations.

SCAG is the Metropolitan Planning Organization for six county Southern California region, which includes the entire South Coast AQMD jurisdiction. SCAG develops Regional Transportation Plan and Sustainable Communities Strategy as a long-range visioning plan that balances future mobility and housing needs with economic and environmental goals for the SCAG region. We also prepare that short-term Federal Transportation Improvement Program that essentially implements RTP SCS. Both the RTP SCS and the FTIP are required to demonstrate transportation conformity to be consistent with the objectives of AQMPs and SIPs, due to the significant changes in ARB's emission model. The entire SCAG region is currently under a transportation conformity lockdown. It is important to note that the Coachella ozone budget shortfalls are a result of change in ARB's EMFAC models and not due to relaxation in the regulations, policies, programs, or projects of ARB, South Coast AQMD, and/or SCAG.

To the contrary, we have been doing more as evidenced in our respective plans and programs. The conformity lockdown is impacting over $26 billion worth of transportation projects, including transit projects. Because SCAG cannot add new transportation projects or amend current transportation projects in our FTIP and RTP SCS, per the constraints of the conformity lockdown. Although the economy remains relatively strong in the SCAG region, the continuation of the conformity lockdown could seriously impact the regional economy and jobs, because these impacted transportation projects could not move forward with implementation.

The management, legal, and planning staff of AQMD, ARB, EPA, and SCAG have been working very closely together over the last year to address the conformity lockdown. And the RFP SIP presented by your staff is a critical solution to identified -- identified by the four agencies that will most expeditiously resolve the conformity lockdown.

In addition to the South Coast -- in addition, the South Coast AQMD governing board has adopted the RFP SIP and the motor vehicle emission budgets. Therefore, we request an appreciate your consideration and approval of the recommendations from your staff.

Thank you.

BOARD CLERK GARCIA: Thank you.

And that concludes the commenters for this item.

CHAIR RANDOLPH: All right. Thank you.

I will now close the record on this agenda item.

I have a couple Board members with their hands up. Board Member Kracov.

BOARD MEMBER KRACOV: Yes. Thank you, Chair. I'm participating remotely today and off camera just recovering from some elective surgery, but I'm on the mend and will see you all in December.

First, I want to thank Senator Leyva for her service. One of the commenters mentioned it, but every time we see those significant reductions from the Heavy-Duty Smog Check Program and SB 210, that was Senator Leyva's work. So what a terrific legacy. I think it's probably the most significant smog reduction measure that many of us have had the chance to vote on as members of this Board, and that's thanks to Senator Leyva's work. So what a terrific legacy. Big shoes to fill and you will be missed, Senator.

SENATOR LEYVA: Thanks. Thank you, Gideon.

BOARD MEMBER KRACOV: As for this -- you bet. As for this item, I'll be supporting it. As the commenters, Mr. Chavez, Ms. Nam noted, this is mostly a technical change to the motor vehicle budgets having to do with ozone. We definitely want to avoid a conformity lockdown in the South Coast region. Supervisor Manuel Perez from Riverside, who sits on the AQMD Board supported this measure. It got unanimous support really without any stakeholder opposition at the South Coast. And for that reason, I'll be supporting the staff recommendation today.

CHAIR RANDOLPH: Thank you.

Board Member Riordan.

BOARD MEMBER RIORDAN: Thank you, Madam Chair. I was going to second Mr. Kracov's hopeful motion, and I would do that, because I think this is an opportunity working together that we can solve a whole lot of problems, so that was my reason for my hand raising.

However, I do want to say to Senator Leyva, thank you so much for your service. And I am the lucky one, because you're going to still be here in the Inland Empire and we are so happy with your new job and look forward to working with you.

SENATOR LEYVA: Thank you, Barbara.

CHAIR RANDOLPH: All right. Thank you.

Okay. Board Member Kracov, do you want to make a motion?

BOARD MEMBER KRACOV: Sure I'll make the motion to approve Item 22-15-1 to consider the Coachella Valley 75 part per billion 8-hour ozone reasonable further progress State Implementation Plan.

CHAIR RANDOLPH: All right. And Board Member Riordan, do you want to second that?

BOARD MEMBER RIORDAN: I do want to second that. Thank you.

CHAIR RANDOLPH: All right. Thank you. Clerk, can you please call the roll.

BOARD CLERK GARCIA: Yes.

Dr. Balmes?

BOARD MEMBER BALMES: Yes.

BOARD CLERK GARCIA: Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Aye.

BOARD CLERK GARCIA: Yes. Okay. Thank you.

Mr. Eisenhut?

BOARD MEMBER EISENHUT: Aye.

BOARD CLERK GARCIA: Sensor Florez?

BOARD MEMBER FLOREZ: Florez, aye.

BOARD CLERK GARCIA: Ms. Hurt?

BOARD MEMBER HURT: Aye.

BOARD CLERK GARCIA: Mr. Kracov?

BOARD MEMBER KRACOV: Yes.

BOARD CLERK GARCIA: Dr. Pacheco-Werner?

BOARD MEMBER PACHECO-WERNER: Yes.

BOARD CLERK GARCIA: Mrs. Riordan?

BOARD MEMBER RIORDAN: Aye.

BOARD CLERK GARCIA: Supervisor Serna?

BOARD MEMBER SERNA: Aye.

BOARD CLERK GARCIA: Professor Sperling?

BOARD MEMBER SPERLING: Aye.

BOARD CLERK GARCIA: Ms. Takvorian?

BOARD MEMBER TAKVORIAN: Aye.

BOARD CLERK GARCIA: Supervisor Vargas?

Vice Chair Berg?

VICE CHAIR BERG: Aye.

BOARD CLERK GARCIA: Chair Randolph?

CHAIR RANDOLPH: Yes.

BOARD CLERK GARCIA: Madam Chair, the motion passes.

CHAIR RANDOLPH: All right. Thank you. The next item on the agenda is Item number 22-15-2, proposed contract with University of California, Davis, titled, "Research Study: Impacts and Implications of California Housing and Transportation Costs".

If are you here with us in the room and wish to comment on this item please fill out a request to speak card as soon as possible and submit it to a Board assistant. If you are joining us remotely and wish to comment on this item, please click the raise hand button or dial star nine now. We will call on both in-person and remote commenters when we get to the public comment portion of this item.

This item is listed on the agenda to comply with Board approval requirements in Government Code section 1091, because two of our Board members are affiliated with UC Davis. Therefore, Board members Berg and Sperling will abstain from the discussion and vote.

Dr. Cliff, would you please summarize the item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. This item is a proposed contract that will help CARB develop estimates of housing and transportation cost burdens across California, as well as policies to reduce the combined cost burdens in the most impacted populations. Existing data do not provide an adequate level of detail on California communities or fully characterize the housing and transportation cost trade-offs that the most vulnerable households might make when they decide where to live.

This proposed study will develop a housing and transportation cost estimate methodology analyzing implications of State policy on costs for priority populations and contextualize the factors that impact location affordability with lived experiences. Approval by the Board will authorize staff to put this contract into place.

This concludes my summary of the item. Thank you

CHAIR RANDOLPH: All right. Thank you. We will now hear from the public who raised their hand to speak on this item. Will the Board clerk please call the commenters.

BOARD CLERK GARCIA: We have no commenters for this item.

CHAIR RANDOLPH: All right. I will now close the record on this item.

Do I have a motion and a second to approve the item and have staff proceed with executing the contract?

BOARD MEMBER BALMES: I move approve to approve the item.

BOARD MEMBER TAKVORIAN: I second it.

BOARD MEMBER HURT: Second.

CHAIR RANDOLPH: All right. Clerk, would you please call the roll.

CHAIR RANDOLPH: Yes.

Dr. Balmes?

BOARD MEMBER BALMES: Yes.

BOARD CLERK GARCIA: Mr. De La Torre?
BOARD MEMBER DE LA TORRE: Yes.
BOARD CLERK GARCIA: Mr. Eisenhut?
BOARD MEMBER EISENHUT: Aye.
BOARD CLERK GARCIA: Senator Florez?
BOARD MEMBER FLOREZ: Aye.
BOARD CLERK GARCIA: Ms. Hurt?
BOARD MEMBER HURT: Aye.
BOARD CLERK GARCIA: Mr. Kracov?
BOARD MEMBER KRACOV: Yes.
BOARD CLERK GARCIA: Dr. Pacheco-Werner?
BOARD MEMBER PACHECO-WERNER: Yes.
BOARD CLERK GARCIA: Mrs. Riordan?
BOARD MEMBER RIORDAN: Aye.
BOARD CLERK GARCIA: Supervisor Serna?
BOARD MEMBER SERNA: Aye.
BOARD CLERK GARCIA: Ms. Takvorian?
BOARD MEMBER TAKVORIAN: Aye.
BOARD CLERK GARCIA: Supervisor Vargas? Vice Chair -- I'm sorry. Chair Randolph?
CHAIR RANDOLPH: Yes.
BOARD CLERK GARCIA: Madam Chair, the motion passes.
CHAIR RANDOLPH: All right. Thank you. The next item on the agenda is Item number

22-15-3, proposed contract with the University of California, Davis, titled, "Research Study: State of Zero-Emission Vehicle Secondary Market and Accessibility Impacts in California's Underserved Communities".

If you are here with us in the room and wish to comment on this item, please fill out a request-to-speak card as soon as possible and submit it to the Board clerks. And if you are joining us remotely, please click the raise hand button or dial star nine now.

This item is listed on the agenda to comply with Board approval requirements in Government Code section 1090. Because two of our Board members are affiliated with UC Davis, therefore Board Members Berg and Sperling will abstain from the discussion and vote.

Dr. Cliff, would you please summarize the item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. This item is proposed contract that will help inform CARB's light-duty ZEV incentives and regulations whose goal is to expand equitable access to ZEVs to all Californians. Used vehicles make up two-thirds of vehicles purchased making the secondary ZEV market an important component of the State's ZEV deployment.

This project will survey used ZEV owners to advance our understanding of who buys used ZEVs, their motivations, and experiences. Understanding car buyers experience, accessing and utilizing used ZEVs is particularly important for lower income households for whom quality used ZEVs is especially significant. Additionally, this project will also analyze the movement of ZEVs across State lines and the impact of CARB's light-duty ZEV incentive programs on the used ZEV market. Approval by the Board will authorize staff to put this contract into place. This concludes my summary of the item. Thank you.

CHAIR RANDOLPH: Thank you.

Board clerk, do we have any members of the public commenting on this item.

BOARD CLERK GARCIA: No commenters for this item.

CHAIR RANDOLPH: All right. I will now close the record on this agenda item.

Do I have a motion and a second to approve the item and have staff proceed with executing the contract?

BOARD MEMBER TAKVORIAN: I'd like to move approval of the item and express a lot of excitement about it. It's really overdue and glad that we're doing this. So thank you to the researchers. Good luck.

BOARD MEMBER BALMES: I'll second.

CHAIR RANDOLPH: Okay. We have a motion and a second.

Clerk, would you please call the roll.

BOARD CLERK ESTABROOK: Dr. Balmes?
BOARD MEMBER BALMES: Yes.
BOARD CLERK GARCIA: Mr. De La Torre?
BOARD MEMBER DE LA TORRE: Yes.
BOARD CLERK GARCIA: Thank you.
Mr. Eisenhut?
BOARD MEMBER EISENHUT: Yes.
BOARD CLERK GARCIA: Senator Florez?
BOARD MEMBER FLOREZ: Florez, aye.
BOARD CLERK GARCIA: Ms. Hurt?
BOARD MEMBER HURT: Aye.
BOARD CLERK GARCIA: Mr. Kracov?
BOARD MEMBER KRACOV: Yes.
BOARD CLERK GARCIA: Dr. Pacheco-Werner?
BOARD MEMBER PACHECO-WERNER: Yes.
BOARD CLERK GARCIA: Mrs. Riordan?
BOARD MEMBER RIORDAN: Aye.
BOARD CLERK GARCIA: Supervisor Serna?
BOARD MEMBER SERNA: Aye.
BOARD CLERK GARCIA: Ms. Takvorian?
BOARD MEMBER TAKVORIAN: Aye.
BOARD CLERK GARCIA: Supervisor Vargas?
Chair Randolph?
CHAIR RANDOLPH: Yes.
BOARD CLERK GARCIA: Madam Chair, the motion

passes.

CHAIR RANDOLPH: All right. Thank you.

The next item on the agenda is Item number 22-15-4, proposed amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation.

If you are here with us in the room and wish to comment on this item, please fill out a request to speak card as soon as possible and submit it to the Board assistant. If you are joining us remotely and wish to comment on this item, please click the raise hand button or dial star nine now. We will call on both in-person and remote commenters when we get to the public comment portion of this item.

The Off-Road Regulation was adopted in 2007 with the goal of reducing diesel particulate matter, NOx, and other criteria air pollutants from in-use off-road diesel-fueled vehicles operating in California. This regulation has been effective in reducing these pollutants, but now, 15 years later, it is critical that the off-road diesel sector take the next step to upgrade to readily available cleaner technology, to further reduce harmful emissions, and improve public health in California.

These proposed amendments also constitute one of the control measures identified in the 2022 State SIP

Strategy, which the Board adopted just two months ago. In the State Implementation Plan, CARB committed to propose these amendments with the goal of achieving four tons per day of NOx reductions by 2037 to meet the Federal National Ambient Air Quality Standards set by U.S. EPA.

The proposed amendments that we hear today are critical both to meet our statewide SIP commitments and to reduce exposure to air pollutants and improve public health outcomes in communities throughout California, particularly in communities that experience disproportionate cumulative pollution burdens from exposure to air contaminants.

Dr. Cliff, would you please introduce this item?

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. As you noted, these proposed amendments are an important step in reducing diesel particulate matter and NOx emissions throughout California to meet federal air quality mandates. Although the current regulation has achieved significant reductions by implementing a declining fleet average emission target that required fleets to gradually turnover their older vehicles over about a ten year period. The current rules would still allow fleets to use vehicles with older tiered engines indefinitely, even though there are much better options now available.

This means there is the potential for fleets to continue to operate old and highly polluting off-road diesel vehicles, such as vehicles with Tier 0 engines, which produce approximately 80 times higher NOx emissions compared to vehicles with Tier 4 final engines, resulting in lost emission reductions that threaten public health in the state and are needed to meet our State Implementation Plan targets.

To address this issue, staff have developed proposed amendments to the Off-Road Regulation that will target emissions from these older highly polluting engines in California. The proposed amendments also include a renewable diesel fuel requirement that will achieve additional near-term NOx and PM reductions statewide; contracting requirements that will require hiring entities to verify fleet-level compliance with the intent of ensuring emission reductions are achieved reducing unfair competition between fleets and supporting CARB's enforcement efforts; and two voluntary zero-emission components that will provide flexibility to fleets that adopt zero-emission vehicles with the intent of supporting the Governor's Executive Order N-79-20 and encouraging the deployment of zero-emission technology in the off-road sector.

Today, we will hear about the proposal for the amendments to the Off-Road Diesel Regulation, as well as the estimated emission reduction benefits and costs of these proposed amendments. I will now ask Nathan Dean of the Mobile Source Control Division to begin the staff presentation.

Nathan

(Thereupon a slide presentation).

MSCD AIR POLLUTION SPECIALIST DEAN: Thank you, Dr. Cliff. And good morning, Chair Randolph and members of the Board. I'm pleased to be presenting staff's proposal for amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation for your consideration today.

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MSCD AIR POLLUTION SPECIALIST DEAN: In this presentation, I will provide background information on the existing Off-Road Diesel Regulation and the air quality goals driving these proposed amendments, an overview of staff's proposal, along with a discussion of the potential benefits and costs associated with the proposal, and lastly staff's recommendation.

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MSCD AIR POLLUTION SPECIALIST DEAN: Across the entire state of California, approximately 70 percent of Californians are breathing unhealthy air. This map of

California, which displays the regions in California that are designated as nonattainment for the most recent Federal National Ambient Air Quality Standards for ozone and PM2.5 highlights just how many communities in California still face challenges with air quality issues. In addition to these regional concerns around ozone an PM2.5, diesel particulate matter poses a significant health risk at the local level to all Californians that live and work near vehicles and equipment that emit diesel exhaust. And it is critically important that action is taken to reduce these adverse health impacts for all communities throughout California, especially disadvantaged and low-income communities.

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MSCD AIR POLLUTION SPECIALIST DEAN: The 2022 State Strategy for the State Implementation Plan, which was just adopted by the Board a few months ago and is intended to demonstrate how California will reach federal attainment for ozone and PM2.5 outlines today's proposal as a key strategy needed to achieve those federal air quality standards. The 2022 SIP commits to achieving statewide emission reductions of four tons per day of nitrogen oxides as well as 0.3 tons per day of reactive organic gases by 2037, specifically through the proposal that staff is bringing before the Board today. These reductions represent a very real benefit to the communities and vehicle operators in California that are facing the impacts of diesel exhaust.

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MSCD AIR POLLUTION SPECIALIST DEAN: Next, I'd like to briefly discuss what vehicles we are talking about today and provide an overview of the current Off-Road Diesel Regulation. The Off-Road Diesel Regulation, which was originally approved in 2007, covers off-road mobile self-propelled diesel-fueled vehicles that are 25 horsepower or greater. This generally means equipment used in construction, mining, and other industrial operations and this also includes equipment that is owned by government fleets at all levels. The current regulation requires fleets that own this type of equipment to gradually clean up their fleet via retirement, engine replacements, or retrofits by implementing declining emission-based fleet average targets that each fleet must achieve by certain years. The current regulation also prohibits the addition Tier 0 to Tier 2 vehicles, requires labeling of vehicles and annual reporting by fleets, and includes idling requirements. For over a decade, CARB has had a dedicated team of full-time implementation staff, including a call-in line focused on the implementation of the current regulation and this team will continue to implement the proposed amendments.

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MSCD AIR POLLUTION SPECIALIST DEAN: As seen in this the chart comparing the emission factors by the various tiers of diesel engines, it is clear that the older vehicles produce far more harmful air emissions than the technology that is readily available today. A Tier 4 final engine, which has been produced since 2015 and is available in all horsepower ranges emits approximately 80 times less nitrogen oxides than a Tier 0 engine. This is why staff's proposal today is recommending a ban on the operations of these older tiers of equipment.

Given the significant reductions that come from the cleaner equipment, it is critical that our air quality goals and for our impacted communities to move to the higher tiers as soon as possible.

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MSCD AIR POLLUTION SPECIALIST DEAN: Before I provide an overview of the proposed amendments, I want to highlight that the -- where these fit into CARB's overall approach to the off-road sector over the coming years. Note that CARB is taking actions in a variety of off-road categories in addition to the construction and mining equipment under discussion today, both on the cleaner combustion side as well as the zero-emission side. It's important to keep in mind that the proposed amendments are one piece of a larger picture with the overarching goals of achieving near-term criteria pollutant emission reductions, as well as transitioning to California's long-term zero-emission future, and each piece of this timeline has a distinct role in meeting these two critical goals.

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MSCD AIR POLLUTION SPECIALIST DEAN: Now, I will discuss staff's proposal in more detail and begin by highlighting the overarching goals for the proposed amendments to the Off-Road Diesel Regulation.

First and foremost, the main goal of the proposed amendments is to achieve additional emission reductions, as I discussed in the last few slides. Supporting the SIP emission reduction goals to reduce ozone and PM pollution and reducing diesel particulate matter throughout California were the most important drivers when developing a proposal.

Another goal of the proposed amendments is to enhance enforceability of the regulation. CARB has over a decade of experience enforcing and implementing the regulation, and strong enforcement is critical in order to maintain a level playing field for compliant fleets conducting business in California, and to ensure that the projected emission reductions are being achieved in-use. Several adjustment were made to the regulation with this goal in mind, particularly centered around the entities that are responsible for hiring fleets subject to the regulation.

And the last goal staff wanted to highlight was the critical push for zero-emission technology. There's no denying that the long-term future for California is zero-emission. This is highlighted in the Governor's Executive Order N-79-20, which set an ambitious goal of transitioning off-road equipment to zero-emission operations by 2035 where feasible.

Although the focus of staff's proposal is to meet our SIP commitments and achieve near-term emission reductions, we also wanted to be cognizant of our long-term zero-emission goals. Currently, commercialized zero-emission technology that could do the work of the vehicles covered under this regulation are generally limited to the lower horsepower ranges, and specific equipment types such as lifts, small wheel loaders, and skid steer loaders. However, staff wanted to ensure that there were pathways within the framework of the regulation to encourage zero-emission adoption

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MSCD AIR POLLUTION SPECIALIST DEAN: The proposal you'll hear about today was developed through an 18-month public process, which included three workshops, three work groups, and over 30 individual stakeholder meetings. The major elements of the proposal include phasing out the operation of the oldest and dirtiest off-road diesel vehicles, expanding the ban on adding vehicles in the regulation, requiring the use of renewable diesel, introducing new contracting requirements, and providing flexibility options to encourage the adoption of zero-emission technology.

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MSCD AIR POLLUTION SPECIALIST DEAN: The first major element of the proposal involves phasing out the oldest off-road diesel engines. This phaseout, which targets Tier 0, 1, and 2 engines has different implementation schedules based on the size of the fleet, as seen in this table. Large fleets have the first phaseout, which bans the operation of all Tier 0 vehicles starting on January 1, 2024. And then two years later, the Tier 1 phaseout is in effect for large fleets, and two years after that is Tier 2.

This structure is the same for medium and small fleets, but start in later years. These requirements are designed to be complementary to the current regulation's fleet average targets. There are a few special notes I wanted to mention. First you'll notice that on-road model year engines are also included in these requirements, and that is because there are a very limited number of vehicles with on-road engines that are subject to this regulation.

Second, ultra small fleets, which are less than 500 horsepower were provided additional years to comply with the Tier 2 phaseout, specifically to provide smaller businesses more time to plan for the replacement of their Tier 2 vehicles as these entities could face additional financial challenges to comply.

And lastly, there are certain vehicles in the regulation that will remain exempted from these tier phaseouts, most notably, are low-use vehicles, vehicles used in emergency operations, and dedicated snow removal vehicles.

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MSCD AIR POLLUTION SPECIALIST DEAN: The next piece of the proposal goes hand in hand with the tier phaseout requirements. To ensure the emission reduction goals are achieved, staff's proposal expands the existing ban on vehicle adding, so that fleets will be required to replace their older tiered equipment with at a minimum, the cleanest combustion technology that is available today, which is Tier 4 final.

The current regulation already prevents fleets from adding vehicles for Tier 0 through 2 engines into their fleet. And staff's proposal expands this to Tier 3 and Tier 4 interim in the timeline shown in the table. The proposal does not limit the use of Tier 3 or Tier 4 interims already in a fleet.

One special note again is that ultra small fleets would be allowed to add Tier 4 interim vehicles through 2035. Stakeholders raised concerns with preventing fleets from adding these vehicles, because this could potentially hinder large fleet's abilities to sell these vehicles in California, hurting their resell value. On the other hand, we also heard feedback that small businesses could face financial challenges with purchasing Tier 4 final vehicles when faced with the tier phaseout requirements.

To help address both these concerns, staff is proposing to allow ultra small fleets to add Tier 4 interim vehicles, which will emit much fewer harmful air emissions compared to Tier 0 through 2 engines for a longer period of time. This provides a resell market in California for the largest fleets to sell these vehicles and provides a less costly compliance alternative for the ultra small fleets.

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MSCD AIR POLLUTION SPECIALIST DEAN: Staff is proposing that all off-road diesel fleets in California will be required to use 99 percent or 100 percent renewable diesel starting on January 1, 2024. Renewable diesel is a drop-in fuel, meaning it meets the same requirements as conventional CARB ultra low sulfur diesel, can be used interchangeably or in combination with CARB diesel, and requires no infrastructure changes or engine modifications. Using renewable diesel in Tier 4 interim and older vehicles reduces NOx emissions by approximately 10 percent and PM emissions by approximately 30 percent compared to CARB diesel.

Based on staff's analysis of historical price information, the program -- with programs such as LCFS factored in, the cost of renewable diesel to fleets is the same as that of CARB diesel. The 2022 off-road inventory estimates that vehicles subject to the Off-Road Regulation use about 270 million gallons of diesel annually, while the LCFS dashboard reported over 900 million gallons of renewable diesel in 2021 with several large renewable diesel production facilities coming online between now and 2024, which will increase this capacity.

All this is to say that renewable diesel is available at cost parity for fleets, does not require any equipment alterations, and will achieve significant early emission reductions that are especially needed for communities. To ensure compliance with this new requirement, there will also be an attestation required during the already established annual reporting by fleets, as well as a record keeping requirement.

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MSCD AIR POLLUTION SPECIALIST DEAN: Staff's proposal includes several limited exemptions to the renewable diesel requirement. First, captive attainment fleets, which are defined in the current regulation as specific regions that are in attainment with the federal ambient air quality standards are not required to use renewable diesel.

Second, fleets that are comprised entirely of Tier 4 final or zero-emission vehicles are exempt. As mentioned previously, the NOx and PM emission reductions are seen in Tier 4 interim and older vehicles because engines with SCR and DPF controls, such as Tier 4 final, show minimal emission reductions when compared to CARB diesel use. For this reason, fleets that only have Tier 4 final vehicles or zero-emission vehicles would potentially not see much of an emission benefit when using renewable diesel, so staff has proposed to exempt these fleets.

Third, although the capacity of renewable diesel in California is able to meet the off-road diesel sector's fuel demands, staff understands that there could be very targeted situations where a fleet might be unable to procure renewable diesel. For this reason, an exemption is proposed where if a fleet is unable to obtain renewable diesel, then the fleet will not face noncompliance for failing to use it.

In order to prevent abuse of this exemption, the fleet must keep records that describe their normal refueling method, records that describe why they were unable to obtain renewable diesel via their normal refueling method, and documentation supporting their inability to obtain renewable diesel.

Lastly, over the last few weeks, we have heard from stakeholders that renewable diesel could face performance issues in very low temperature climates. Staff agrees that we would not want fleets to face these potential performance issues and are considering 15-day changes that allow blending of low temperature fossil fuel with renewable diesel under certain conditions to avoid these issues.

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MSCD AIR POLLUTION SPECIALIST DEAN: As mentioned previously, one of the goals of these amendments is to enhance enforceability of the regulation. And currently, some non-compliant fleets are being hired to do work on projects throughout the state. To help address this issues, staff is proposing to require that all contracting entities must verify that a fleet has a valid, CARB-issued Certificate of Reported Compliance prior to entering into a contract with that fleet. By ensuring that hiring entities are only contracting with fleets that are compliant with the Off-Road Regulation, CARB can achieve its implementation goals more effectively than through CARB enforcement efforts alone.

Staff's proposal includes several requirements specifically for prime contractors due to their direct control over the job sites under their purview. Prime contractors must report any observed noncompliance on their job site to CARB, which is similar to requirements in the recent TRU and heavy-duty I&M regulations.

Additionally, if CARB visits a job site and asks the prime contractor for ownership information of vehicles, then the prime contractor must disclose that information, and the prime contractor must post a sign at each job site, which provides high level information on the Off-Road Diesel Regulation and instructions on how to report observed noncompliance.

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MSCD AIR POLLUTION SPECIALIST DEAN: Staff's proposal up to this point has been intended to implement very quick and targeted requirements to achieve near-term

NOx and PM emission reductions, which are critically needed to reach California's near-term air quality goals. But switching gears slightly, staff is also proposing additional compliance options with the intent of encouraging the adoption of zero-emission technology to support California's long-term goals as well. To do this, staff has developed a two-pronged approach to encourage the adoption of zero-emission technology.

The first prong being a vehicle-to-vehicle flexibility. The intent of this provision is to allow a fleet that adopts a zero-emission vehicle to be able to keep a similar sized Tier 1 or Tier 2 vehicle for an additional two years beyond the tier phaseout dates. This allows fleets the opportunity to have additional time to make any operational adjustments necessary to fully incorporate zero-emission into their fleet, while having the ability to rely on the older vehicles, if needed. This requirement includes several reporting requirements to ensure CARB can properly track which vehicles are receiving the additional two-year flexibility and to ensure the provision is being used properly.

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MSCD AIR POLLUTION SPECIALIST DEAN: The second zero-emission prong is intended to allow for a much bolder and more transformative zero-emission compliance pathway.

Replacing Tier 0 to 2 vehicles with the cleanest available combustion technology is necessary to meet our near-term air quality goals. But if a fleet would rather hold off on investing their capital into Tier 4 final equipment and would rather invest in zero-emission technology, that should be not only allowed but encouraged within the framework of the regulation. This is where the Zero-Emission Transition Application, or ZETA, process allows for an alternate compliance pathway for fleets wishing to go all in on zero-emission technology and help lead the way to a zero-emission off-road sector.

First, a fleet wishing to make this transformational commitment must submit a ZETA to CARB and if it is approved, then the fleet no longer must comply with the fleet average targets or the tier phaseout requirements. In order to utilize this alternate compliance pathway, a fleet must commit to turnover at least 15 percent of their fleet based on total horsepower to zero-emission operations by 2030, and at least 50 percent of their fleet to zero-emission operations by 2035.

In addition, the ZETA must include several important elements before CARB will approve it. Every year, after a ZETA is approved, a fleet will be required to submit annual updates to CARB detailing progress they're making on there plan. Based on this annual update, there are several potential outcomes that are shown on the slide.

If CARB revokes approval during the annual reviews or if CARB does not approve a ZETA in the second step, then the fleet must comply with the fleet average targets and Tier phaseout requirements. Including this alternate compliance pathway, it will allow fleets the option to invest in the long-term zero-emission future of California, which is a critical first step to transition to zero-emission operations.

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MSCD AIR POLLUTION SPECIALIST DEAN: Staff's proposal also includes a simplification of the low use provision to only include a permanent low-use option, an introduction of a three-year rolling average to the permanent low-use option, which provides additional flexibility for fleets, and a ban on the operation of Tier 0 low-use vehicles starting in January 1, 2036.

Staff's proposal requires fleets starting in January 1, 2028 to only add vehicles which are California certified or certified to a California equivalent standard for all model year 2028 and newer engines. This provision provides assurance that the cleanest engines continue to be used in California, even if federal and California engine standards do not remain aligned in the future.

Off-road engines are required to have a visible and readable emission control label on the engine and has been observed that some off-road engines in operation no longer have a readable emission control label, and it is the responsibility of the manufacturer to provide replacement emission control labels. Staff's proposal includes a requirement for fleets that when they observe a missing or unreadable emission control label, they must request this replacement label from the manufacturer.

Staff have also made several adjustments to the regulatory language to improve clarity to reflect how the current regulation is actually being implemented by staff and to address stakeholder feedback in targeted areas.

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MSCD AIR POLLUTION SPECIALIST DEAN: So that completes the overview of the proposal. And now we will transition into the potential benefits and costs associated with the proposal. This slide shows the potential NOx emission reductions that will be achieved through staff's proposal compared to the emission levels of the current Off-Road Regulation.

The blue and dashed line represents the current regulation fully implemented with no amendments, while the orange and unbroken line represent staff's amendment proposal. As you can see, staff's proposal is achieving substantial emission reductions, especially in the early -- very early years, which is critical for California' near-term air quality goals. One other note I'd like to make is that the 2022 State SIP Strategy committed to four tons per day of NOx reductions in 2037 statewide by this proposal. And as you can see, we are projected to achieve 4.1 in 2037.

Although the reductions are impressive, we are not overshooting this target by very much, which highlights the need to maintain the proposal's level of stringency.

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MSCD AIR POLLUTION SPECIALIST DEAN: And on this slide, we have a similar graph showing the difference in PM emissions. Both graphs tell the same compelling story, which is that staff' proposal will achieve significant near-term emission reductions beyond what will be achieved by the current regulation.

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MSCD AIR POLLUTION SPECIALIST DEAN: These near-term emission reductions have a real direct benefit to the citizens of California in the form of reduced adverse health impacts. Based on CARB's analysis, staff's proposal will prevent and estimated 571 premature deaths and prevent many hospitalizations and emergency room visits caused by harmful air emissions. The estimated valuation of these prevented adverse health impacts is $5.7 billion.

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MSCD AIR POLLUTION SPECIALIST DEAN: These emission reductions and health benefits do come at a monetary cost for the fleets subject to this regulation. Based on staff's analysis and the Standardized Regulatory Impact Assessment, staff's proposal has an estimated net cost of $1.9 billion from 2023 through 2038. The bulk of this cost comes from the tier phaseout requirement and fleets replacing the old tiered vehicles with Tier 4 final. Based on the estimated emission reductions that will be achieved, staff's proposal has a cost effectiveness of about $22,700 per weighted ton of emissions. Although, there is a significant cost, the health benefit valuation far exceeds the potential cost to industry.

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MSCD AIR POLLUTION SPECIALIST DEAN: Staff recommends the Board approve Resolution 22-19. With this action, the Board will achieve significant near-term emission reductions critically needed to attain California's federal ambient air quality standards and to reduce the adverse health impacts faced by communities throughout California.

After this meeting, staff will prepare the Final Statement of Reasons, which will respond to public comments received during the open public comment period and during this hearing or circulate to the public 15-day proposed changes as needed.

Staff anticipates the submitting the rulemaking to California's Office of Administrative Law for its review and approval in 2023. To the extent that this rulemaking action requires an authorization, staff shall submit a request for authorization to U.S. EPA. Staff will also request that U.S. EPA approve these regulations into California's State Implementation Plan.

This concludes my presentation.

CHAIR RANDOLPH: All right. Thank you. Okay. We will now hear from the public who signed up to speak on this item either by submitting a request to speak card here in person or a raised hand in Zoom. And so I will ask the Board clerks to being calling the commenters.

BOARD CLERK HARRINGTON: Thank you. We currently have eight commenters in person. I'll start with Jerry Fernandez

JERRY FERNANDEZ: ...services for abandonment of oil wells in the San Joaquin Valley and all of the state of California. We appreciate the opportunity to offer brief comments today on the proposed amendment for the DOORS regulation.

We have three primary concerns with the proposed amendments. The first being that the timing of the Tier 3 and Tier 4 interim purchases bans, currently the deadline for a Tier 3 engine in portable equipment is December 31st of 2024. This regulation, if approved, will change that to January 1st, 2024 disproportionately impacting the companies that have expended time, energy, resources to meet the previously established time frame.

In fact, it appears the industry will be challenged even to meet the December 31st, 2024 time frame. Therefore, we recommend extending the current deadline to January 1st, of 2026. We currently in January purchased 16 Tier 4 final engines. We have only been able to receive four of those 16 engines into inventory. The other are either on boats or waiting to come in from some place. So it has extremely limited us ability to be able to switch these engines out at the rapid pace that this is happening.

We also disagree on the ban of Tier 4 fine -- interim engines, until the Tier 5 Regulations or the Tier 57 emissions can be qualified, and therefore, we have sufficient supply of these engines in stock to be able to support putting them in equipment. We saw this with the portable equipment where we went to a thing and still have Tier 4 engines that we can't get ahold of. So we have a concern there.

We're also concerned with the proposed deadline for R99 and R100. A lot of the contracts that are written for diesel fuel require, you know, year or two-year contracts with our vendors. We currently have a -- a refinery in our own area that is struggling to be able to convert over to RD99 and is now showing possible bankruptcy from converting that over. So I don't think the fuels will be available to us like we thought we might have.

We have concerns that section 2249(d) with the Tier 5, it seems to me the way it's written that it may conflict with EPA and the Tier 5 engines. And it won't allow us to add vehicles unless they're EPA certified, but it may not be CARB certified at the time. So we would request that you take a look at that and until that is resolved, we recommend postponing the implementation of this section.

I currently have 156 pieces of equipment in DOORS, 345 equipment in truck and bus, 210 pieces of equipment in portable, and then assortment of store equipment. So we would request your permission to take a look at this a little further.

Thank you.

BOARD CLERK HARRINGTON: Thank you.

Next, we have Todd Bloomstine.

TODD BLOOMSTINE: Thank you, Madam Chair and Board members. My name is Todd Bloomstine and I am here on behalf of the Southern California Contractors Association. SCCA would like to associate our comments with those submitted by the Construction Industry Air Quality Coalition.

By way of background, SCCA is an all union trade association of engineering contractors with about 300 members. They work on all projects from the ground down, streets, highways, dams, and other similar infrastructure. Their work requires the utilization of heavy diesel off-road equipment.

SCCA contractors are all signatory to several unions, but primarily employ carpenters, operating engineers, and laborers. SCCA members annually employ around 12 million personnel hours of construction labor.

Our concern today is how the proposed changes to the Off-Road Rule will reduce the overall size of the construction fleet and in turn reduce the State's ability to construct projects. The industry estimates -- estimates that the current regulation and proposed amended regulation will reduce the fleet by 62,000 pieces of equipment. That's a 33 percent reduction in the total California construction fleet. Naturally, some of that equipment will be replaced with new equipment, but not all of it. A reduction of 20 percent would still result in 38,000 less pieces of equipment.

Large general contractors are already facing significant backlogs before they even begin to work on projects. Twelve to 18 month delays before construction starts is not uncommon. Eliminating 20 to 33 percent of the state's off-road diesel fleet will simply add to those delays. This means that it will take much longer to grade the land for a solar farm, construct a bicycle bridge over the interstate, or expand a transit line.

Assuming the Air Resources Board moves forward with this proposed amendment, contractors will reduce their fleet and the high-road employers, much swooned over by the administration, legislature, and academic world will be forced to layoff people that operate those machines.

Madam Chair, SCCA contractors are high-road employers. They pay an entry level operating engineer $85 per hour for their work, $85 per hour. This regulation on the conservative end will eliminate 20 percent of the existing fleet, eliminating 38,000 seats for those workers. Once those jobs are eliminated, it will take a decade for the industry to recover, hire back those workers, and increase the industry's capacity.

Madam Chair, we're on the precipice of another recession. We have high inflation, technology companies, primarily based in California, laying off tens of thousands of workers, and the LAO ha signaled we're looking at a State deficit.

We respectfully ask the Board to instruct staff to reconsider the proposed amendment on CIAQC's letter, and the troubling acceleration in reducing the size of the construction industry fleet. Thank you, Madam Chair. Thank you Board members.

BOARD CLERK HARRINGTON: Thank you.

Next is Manny Leon.

MANNY LEON: Hello, Madam Chair and members of the Board. Manny Leon with the California Alliance for Jobs. The Alliance has submitted a letter with formal comments on the proposed Off-Road Diesel Fleet Regulation prior to the November 7th deadline.

Let me first off -- first off start by saying that the Alliance echos many of the comments and concerns provided to the Board and staff by other entities in the construction industry. As written -- sorry -- into the construction industry as will be provided here today in public comments as well as with their written comments submitted.

Several of these concerns include the vehicle transition requirements being too extreme, the availability of renewable diesel, the feasibility of utilizing the renewable diesel to operate fleets in certain weather conditions, the new enforcement mandates on prime contractors, and lastly, the damaging economic and financial impacts to the construction industry, if this regulation is rolled out.

Concerns I want to specifically highlight here are the impractical transition timelines for vehicles and the negative economic and financial impacts to the construction industry. In regards to the vehicle transition requirements, we find the transition schedule to unreasonably ex -- to be unreasonably accelerated and impractical.

The present and future economic and geopolitical issues we are -- we are and will be experiencing should be taken into account in the development of the vehicle transition requirements for large, medium, and small fleets. We ask that the vehicle transition scheduled be reconsidered with deadlines set for later dates, as specified in many of the comment letters submitted to staff. In regards to the economic and financial impacts, the proposed regulation provides no financial support to assist companies with the costs associated with the proposed Off-Road Diesel Regulation.

The vehicles subject to this regulation are major capital investments for our members and are usually part of a multi-year capital investment program. It's unreasonable to assume companies can simply purchase these vehicles or vehicles at any time and the proposed regulation does not factor in or consider many of the circumstances our members face on a daily, monthly, and annual basis.

As I've mentioned in many -- in public comments before, we, the construction industry, stand here ready to meet and confer with ARB staff to work on a proposal that will be economically balanced, administrative -- administratively achievable and ultimately lead to a successful implementation.

Thank you for your time.

BOARD CLERK HARRINGTON: Thank you.

Next, is Adam Harper.

ADAM HARPER: Chair Randolph, members of the Board, Adam Harper with the California Construction and Industrial Materials Association.

I want to -- briefly, I want to thank Nathan, Johanna, and the entire CARB team. They were very accessible. They responded to us. They listened. Thank you. We are the construction aggregate, sand and gravel, industry minerals, concrete and asphalt industry. We tend to operate fixed facilities. We also have members that are engaged in construction. So we kind of cover the full gamut of covered equipment under this rule.

We would like to focus the Board's attention on the phased timelines. We appreciate the Board recognized that we are not ready for zero-emission vehicles in this sector. We appreciate the ZETA process. We think everyone recognizes the challenge of 2045 and adaptation. And we would like to request that the Board change the phaseout schedules by one year, as included in our comment letter. This keeps you within the guidelines of your mobility plan. It would give larger fleets the time to look at that and figure out if they could develop a ZETA plan, something that would target their fleet and look at those options.

We also have suggested that in the ZETA plan you consider enabling components of fleets. We operate fixed site facilities, so if you're looking at how you decarbonize a type of operation, you may not be able to do it across your operations, but you may be able to look at a facility and see if you can put a proposal in and develop a decarbonization strategy. We think there is value to enabling that type of activity. We think that should be considered in modifications to the rule.

On renewable diesel, one, we agree that renewable diesel is superior. It reduces emissions. It's a key component of the early emissions reductions of this rule. Our concern is it is written as a specific equipment mandate. We suggested modifications that would make it a purchasing contract obligation. So we think it would be both easier to enforce. We think it would be much easier for fleets to comply with. And obviously, if you did have market disruptions, those records would be there.

The analysis that was done in the ISOR validated that the vast majority of fleets in this sector are doing large purchasings. So we think it's a proposal that would be much easier and effective. Record keeping is becoming an incredible burden for industry. You know the number of rules you have. Every other agency has the same. Our environmental professionals want to be out there on the ground making changes, not doing paperwork, and trying to develop tracking systems. And if we can develop rules slightly more efficiently, it really is helpful.

In terms of the adding vehicles and retiring vehicles -- thank you for your time. We submitted our letter. Appreciate it.

BOARD CLERK HARRINGTON: Thank you.

Next is Nicholas Armstrong.

NICHOLAS ARMSTRONG: Good morning and thank you. I'm Nick Armstrong representing Teichert Materials as well as the current Chair of CalCIMA's Environmental Committee. I'd like to second Adam's comments. As well, Teichert had submit written comment. We appreciate the time CARB staff has taken to understand the logistical implications of the prime contractor responsibilities. Additionally, we'd like to note that they've spent a lot of time understanding the technical limitations that were recently uncovered related to renewable diesel and cold weather. We look forward to working them -- with them on that for a solution.

At a minimum, we'd like to acknowledge that we would support a 15-day change related to the renewable diesel, as without this, we believe there's significant impacts to operational abilities in cold weather.

Thank you.

BOARD CLERK HARRINGTON: Thank you.

Next is Brian McDonald.

BRIAN McDONALD: Good morning, Chair Randolph, Board, and CARB staff. My name is Brian McDonald. I'm here representing Tesoro Refining and Marketing. We're wholly owned subsidiary of Marathon and more that you would imagine would know that name.

So Marathon, through its subsidiaries, it's a producer of renewable diesel as well as traditional petroleum fuels. We operate one petroleum refinery and several terminals, which distribute these feels within California. And we're also in the process of converting one of our petroleum refineries to produce renewable diesel.

You know, I'll just say that all of these facilities do utilize the vehicles, which are regulated under this rule. So, you know, at our -- at our facilities, you know, off-road vehicles provide support for the daily operation and maintenance of critical equipment used to produce these fuels. The vehicles are also used to support the transition of our Martinez facility to a hundred percent renewable fuels. And so while Marathon appreciates the role renewable diesel is playing in this rule -- in this regulation, I do want to comment on the rule's proposed deadlines for replacing existing engines in vehicles.

So really it's just about the time to plan, bid, and award contracts for this transition, you know -- or purchase new vehicles. It's just too short. We do have some Tier 0 vehicles in our fleet and essentially we're facing a 13-month ban. While there is a compliance extension in the rule, you know, the extension mostly, you know, provides a pathway for, compliance but it's more on the manufacturing availability side, not necessarily addressing any certain needs is the facility might have for this equipment, so we would say it, you know, falls a little short on -- from our perspective.

And so, you know, what we're asking is for an extension of these deadlines to transition our vehicles by at least one year. We think that that's enough to be able to, like I said, plan, bid, and, you know, more efficiently transition our vehicles to really what your goals are. So thank you very much.

BOARD CLERK HARRINGTON: Next is Daniel Barad.

DANIEL BARAD: Good morning, Chair and members. Daniel Barad on behalf of Sierra Club California and our 500,000 members and supporters throughout the state.

We support the proposed Off-Road Diesel-Fueled Fleet amendments and urge the Board to adopt them today. We want to thank staff for their work on this rule and the time they took to meet with us over the past few months. Diesel pollution perpetuates the climate crisis and endangers the lives of Californians, too many of whom are burdened with the worst air quality in the country. As the State looks towards a zero-emission future, it is critical that it also plans for the retirement of combustion engines, prioritizing the oldest and dirtiest engines first.

These amendments would do just that by setting a timeline for phasing out diesel -- dirty diesel off-road engines. We support the establishment of these compliance deadlines, but we also believe this timeline could even be accelerated further, which would obviously deliver greater emission reductions. We appreciate that these amendments allow for the adoption of zero-emission technologies in the off-road sector and we encourage CARB to continue to look for opportunities to phaseout combustion entirely whatever it's possible.

The adoption of these amendments will prevent hundreds of premature deaths and hospital visits. They will also help to slow the climate crisis and deliver the emission reductions that are needed for California to comply with the State Implementation Plan that the Board just recently passed. Again, Sierra Club California strongly urges you to adopt these life-saving amendments today and we look forward to working with you in the future to advance zero-emission technologies in this and every sector.

Thank you.

BOARD CLERK HARRINGTON: Bill Magavern

BILL MAGAVERN: Good morning. Bill Magavern with the Coalition for Clean Air. We urge you to adopt the rule in front of you today without any reduction in stringency or any delay. The existing off-read diesel rule is one of the most effective measures this Board has adopted to reduce toxic diesel exhaust, but it is 15 years old and definitely is in need of the updates that are being proposed today.

When you hear that amazing fact that staff gave you, the -- some of the oldest engines can emit up to 80 times as much as a newer engine, then it becomes clear that one of the most sensible measures that we can take is to quickly phase out those old dirty diesel engines and have them be replaced with existing available much cleaner technology.

The benefits of the rule are substantial in terms of hundreds of lives saved. Economically, the benefits outweigh the costs by more than three times. And importantly, the benefits are actually front-loaded. A lot of the important rules that you adopt, the benefits are mostly in 10 or 15 years time, but here, you get half of them in the first five years. So this is an important part of the SIP. It's a key piece of your efforts to protect public health. And the amendments are reasonable and feasible.

You know, we support the -- in addition to the updating of the engines, requirement to use renewable diesel. This is really one of the highest and best uses of our renewable diesel, because a lot of these older off-road engines, they don't have the modern emission controls. So we get the greatest benefits from using renewable diesel in those sorts of engines in terms of reductions in NOx, in particulate matter, as well as the greenhouse gas reductions.

So this is necessary, it's something that is already part of your plans, and we urge you to stay the course and approve this measure today.

Thank you.

BOARD CLERK HARRINGTON: Thank you.

Mike Buckantz.

MIKE BUCKANTZ: Thank you. Madam Chair, members of the Board. I'm Mike Buckantz. I'm with the environmental consulting firm Associates Environmental. We assist users of off-road diesel equipment in their planning to strategize to comply with not just this regulation but diesel regulations throughout California.

Today, I'm here to oppose the amendments to the Off-Road Diesel Regulation. You've heard much from the staff today about the tens of thousands of tons of emissions being reduced by banning the use of lower tier equipment. However, the staff can't guarantee to you that even one pound of those reductions are real, permanent, verifiable, and enforceable. In fact, the proposed amendments could, in some cases, result in emission increase and here's the reason.

The current regulation has resulted in many, if not most, of the lower tier engines being classified as low use with an operational cap of up to, but not exceeding, 200 operating hours a year. Under the proposed regulation, these engines can't be used by entities subject to the off-read diesel regulation, but they can be moved to sectors not subject to the requirements of this particular rule, where they could use them even beyond the 200-hour cap that's in place for most of these engines today.

For this reason, the amendments proposed in front of you right now are fatally flawed. We proposed to the staff that they consider extending the regulation with future lower fleet average targets to leverage the existing regulatory framework that the industry has been familiar with for more than 15 years now. And staff has kind of dismissed this suggestion with basically a be careful what you wish for response, and hasn't even considered a discussion, or entertained a discussion, about what those lower fleet average targets might be in the future.

For those reasons and the others you've heard here today, I recommend that you send this rule back to staff for further consideration and thank you very much.

BOARD CLERK GARCIA: Thank you. That concludes our in-person commenters and we will turn it over to our remote commenters. We have nine commenters with their hands raised in Zoom. So we'll start with Christine Wolfe, Matt Cremins, Amanda Parsons DeRosier, and Mary Alyssa Rancier.

So Christine, I have activated your microphone. Please unmute and begin.

CHRISTINE WOLFE: Good morning, Chair Randolph and members of the Board. This is Christine Wolfe with the California Council for Environmental and Economic Balance. CCEEB members include both off-road fleet owners and operators as well as fuels producers.

We appreciate that emissions reductions from the off-road sector are an important part of the state's contribution to attaining federal air quality standards throughout the state. We want to thank staff for their engagement and assistance throughout this process.

Our primary concern is with the overlap between the existing regulatory program and the proposed amendments. CCEEB members, like others who've spoken today, have been relying on the fleet averaging methodology in order to comply with the requirements of the current regulation. Capital planning for vehicles subject to the proposed regulation often occurs two to three years out from receipt of equipment, and delivery typically takes about a year. These timelines have all been exacerbated by the supply chain crisis, precipitated by COVID-19.

For these reasons, we ask that all implementation dates be pushed out by one year to accommodate both the supply chain challenges and the fact that the current regulation extends to 2023. In addition, we wish to note that market based fuels-focused programs, like the Low Carbon Fuel Standard, or the more appropriate place to incentivize the use of renewable diesel, rather than forcing specific fuels into specific end uses.

Thank you for your consideration.

BOARD CLERK GARCIA: Thank you.

Matt, I have activated your microphone. Please unmute and begin.

MATT CREMINS: Thank you, Madam Chair and members of the Board, Matt Cremins here on behalf of the California Nevada Conference of Operating Engineers. We're here today to express our sincere concerns regarding the proposed amendment to the In-Use Off-Road Diesel-Fueled Fleets Regulation, which will have a substantial impact on our signatory contractors and our apprenticeship programs across the state.

Our organization wholeheartedly supports the goals of the regulation and we are not ignorant to the current impacts that we are seeing climate change have on our state. I would also point out that our apprenticeship programs and contractor partners have worked diligently and in good faith for years to meet the stringent requirements that are currently place under this regulation.

With that being said, we would urge caution with these amendments and ask for more time to inspect the impact that they may have on the State's ability to meet our infrastructure needs as well as the impacts they may have on our apprentices seeking to be the future of our State's infrastructure workforce. As I'm sure this Board knows well, the State currently has a wide variety of infrastructure needs that rely heavily on the use of off-road heavy equipment. These infrastructure needs include, but are not limited to, bridge and road repair, dam repair and water storage projects, fire cleanup and wildfire mitigation works, green energy projects, as well as housing projects, which I would point out the Legislature just passed two major pieces of housing legislation aimed at substantially increasing housing production in the state to ease the state's current housing crisis.

From what we have been told by our contractor partners, this regulation will result in a substantial decrease in available equipment for these increasingly important projects, which means less work opportunities for our members and apprentices, and an inability for the State to meet its urgent infrastructure needs.

Again, we would respectfully urge caution and ask for more time to thoroughly examine the impacts this may have not just on our organization, but the infrastructure needs of the state as a whole.

Thank you very much.

BOARD CLERK GARCIA: Thank you.

Amanda, I have activated your microphone. Please unmute and begin.

AMANDA PARSONS DEROSIER: Thank you, Chair Randolph and members of the Board for allowing us to comment on Off-Road Vehicle Rule's proposed amendments. My name is Amanda Parsons DeRosier and I'm here representing global clean energy. We're a California based renewable fuel company with a renewable fuels refinery in Bakersfield, a disadvantaged community, as well as offices in Torrance.

We appreciate CARB taking the benefits of renewable diesel into account within your In-Use Off-Road

Vehicle Fleets rulemaking process. Thank you, Mr. Dean, for outlining the -- renewable diesel's many benefits, including its lower GHG and local emissions than traditional diesel and biofuels. Also, it's use as a drop-in replacement for modern traditional diesel engines and the fact that unlike electric and hydrogen options renewable diesel does not require large scale infrastructure changes.

Global Clean Energy produces ultra low carbon renewable fuels including renewable diesel. What makes us unique is that we make our renewable fuels from a crop called camelina. Our patented camelina varieties were issued a first of its kind LCFS pathway by CARB in 2015. We're working hard to drive our CI score to zero and below in the coming years. Unlike other renewable fuel feed stocks like soy and canola, camelina is non-food. It acts as a cover crops, has quick maturity, drought tolerance, pest tolerance, promotes biodiversity and does not displace food when it is grown.

We encourage the further adoption of ultra low carbon renewable fuels in further applications beyond off-road vehicles, including stationary sources like generator, and pumps, and hard-to-decarbonize areas like marine vessels and rail. Further, we encourage the Board to incentivize renewable diesel's enhanced use within the off-read vehicle rule to include its use in areas beyond the designated captive attainment area fleets.

Our clean energy future will require diverse low carbon solutions and renewable fuels can play a key role in propelling California toward reaching carbon neutrality in 2025 or sooner. We encourage CARB to prioritize innovative renewable fuels like Global Clean Energy's in more applications throughout the State.

Thank you.

BOARD CLERK GARCIA: Thank you.

And after Mary will hear from Michael Lewis, Rebecca Baskins, Adrian Martinez, Will Barrett, Bob Shepherd, and Teresa Bui.

So Mary, I have activated your microphone. Please unmute and begin.

MARY ALYSSA RANCIER: Hello, Chair and members of the Board and staff. Good morning. My name is Mary Alyssa Rancier and I'm speaking on behalf of Associated General Contractors of California. AGC is a member-driven organization with over 900 members that provide commercial construction services that utilize off-road diesel equipment.

While we support cleaner air for our communities, we assert that the regulations that seek to accomplish those goals are clear, consistent, and practical. As the language is currently written, we have many concerns we'd like to address. First, Tier 4, final equipment are difficult to obtain. And this will only get worse as the demand for them increases due to this regulation. We assert that the phaseout of Tier 3 be extended to at least January 1st, 2026, as Tier 3 still largely represents the available equipment repower options.

Furthermore, Tier 4 interim should not be banned from purchase at all, as the current NOx fleet average is based on fleets meeting a final fleet average equivalent to Tier 4 interim. We assert that the ban of Tier 4 interim equipment come no sooner than 2030.

Additionally, large fleets are not currently eligible for funding, except through the Carl Moyer SOON Program at South Coast AQMD. We encourage CARB to open the Carl Moyer funding up to large fleets in all California air districts, and to continue doing so moving forward.

Second, in terms of renewable diesel, AGC of California appreciates CARB's willingness to meet with industry to collaborate on multiple occasions. We've discussed and agree with the benefits of using renewable diesel. We also appreciate your willingness to hear potential issues with mandating R99 or R100. For instance, the additional cost of feedstock procurement and transportation of fuel make renewable diesel approximately $2 more a gallon than red-dyed diesel.

Additionally, renewable diesel has proven to be problematic in cold climates due to its associated cloud point. Renewable diesel can solidify in equipment in climates that reach temperatures 23 degrees Fahrenheit or lower, which not only damages the equipment, but also poses a safety concern for the operator. We assert CARB to add an exemption to allow fleets to use a mix of Diesel 1 and renewable diesel in these situations to prevent any disruption. We suggest looking at detail provider within AGC of California member Teichert's comment letter for more information.

Third, we urge CARB to remove prime contractor requirements, as this is an inappropriate role for contractors to play. We believe that it can and should be carried out by CARB staff. We want to comment and thank the Board and staff for their efforts and inclusiveness in the development of this regulation. We encourage the Board to consider and address our industry comments.

Thank you for your time.

BOARD CLERK GARCIA: Thank you.

Michael, I have activated your microphone. Please unmute and begin.

MICHAEL LEWIS: Hi. This is Michael Lewis with the Construction Industry Air Quality Coalition. And on behalf of our Association members and their 2,000 contractor companies which employ approximately 300,000 of the 900,000 construction workers in California, I want to offer our thoughts on some changes to this off-read proposal.

As the current rule reaches its final fleet average requirements over the next five or six years, we believe that the statewide fleet is going to shrink from a peak of 192,000 machines to 130,000 machines. That's fully one-third of the fleet that will have to go in order to meet the current fleet averages. Almost 19,000 machines have disappeared in the last two years alone to meet that standard. Every one of those machines represents a seat for a worker that is no longer available.

Most of this equipment is not likely to be replaced in the next few years because of the very high cost, the fact that we're entering a recession of unknown duration, and we have already replaced 54 percent of the fleet, 95,000 machines, with Tier 4 final engines in the last six years, the latest -- the latest and newest cleanest diesel engines in the world at a cost of billions of dollars, not the few hundred million estimated by your staff 12 years ago. When this rule was adopted in 2007, it was the most expensive rule CARB ever approved. And with these amendments, it will continue to be so.

There are six things we're asking of you today. One, modify the turnover requirements. They are too extreme. The elimination of Tier 0 should be extended from 2023 to 2026. Phaseout of Tier 3 should be extended to 2028. Tier 2 is already banned. Tier 4 interim should not be banned at all in 2004 -- or '24. The current final fleet average is equivalent to a Tier 4 interim. Most fleets will need that equipment to achieve compliance and the compressed two-year schedule is just too extreme.

Narrow the scope of this rule to two air districts that need the extra reductions. The remainder of the state is achieving compliance with State and federal standards and CARB has done nothing to regulate the ag and forestry fleets in those areas that use exactly the same machines. It's unfair to burden only contractors were it not necessary to achieve air quality standards. This will also allow the statewide fleets to put their new equipment in those two districts to get early reductions you are seeking

Three, we don't believe the staff projections on the availability of renewable fuel. We would suggest that you add a definition of "if available" that includes relative costs, remote sites, in-state producers, fleet mix, long-term contract requirements, et cetera.

Fourth, contractors should not be responsible for enforcement. A certificate of reported compliance is sufficient for determining contractor subcompliance -- subcontractor compliance. We would ask that you remove section 2449(d)(6)(I). It assumes yet undeveloped engine would be required that is not certified by EPA but approved by CARB. It's inappropriate to include that language at this -- at this time.

And finally, we ask that you consider the cumulative effect of this rule on our industry. We are implementing your Portable Equipment Rule, your Advanced Clean Fleets and Truck Rule, Heavy-Duty Vehicle Inspection and Maintenance, and Forklift Rule. We would ask that you include a thorough review of the impacts and costs of this rule to take place by the Board in 2027 to determine if the effects have been as you originally projected.

Thank you.

BOARD CLERK GARCIA: Thank you.

Rebecca, I have activated your microphone. Please unmute and begin.

REBECCA BASKINS: Good morning, Chair and members. Rebecca Baskins on behalf of California Advanced Biofuels Alliance and Clean Fuels Alliance America.

First and foremost, thank you to Nathan and

Johanna for your accessibility during this regulatory process. While we applaud amending the regulation to require the use of renewable diesel, we believe other drop-in fuel replacements, such as blends of renewable diesel and biodiesel should be an available alternative, especially when the regulation is worded to default to allow the use of petroleum diesel in the even renewable diesel is unavailable.

While both fuels provide significant benefits on their own, blending the fuels together maximizes both the environmental and economic profiles of biodiesel and renewable diesel. Renewable diesel biodiesel comprise of up to 20 biodiesel and 80 percent renewable diesel or R80/B20 will reduce emissions, perform higher, and provide supply and cost benefits to California communities.

Furthermore, over the past six consecutive quarters, biodiesel and renewable diesel blends have exceeded the 2.75 to 1 ratio determined by CARB as being NOx neutral for biodiesel, renewable diesel blends and used in older legacy vehicles as established by their recently amendments -- or recently amended Alternative Diesel Fuel Regulation. This, coupled with the high turnover to new technology diesel engines, means that any remaining NOx concerns involving biodiesel used in California vehicles has been effectively addressed by the market.

At the very least, biodiesel and renewable diesel blends should be required for the use in regulated fleets when R99 or R100 is not available. To permit the use of petroleum diesel when blends of renewable diesel and biodiesel are available in the absence of R99 or R100 makes little sense, but that is how the current proposed regulatory text is worded. To address this, we provided staff with suggested amendments as described in our comments that would replace the petroleum diesel default fuel with a renewable diesel and biodiesel blend.

There is not single solution to help California achieve its ambitious goals. Allowing blend alternatives as well as R99 and the Off-Road Regulation will help California achieve emission benefits immediately, while the State pursues its decarbonization efforts. We look forward to continual -- continuing working with you all on this.

Thank you.

BOARD CLERK GARCIA: Thank you.

Adrian, I have activated your microphone. Please unmute and begin.

ADRIAN MARTINEZ: Good morning, Chair and members of the Board. My name is Adrian Martinez. And I'm here on behalf of Earthjustice. We're here to support this rule. This is an important opportunity to get near-term emission reductions in a critical sector. We have an off-road pollution crisis in this state, as evidenced by the recent state tragedy which shows a large portion of our emissions coming from off-road sector.

I think staff has done a good job of identifying some ways to hasten the, you know, retirement and moving away from what is very antiquated and old and heavily polluting equipment in the off-road sector. I think it's apt that we're having this discussion today on the same day that you heard about a conformity lockdown in the Coachella, which has frozen 20 plus billion dollars in infrastructure projects because of air quality concerns.

It's important that we tackle a wide range of emissions from off-road, on-road, and I think this is an important step to provide immediate relief in the next five years to communities all across the state, but particularly in places like the South Coast Air Basing and the San Joaquin Basin -- San Joaquin Valley, which are experiencing unconscionable levels of air pollution.

We hope you will move forward adopting this plan and reject any efforts to weaken it, delay it, or just not move forward. Thank you for the time to present today. And I look forward to hearing Board discussion on this item.

Thank you.

BOARD CLERK GARCIA: Thank you.

Will, I've activated your microphone. Please unmute and begin.

WILL BARRETT: Hi. Thank you. This is Will Barrett with the American Lung Association.

And first, I want to say thank you to the Board and the staff for all of the time and the very good work that you've put into this life-saving policy proposal.

The Lung Association we're in strong support of this rule amendment package to cut cancer risk and save lives by reducing toxic diesel exhaust in communities and on job sites across California. We urge you to adopt his amended rule today without delay. The in-use amendments target real-world emission benefits, support attainment of health protective ozone standards, and will save hundreds of lives by phasing out the oldest, dirtiest equipment, up to 80 times more -- you know, more high polluting in some cases, as noted earlier, and really bringing the cleanest possible equipment online as soon as possible.

The amendments are built on a long public process on a even longer standing existing rule that the Board has adopted. The proposals takes appropriate steps specific to the various equipment and emission controls. And again, we really need to emphasize that these are amendments and have long been discussed with industry, trade associations, and fleets throughout the development process.

Delay is not an option and moving more quickly would certainly be welcome given the cumulative burdens posed by toxic air generated by this sector in communities across California. The policy amendments will save hundreds of lives, present -- prevent tons of NOx emissions daily, and signal the end of the oldest, dirtiest equipment that should be phased out as rapidly as possible to protect the hearts and lungs of workers and California communities against these oldest highest polluting pieces of equipment.

Again, these are not new concepts. And while we appreciated the proposed schedule for phaseout, we believe that the schedules could even be accelerated to bring healthier air online sooner to communities all across the state. And we support the pathways to zero emissions to fully eliminate the burdens posed by diesel exhaust in this sector, and believe that CARB must continue to work hard to make this transition happen as quickly as possible to save more lives and reduce more pollution.

We support the proposed amendments before you today and urge you to adopt the package today really as the absolute minimum in terms of stringency and timing to bring these real-world health benefits online as quickly as possible.

So with that, thank you again for the strong work, the communication throughout the process, and really again keeping in mind that this means healthier communities, better occupational health, and a healthier climate for all Californians.

Thank you.

BOARD CLERK GARCIA: Thank you.

Bob Shepherd, I have activated your microphone. Please unmute and begin.

BOB SHEPHERD: Good morning, Chair Randolph, Vice Chair Berg, and Board members. I'm Bob Shepherd and today I'm speaking on behalf of the six California Caterpillar dealers. Our companies are committed to reducing their emissions impacts. And as a result each of our dealers reported off-road mobile diesel fleets met final compliance several years ago and are presently well below the required fleet average.

But we have concerns with several of the amendments that we are -- have identified in our letter to the Board and I'll summarize today. The Tier 0 ban by 2024 for large fleets will put an unexpected financial burden on those fleets that have used early compliance carryover credits and planned the compliance years in advance of 2023. The deadline must follow more closely the current regulation design, which would meet the goal closer to 2025 or 2026, instead of 2024. Given the cost of replacement of these machines, we ask the Board to allow these large fleets a 2026 deadline instead of the proposed accelerated 2024 deadline.

On the Tier 3 deadline, the deadline should be moved to 2026 instead of 2024. Small fleets will be banned on purchasing Tier 2 at the end of this year. And then only a year later, they'll be banned on Tier 3 even though those fleets are not required to be at a Tier 3 fleet average until sometime in 226.

As a Tier 4 interim purchased ban on 2024, we do not agree that this is necessary. All fleets must ultimately reach a final fleet average of Tier 4 interim, so why remove machines that assist all fleets in reaching the final goal. We suggest a Tier 4 interim purchase ban only go into effect if a more stringent standard beyond on Tier 4 final is adopted by CARB. But such a ban should not occur any earlier than 2030.

As for renewable fuel, that mandate is 1/1/2024. If this Board approves these changes today, it will be well within the year next year before final approval by OAL, thus 12,000 fleets will be scrambling all at once to meet the 2024 deadline. Laws of supply and demand will most certainly raise the cost of this fuel. We suggest CARB instead delay the mandate until 2028 and in the interim perhaps provide incentives for use -- early use of the fuel.

Finally, section 2449(d)(6)(I) needs to be removed for reasons stated in our letter and Caterpillar's letter. This statement is not appropriate in this in-use regulation. This statement only belongs in the new engine standard regulation, if and when that occurs. We ask this Board to direct staff to: one, move the Tier 0 ban for large fleets to 2026; move the Tier 3 purchase ban deadline to 2026; remove the purchase ban from Tier 4 interim at least until a more stringent standard is adopted, but no sooner than 2030; move the mandate for renewable fuel to 2028 and in the interim provide an incentive program for early conversion; five remove 2449(d)(6)(I) in its entirety.

We want to -- the Caterpillar dealers thank you for these comments that we put together today.

BOARD CLERK GARCIA: Thank.

Lastly, we'll hear from Teresa Bui and Mark Roest.

So Teresa, I have activated your microphone. Please unmute and begin.

TERESA BUI: Good morning. This is Teresa Bui with the environmental non-profit group Pacific Environment. I just want to thank you staff for all your hard work on this. We are supporting the rule and urging the Board to adopt the rule today.

We just want to echo the comments made in support by advocates like Earthjustice, American Lung Association, and Coalition for Clean Air. Off-road mobile machinery makes up about 35 percent of all statewide transportation pollution. And the proposed rule will result in 571 fewer premature deaths statewide. The value due to avoided health outcomes would be about $5.74 billion. Controlling off-road pollution is vital to protecting Californians. And while we recognize that the rule provisions does not require zero-emission, we do appreciate CARB's effort to allow for more zero-emission technology, as we are seeing with the rapid development of electrification technology.

And so with that, again, we are urging you to adopt the rule today and thank you for your attention.

BOARD CLERK GARCIA: Thank you.

Mark, I have activated your microphone. Please unmute and begin.

MARK ROEST: Hello. I'm Mark Roest with Sustainable Energy, Inc., and Silicon Valley Clean Cities Coalition. Thank you, Chair and members of the Board.

There's a company that has developed low-cost high-power kits to convert diesel drivetrains to full battery electric power. It is completing a Class 3 box truck demonstration at this time. It is designed to provide ample power for demanding duty cycles, such as off-road equipment has.

I ask that the Board direct staff to coordinate focused funding for demonstration projects to adapt the technology to specific off-road equipment and test and certify it, and then move directly to larger demonstrations and then pilot projects. I also ask that the Board direct staff to coordinate with the CEC, so that incentive funding is available before the work is done for both vehicle conversion and charging and solar fueling to provide the electricity necessary to power the vehicles wherever they are.

And I would add to that that there are batteries and solar -- solar fuel -- solar thin film power coming in technology development that will increase the power available in a battery to 3 kilowatt hours per kilogram and the effective -- and the efficiency of solar conversion to 30 -- 42 percent efficiency in high volume production. And both of those will be at lower cost than current batteries in solar -- in solar panels. So this means that with support from the State, the -- these technologies can be brought forward and then they are designed so they're rapidly scalable. And the cost of the capital equipment for them is greatly less for the solar and batteries and the conversion kits are using existing mass produced components.

Thank you very much.

BOARD CLERK GARCIA: Thank you.

And it looks like we have one more hand up in Zoom. That's Angela Abuda.

And Angela, I have activated your microphone. Please unmute and begin.

ANGELA ABUDA: Hello. I'm Angela Abuda with Environment California. And I'm also a student at UC Davis majoring in political science and minoring in environmental policy analysis and planning.

Environmental California is part of the Charge Ahead California Initiative. And we strongly support the funding plan overall. We appreciate CARB working with stakeholders to develop an expansion plan for Clean Cars 4 All that will expand service to the state, while continuing to prioritize disadvantaged communities.

CARB's vision of implementing a needs-based application process is laudable. However, we urge you to develop this application process in a public and transparent process. It must also be designed in a way that addresses community needs and is compatible with current Clean Cars 4 All programs.

Jointly administering Clean are -- Clean Cars 4 All and financing assistance programs will present a unique challenge. Both programs will have different needs and different skill sets. Further, clarity is needed regarding the role of current administrator of the State Clean Vehicle Assistance Program.

We also continue to support fleet size limits and prioritize assistance to small fleets. CARB's proposal would provide a reasonable transition period to phase in fleets size limits that replaces dirty, high-polluting equipment with cleaner models including zero-emission equipment and will yield significant public benefits for our most vulnerable communities.

California will need to continue to support medium- and heavy-duty incentive programs, given the sectors outsized role in producing climate and health harming pollutants.

We hope you adopt this plan and thank you for your time.

BOARD CLERK GARCIA: Thank you.

And that concludes the commenters for this item.

CHAIR RANDOLPH: Thank you.

Staff, are there any issues you wanted to address before I close the record on this item?

MSCD DIVISION CHIEF VERGIS: Yes. Thank you, Chair and Board. Sydney Vergis, Division Chief for the Mobile Source Control Division.

So I just will provide a quick summary of some of the concerns that we heard today, which I would broadly put in the category of too quick. So for some context today, we're talking about a regulation that's been on the books for 15 years and it has certainly started the phaseout process of getting Tier 0s out of our various equipment fleets, but we know we need to move faster. As you heard from the staff presentation today, Tier 0 equipment emits 80 times more than Tier 4 final equipment. And as you saw when this concept was established in the 2020 Mobile Source Strategy and recently in September of this year when the Board adopted the SIP, we know that from a State and community perspective that we need these near-term reductions now.

In terms of some specific categories of concerns we heard, we heard concerns about the availability of renewable diesel. We know that renewable diesel is readily available today, thanks in large part to the LCFS Program at no incremental cost to fleets. We also heard from CalCIMA, as they noted the proposed language around procurement of renewable diesel. It's certainly not intended to be at the vehicle level necessarily. So we can take a look at that language to make sure that intent is reflected in that language. But their understanding is the same as ours about what it should be.

In terms of phasing out too quickly, for Tier 0 for a large fleet phaseout in 2024, as indicated in the September SIP, this is long overdue. We've heard from many communities, specifically 10 AB 617 communities that noted that off-road equipment was a major concern. And just a few observations about Tier 0 that I want to put on the table. The youngest piece of Tier 0 equipment in the year 2024 will be 25 years old. What does this provision mean for large fleets? Well, we know that five percent of the composition of large fleets is Tier 0 equipment. So that's what we're asking for in 2024, five percent.

In terms of Tier 4 final availability, as you heard in staff's presentation, this equipment has been readily available for seven years now. This is not new technology and it already makes up 64 percent of the equipment in large fleets.

The regulation already contains a number of flexibilities related to manufacture delay provisions or availability issues. And in terms of the ask to push back our various timelines, we did model that. And the result is that we would miss the Board's SIP commitment for this particular requirement and regulation by a significant percentage.

So with that, happy to answer any questions you might have. Thanks.

CHAIR RANDOLPH: Okay. I'm going to go ahead and do the -- close the record on this agenda item and then we'll have board questions and discussion.

So I'm closing the record. If it is determined that additional conforming modifications are appropriate, the record will be reopened and a 15-day Notice of Public Availability will be issued. If the record is reopened for a 15-day comment period, the public may submit written comments on the proposed changes, which will be considered and responded to in the Final Statement of Reasons for the regulation.

Written or oral comments received after this hearing date, but before a 15-day notice is issued will not be accepted as part of the official record on this agenda item. The Executive Officer may present the regulation to the Board for further consideration, if warranted, and if not, the Executive Officer shall take the final action to adopt the regulation after addressing all appropriate conforming modifications.

Okay. So I will turn it over to my colleagues. We will start with Board Member Riordan.

BOARD MEMBER RIORDAN: Thank you, Madam Chair.

For the staff, I wondered from the first speaker that we had today, it seemed to me what he was saying was that he placed orders for equipment, but due to nothing that he had done, but in the delivery process, they could not deliver that equipment on time. Is there anything in our amendment or what we are amending for something that is beyond the control of the purchaser, but just simply can't be delivered? Is -- that's my first question. And maybe you'd like to answer that, then I have a second question.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: I can take that. Johanna Levine with the Mobile Source Control Division. The current regulation includes a provision for manufacturer delays. So if a fleet puts a purchase -- has a purchase order for a piece of --

CHAIR RANDOLPH: Can you speak up? We can't quite hear you.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: I'm sorry. I'm sorry.

Johanna Levine with the Mobile Source Control Division. The current regulation already has a provision that provides flexibility if -- for manufacturer delays. So if a fleet has a purchase order for a piece of equipment and they are unable to obtain it, if there's a delay on the manufacturer side with delivery, then they can continue to use their old piece of equipment until that piece of -- till the new piece of equipment is delivered. So that's already included in the regulation today.

BOARD MEMBER RIORDAN: Okay. Thank you, because that was of concern to me, because there are a number of delays as we know.

Then my next question is one of funding and one of the speakers brought that up. Just for the record, could you elaborate, and for those who are listening today, the funding opportunities? And I'm wondering if there's anything in the federal infrastructure bill that might be able to help some of these companies procure the newer technology.

MSCD DIVISION CHIEF VERGIS: Yeah. So Sydney Vergis again. So in terms of a lot of the comments that we certainly got on the docket and got today was primarily around the Carl Moyer Program. And just to be frank, you know, we -- the current status quo has been the current regulation plus Carl Moyer in terms of trying to clean up the sector, but we know we need to move faster. And so there are certainly implications for large fleet eligibility in this regulation for the Carl Moyer Program.

Small and medium fleets will have longer opportunities to be eligible for our statewide incentive programs. I would need to look into the federal -- the specifics of the federal question you asked.

BOARD MEMBER RIORDAN: Okay. So we really only have at the State level right now the Carl Moyer Program, is that correct?

MSCD DIVISION CHIEF VERGIS: Certainly when it comes to combustion. When it comes to helping to get zero-emission technologies on the road, we also have the CORE Program, which you'll be hearing quite a bit about in the next item.

BOARD MEMBER RIORDAN: Okay. Very good. Thank you for those clarifications. I appreciate that.

CHAIR RANDOLPH: Thank you.

Supervisor Serna.

BOARD MEMBER SERNA: Thank you, Chair. I just wanted some clarification on the comments that were provided by a number of folks here today in person and I believe in writing. And I certainly had an opportunity to hear directly from Teichert about the cold weather issue relative to renewable diesel. I think during the course of your presentation, you mentioned that there would be some provision to - is it a blending - certain percentage blending with standard diesel that would be permitted?

MSCD AIR POLLUTION SPECIALIST DEAN: Yeah, so that is -- we are working with stakeholders to develop exactly what those 15-day changes will look like, but that is the idea currently is that we would allow blending to ensure that the low temperature operates properly.

BOARD MEMBER SERNA: And is that something that we're investigating through our own, you know, lab sciences? I mean, are we -- are we -- what are we -- what are we relying on to understand the reliability of that?

MSCD AIR POLLUTION SPECIALIST DEAN: So we do have internal experts on the fuel side that we're working with to make sure that all of the scientific information is correct and that we're work with our fuels group and then hearing what the stakeholder feedback is and understanding they -- what they are seeing in the field. So we're kind of working internally with experts and then the stakeholders as well.

BOARD MEMBER SERNA: And in terms of implementation, would that likely have a calendar associated with it in terms of when and where, whether it's, for instance, up at altitude or during certain winter months where this provision would be applicable?

MSCD AIR POLLUTION SPECIALIST DEAN: So we haven't developed the specifics yet, but the idea is that under certain climate conditions, this sort of exemption or the provision would kick in. We're still working on like if it would be a certain temperature or a certain climate, but that is something that we're developing. So we're working with stakeholders and our fuel experts to develop what the right -- how to limit the exemption to properly work.

BOARD MEMBER SERNA: Great. All right. Thank you.

CHAIR RANDOLPH: Board Member Eisenhut.

BOARD MEMBER EISENHUT: Thank you, Chair. I have a very narrowly focused question for staff. I believe that Cal Fire -- and it has to do with contract regulations. I believe that Cal Fire has a lot of equipment subcontracted. And I'm curious as to whether this is exempt as emergency equipment, if this is covered in the contract requirements as described?

Thank you.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: Yes, that equipment that's operating for wildfire, that would be considered in emergency operations.

BOARD MEMBER EISENHUT: Thank you.

CHAIR RANDOLPH: Vice Chair Berg.

VICE CHAIR BERG: Good morning, everyone. Thanks so much for everybody's testimony and all the hard work. I want to start out by saying that this -- this Off-Road Rule is critical, but I'm really concerned why we hadn't addressed it before, if given -- and truly am concerned about the time frames.

So I have a couple of questions that I'd really like to have staff help me clarify, so that I can maybe get more comfortable. I'd like to understand what are the emission benefits differences from a Tier 4 interim with renewable diesel versus a Tier 4 final? And I'm asking that because I'm trying to understand the purchase band.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: So that would be-- even in a Tier 4 interim, Tier 4 interims do not have SCR or DPFs. You would still see the 30 percent PM benefit and the 10 percent NOx benefit. So we can run those numbers right now. I don't have them off the top of my head, but it would still be the same percent benefit off the engine standard for the emission factors.

VICE CHAIR BERG: Okay. Including the -- including the renewable diesel. So then it would be even a greater benefit if they didn't use diesel, is that correct?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: A greater benefit. I'm sorry, can you clarify the -- a greater benefit than a Tier --

VICE CHAIR BERG: If we hadn't -- if we didn't -- if you didn't have the provision of the renewable diesel, then it even would be a bigger benefit, is that what I'm hearing?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: Oh.

EXECUTIVE OFFICER CLIFF: Vice Chair Berg, this is Steve Cliff. I think what you're asking is switching from interim to final, if you weren't using renewable diesel would have a greater emissions benefit, is that correct?

VICE CHAIR BERG: Yes. Yes.

EXECUTIVE OFFICER CLIFF: Yes, that's correct. What Johanna was saying is that by using renewable diesel, in the interim engine, you would see a 30 percent benefit in PM and 10 percent in NOx. So you're correct that if you were not using renewable diesel, you would see an even greater benefit by switching to Tier 4 final.

VICE CHAIR BERG: And then switching to the cost, is it fair to say that the first five years the costs -- the cost of this rule has the largest impact?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: That would be fair.

VICE CHAIR BERG: Okay. And looking at the current compliance and inspection, what is our percentage of enforcement when we're look -- with the enforcement, what percentage is non-compliance?

ED ASSISTANT CHIEF QUIROS: Hi. This is Heather Quiros with the Enforcement Division. I think you're asking compliance rate for the Off-Road Regulation when we do inspections. Over the last several years we've sort of hovered around 80 to 90 percent compliance rate for the Off-Road Regulation with approximately 86 percent compliance rate in disadvantaged communities.

VICE CHAIR BERG: With approximately what?

ED ASSISTANT CHIEF QUIROS: Approximately 86 percent compliance rate in disadvantaged communities.

VICE CHAIR BERG: Okay. Thank you. And so when we talk about having a certificate having CARB have the certificate of compliance for the fleets. What happens when a fleet who is not meeting the compliance, but who are turning over the 10 percent as required by the current rule, do they get a certificate of compliance?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: Yes, they do, because they would be in compliance with the regulation.

VICE CHAIR BERG: So I'm just trying to understand what we're asking of the primary contractors and what does it mean by observe? You know, that's kind of a little bit fuzzy to me. What are we expecting the primary contractors to do as they -- as part of the requirement to help us make sure the level playing field?

MSCD AIR POLLUTION SPECIALIST DEAN: So the -- this is Nathan Dean again. So the first piece of the provision is, you know, checking that the prime contractor checks that the fleet has a valid certificate of compliance.

VICE CHAIR BERG: I understand that part, Nathan, so I'll just help you. I just want to know what the definition of report observe non-compliance to CARB? What does that mean?

MSCD AIR POLLUTION SPECIALIST DEAN: So the idea there is that in the fields often -- or sometimes vehicles will potentially be mislabeled and the idea is that a prime contractor, if they see that a vehicle is mislabeled or if they see something that is not compliant on their job site that they have direct control over, that they would report that to CARB. So it's direct purview over the job site. And if they observe something on a vehicle that is non-compliant, they would report that.

VICE CHAIR BERG: And how will we quantify that as far as if CARB is on-site for an inspection and finds a non-compliant vehicle? How are you going to decide if a prime contractor violated that part of the regulation?

ED ASSISTANT CHIEF QUIROS: I can jump in on that. I think what we would do, if we did see a non-compliant piece of equipment on-site, we would be pursuing enforcement action against the owner of that piece of equipment. The prime contractor is responsible for checking that certificate of compliance. And if they did that due diligence, then they would not be liable if there does happen to be a non-compliant piece of equipment there.

VICE CHAIR BERG: Okay. That's really helpful for me, so thank you very much. I really appreciate that. I am really concerned about the -- about the phase-in starting in a mere 12 months. And I have just really been struggling over -- trying to understand and really in this economic environment and in our construction environment, how this is going to work that is not going to have a big impact. And I -- I'm just really struggling with it. I just have to let everybody know.

So thank you for listening.

CHAIR RANDOLPH: All right. Dr. Sperling.

BOARD MEMBER SPERLING: So I like this rule a lot. I like the, you know, performance standards tier, you know, moving to more low-emission engines and moving eventually to electric. But there was a part of it I hadn't really paid attention to that really got my attention here and that's the renewable diesel part.

So the renewable diesel is here because -- mostly because of the Low Carbon Fuel Standard. And we're seeing a lot of new production coming in. So I have a couple of questions. The first question is just to understand the industry. My understanding is these big refineries are making the renewable diesel and they're just putting it into the pipeline system and putting it into the distribution system and not necessarily keeping it separate, but, you know, the -- that's always been the way the oil industry worked. Is that true or not? Because, you know, this is going to get to the availability question.

MSCD AIR POLLUTION SPECIALIST DEAN: Right. So -- this is Nathan Dean again. So currently, a lot of the Renewable Diesel that's produced is getting put into -- mixed in with traditional diesel. I believe it's about like five percent. And it usually gets used in the on-road side, so a lot of this fuel is used in 2010 or newer on-road engines. So what our amendments would be doing is if this fuel were to go into those off-road equipment that's older, it does not have the SCR and DPF controls, you would see that NOx and PM benefit. So currently, you are correct. It is blended in -- generally blended in and used in the --

BOARD MEMBER SPERLING: So how would someone get access to this renewable diesel and -- since it's just put into the distribution system and mixed with everything else?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: So we are seeing stations that are renewable diesel --

BOARD MEMBER SPERLING: Could you speak a little louder?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: Sorry. I'm sorry.

We are seeing stations that are renewable diesel specific, so they will have R99, R100 from those stations. You can also procure it through your -- through your fueling contracts. I know at the 76 station by my house, there is a renewable diesel pump now. So it is coming online. It is becoming more available. And that's why if in the interim time, if there is a -- a fleet has issues of procuring renewable diesel, we do have that flexibility provision if they're unable to obtain it.

BOARD MEMBER SPERLING: Okay. I mean, I'm a little skeptical of this. You know, like what about when you get to remote areas where a lot of this equipment is used? And the question also is if it's available as a stand-alone option, it's always going to be presumably much more expensive, because -- otherwise, you know, there's extra distribution costs putting it in a truck, bringing it to some location. So I think there would be a significant cost premium for these fuels if they're distributed separately.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: No, we're not seeing that right now.

BOARD MEMBER SPERLING: Yeah.

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: That's not what we're seeing. I mean, we have data that Caltrans keeps a report of the cost of renewable diesel and conventional diesel and they're at cost parity for their fleets that are using and able to sell on their projects.

BOARD MEMBER SPERLING: And is that possibly because so far the renewable diesel is made in small facilities, I believe, and it's not really -- they haven't really geared up in a major way. That part I'm not sure about, but anyway. I guess I'd like to -- you know -- okay. So then the second -- the second question has to do with the emission reductions that come with the renewable diesel. But I do have a lot of -- kind of a technical questions, what does weighted mean, weighted between different engines, different fuels, when you talk about the 10 percent and 30 percent reduction.

MSCD AIR POLLUTION SPECIALIST DEAN: I don't recall -- this is Nathan again. So I don't recall saying weighted per se. So I know that they -- we have a

BOARD MEMBER SPERLING: It says it right in the -- your presentation.

MSCD AIR POLLUTION SPECIALIST DEAN: So what I can say is, you know, the study that we relied upon, a CARB study, is that in older technology it showed that 10 percent NOx and 30 percent PM reductions in the older engines, specifically when using 100 percent, 99 percent renewable diesel. So I'm not sure specifically the weighted concern. Maybe you can --

BOARD MEMBER SPERLING: It's only a -- it's more a question of that if we're going to deal with this availability question and it's going to be available in some place or another, it seems like -- because I think what you said I presume is correct that, you know, you get bigger bang in the older engines. So there might be some reasonable to want to, you know, prioritize that. And it would affect the calculations that are done.

But the more important one is that I presume there's going to be a fixed amount of renewable diesel, that this program is not going to stimulate new production. Most of it is coming because of the LCFS. And so the emission benefit, I don't -- it doesn't seem like there's any emission benefits here, because you're just moving the benefits around. In other words, if it's not used in some off-road equipment, it's used, you know, on some truck somewhere. Am I missing something on that?

MSCD AIR POLLUTION SPECIALIST DEAN: So that is currently, the fuel would be used in on-road. And the issue there is that in 2010 and newer on-road engines, you do not see that NOx and PM benefit. Because they have SCR and DPF. So without these amendments, it would be use in on-road and we would not see the NOx and PM. But by shifting it into the Tier 4 interim and older engines, we do see that 10 percent NOx and 30 percent PM reduction.

EXECUTIVE OFFICER CLIFF: And due to SB 1, all trucks on the road at the end of this year will be 2010 or newer.

BOARD MEMBER SPERLING: You know, it just seems like it's a great regulation, but do we need this renewable diesel requirement? It seems like it creates a lot of work for the staff for almost no benefit that I can see -- any marginal benefit. You know, okay, so as Dr. Cliff says, you know, if you look around -- if we really tease the data and look at where is it actually used, is it used in older engines or newer engines, maybe there's some small benefits, but it's going to be pretty tiny.

MSCD DIVISION CHIEF VERGIS: Just -- yeah, thanks for the opportunity. Sydney Vergis again. So appreciate the opportunity to respond to that. I would say renewable diesel is a really critical and foundational part of this regulation. Renewable diesel is responsible for 40 percent of the NOx benefits and 70 percent of the PM benefits initially. So particularly in those early years, renewable diesel is a really critical underpinning here.

You mentioned availability earlier, I'll just mention that there's 900 million gallons of renewable diesel available now, and in the next couple years, we expect even more to be coming online.

BOARD MEMBER SPERLING: Yeah. My only point is that, yes, it's just moving the -- you know, the -- you know, the benefits around and it's a -- if it wasn't a benefit here, it would be a benefit somewhere else but -- but if that's not a compelling argument, then -- you know, it just seems like a lot of extra work for very little benefit. But if you want to do a lot of more work, Dr. Vergis --

MSCD DIVISION CHIEF VERGIS: We would like to get the benefits that were committed to in the SIP, yes. Thank you.

CHAIR RANDOLPH: Dr. Pacheco-Werner.

BOARD MEMBER PACHECO-WERNER: Yeah, thank you. I'm really excited about this -- those proposed amendments. I do have a question as it comes to -- I know that some of the flexibilities that are in here are around the zero-emission vehicles. But I -- but I'm not sure in terms of the phase-in what the availability is right now. Let's say, for example, for construction equipment and that would be in areas, you know, that they're stationary for a period of time. And they don't have access to electricity, because they're in construction areas. What are the -- what's sort of the technology that's available right now or what are we looking for and are there opportunities that we can think about to talk with our legislature about further funding for more technology to make that happen.

Thanks.

EXECUTIVE OFFICER CLIFF: This is Steve Cliff. Thank you for that question. For those in the room, there is a bunch of equipment outside. And we'll well get the opportunity to see that -- that equipment and more and more zero emissions is coming online. This regulation itself will incentivize more zero-emissions equipment, but does not mandate the turnover to zero emissions. I would venture to say stay tuned. I'm sure that we will get around to that some day. But this regulation is really about getting rid of the dirtiest, oldest equipment, even though we are very excited about the zero-emission options that are coming online.

BOARD MEMBER PACHECO-WERNER: I'm sorry, I was just referring to the slide where it says the exceptions.

I guess slide 13. So that -- so the exception is for those that are -- that already have a zero-emission fleet, but how are people getting to that or is it more about just that in this regulation we're just focused on making sure they're using this -- the right fuel, and -- you know, I'm just trying to see how we're, you know, sort of pro -- is this meant to just be the exception or are we using it as sort of like incentivizing to get to that place?

MSCD AIR POLLUTION SPECIALIST DEAN: Hello. This is Nathan Dean again. So this exemption on slide 13 it was for the renewable diesel requirement. And so exempting the fleets that are zero-emission is really trying to incentivize those fleets that adopted zero emission. And the other idea here is that renewable diesel wouldn't have -- see much of a benefit in a fleet that has Tier 4 final and zero emission. So that's part of why we had the exemption. And really the critical part is that, you know, if a fleet is fully zero emission, we would want to be rewarding those types of fleets.

BOARD MEMBER PACHECO-WERNER: Right. So like the vehicle-to-vehicle thing that you have on slide 15. I'm just trying to see like how people would act -- like is -- is this voluntary emission flexibility, is that actually something that's doable right now for those types of like construction equipment.

MSCD AIR POLLUTION SPECIALIST DEAN: Yeah. So I think the vehicle-to-vehicle one is definitely something that can happen now. As Dr. Cliff was mentioning, you know, there's equipment -- you know, part of the funding plan that's available for purchase. And we think this vehicle-to-vehicle would be perfect for that situation. So we do think that there are certain equipment categories and certain horsepower ranges where zero emission is out there now. And I think that, you know, we see it in very targeted areas, which is why we're really pushing for the cleaner combustion in this regulation. But we do see in the low horsepower and certain equipment types that zero emission is available today.

CHAIR RANDOLPH: Okay. Board Member De La Torre.

BOARD MEMBER DE LA TORRE: Hello. I just wanted to make a comment in terms of the process and how we got her today, which is a couple of things. One, these changes were telegraphed and made clear in the 2020 Mobile Source Strategy. So the fleets were well aware that we were looking to do this. And, in fact, the process that led to today has been in development for 18 months. So there has been a long lead time in terms of the communication, in terms of the involvement. I understand that folks aren't necessarily happy with this product --

this regulation as it's being put before us, but in terms of the timing, there is no surprise here. We're almost at the end of 2022 and this goes back to 2020. So just wanted to clarify that. And I'm very supportive.

Thank you.

CHAIR RANDOLPH: Thank you.

Dr. Balmes.

BOARD MEMBER BALMES: Thank you, Chair Randolph. As the public health member of the Board, I feel it's just important to emphasize the importance of this rule as is shown on slide 20 of the staff presentation. The estimated lifetime health benefits are considerable. You know, hundreds of premature deaths, hospitalizations and emergency room visits for asthma. And I think, if anything, that's an underestimate. So I just wanted to emphasize, I think this regulation is needed to protect public health.

Thank you.

CHAIR RANDOLPH: I had a question for staff. I think most of my other questions have already been asked by my colleagues, but I did have a question about the comment about the renewable diesel being an equipment requirement versus a purchasing requirement. So can you kind of explain that concern and what your thoughts are?

MSCD AIR POLLUTION SPECIALIST DEAN: This is nathan Dean again. So the intent with those provisions for record keeping was to ensure that the renewable diesel is being used by the fleets. So our intent is in line with CalCIMA's comment and that it should be, you know, ensuring that fleets are using renewable diesel. To the extent that our language is unclear, we want to make sure that that's clarified in 15-day changes potentially. But our intent is matching with the letter that we received and the comments we heard from CalCIMA.

CHAIR RANDOLPH: Okay. Thank you. All right. We have more Board member comments. I'm going to go with Board Member Hurt and then Board Member Kracov.

BOARD MEMBER HURT: Thank you, Chair.

I think similar to Board Member Balmes, the health benefits are really persuasive to me. I am -- I really appreciated how clearly the benefits were laid out by the staff report. And I especially appreciated I think it's Figure 10 of the statewide emissions of NOx by the mobile sector, the change that would occur in that space. It's important that if we all want to get our regions into acceptable compliance, that measures like this one need to be passed. And it's not only benefiting local residents, but the operators alike with the reduction in NOx and PM.

I did have a question and I'm hoping staff could just explain how this work -- this rule will work with the

AB 617 community plans and measures that are being created in communities all over California. I think it's important to talk about how these rules are supporting all the work that's happening in these communities and how important it is to them that the regulations support the work that they're doing.

MSCD AIR POLLUTION SPECIALIST DEAN: So I can take this one too. So as Sydney had mentioned earlier, 10 of the AB 617 communities identified off-road diesel as a piece of interesting sector for reductions. So we are open to working with, you know, the AB 617 communities. During the development process, we also posted several blog posts on the environmental justice webpage and invited community members to our public work groups through our gov deliveries.

So we -- during development we're open and we remain open to working with the communities to make sure that our amendments are in line with the health benefits that -- for those communities.

BOARD MEMBER HURT: Thank you. I definitely had questions around availability and the cold weather impacts. And I think they've adequately been responded by the staff. I think the cost to not make amendments to this regulation is our health and our planet. And so we need to move forward in all the different sectors in the many different ways for cleaner air.

Similar to Vice Chair Berg, I did have concerns with the State's goals around housing and infrastructure, just our construction goals. But I think -- and I'm going to ask now another question from the staff. If we are to find that there's a lot of equipment that's taken out of availability, it's really impacting the transition in a way that's hindering infrastructure, improvements in housing, how -- how would we respond in this amendment or in this rule in the future or how could we?

MSCD OFF-ROAD IMPLEMENTATION SECTION MANAGER LEVINE: So there actually is a secondary flexibility provision in the regulation that allows for if there's a lack of availability of Tier 4 equipment, just more in general, like if it's not available. And we can look at that language and see if the concerns that you bring up are really covered under those provisions.

BOARD MEMBER HURT: Okay. Thank you. I'm supportive of this rule and will be voting in favor of it.

Thank you.

CHAIR RANDOLPH: Vice Chair Berg.

VICE CHAIR BERG: Thank you, Chair Randolph. I apologize that I'm circling back, but I did have another question. And that was on one of the testimony, there was a concern that these Tier 0, 1, and 2s can be sold into other industries that are not regulated. Could staff comment on that, please, and I'm thinking specifically the ag industry.

EXECUTIVE OFFICER CLIFF: Vice Chair Berg, this is Steve. I think it is true that they could be sold into the ag industry. However, we have a lot of programs that are encouraging ag to turnover their fleets to cleaner equipment as well. And we have also been pretty clear that as part of our SIP commitments, we need the ag industry to continue to make progress there. And incentives have been the primary way that we've tried to continue that progress.

And if we're not able to continue to make progress, then we will need to evaluate whether other options for getting those reductions are necessary. We're not really seeing that this is a problem so far. And that's in large part because the benefits of the newer equipment are significant. And so the industry tends to be moving towards the cleaner equipment, especially in the areas where non-attainment is observed and we're seeing that that industry, like in the Central Valley, the ag industry is continuing to move towards cleaner equipment in response to those incentive programs.

VICE CHAIR BERG: Well, and I do appreciate that comment. I would think that several of those 10 communities on 617 also might not know the nuances between off-road and ag, and are concerned with ag equipment as much as they're concerned rightfully about the off-road rule.

Thank you, Chair Randolph. I, again -- oh, I would like to make one other comment. My -- I -- I so respect my esteemed colleague, Hector De La Torre, but I think that when we live in this policy world versus being in the business world of medium and small businesses, these are not companies that read the Mobile Source Plan. And also, they're used to be, in my 18 years of experience, a public process where staff would have this 18 months, but businesses weren't to presume that that meant we would give them 12 months notice.

So if we truly are going to -- this is the new day of acceleration, then you're right, we need to let businesses know that this is the new day of acceleration. We need these. I agree we need Tier 0s, 1s, and 2s off -- out of the inventory. I couldn't agree more. I know how dirty they are. They're also expensive to maintain. And so fleets wouldn't keep them in their fleets if they weren't hard to replace.

And so I just again feel that the 12 months is not enough time on any regulation that is of this magnitude, and so it is very important. I get it for the

SIP, and that's why I'm so conflicted between the two sources. And I really appreciate Board Member Hurt for summarizing much more eloquently -- I will say that I'll blame it on my head cold that I wasn't very articulate. And I really thank you for being articulate on the concern about construction, specifically on very important social concerns, and quite frankly our transitions that we're going to really count on our construction industry to help us make all of our transitions successful.

Thank you, Chair.

CHAIR RANDOLPH: All right. Thank you.

Board Member Takvorian.

BOARD MEMBER TAKVORIAN: Thank you, Chair. I don't have much to say. As I just said to my colleague here, everyone has really answered -- asked the questions and I really appreciate staff's good work on this -- on this -- on these amendments and on your responses to us today.

I'm compelled by the feasibility of this rule and the availability of the equipment, the health benefits to both the public and workers, and the near-term benefits as well as the enormous difference between the Tier 4s and the Tier 0s and 1s. I mean 80 times is so, so dramatic. I don't think we see that very often. And to have the number of -- the amount of benefits in the first five years as others have pointed out I think is really compelling.

I do appreciate the inclusion of the 617 communities, as I know that that was included in many CERPs. And folks are struggling with how to make that come to life in their local communities and they really need CARB's leadership I believe in order to make that happen.

So I'm ready to move approval of the proposed amendments, if we're ready for that Chair.

CHAIR RANDOLPH: Okay.

BOARD MEMBER FLOREZ: I will second that. Dean Florez.

CHAIR RANDOLPH: Who -- where is that voice coming from?

(Laughter).

BOARD MEMBER BALMES: Senator Florez.

CHAIR RANDOLPH: Senator Florez, thank you so much. I couldn't see you on my screen here.

BOARD MEMBER FLOREZ: No worries. And I'm saving a comment as well, because Diane pretty much summarized it, so I just -- I'll second the motion.

CHAIR RANDOLPH: Okay. Great. Yeah, I don't have much to add. I think the only thing I would add briefly before we vote is I do share Dr. Sperling's concern just about the work involved in the exemptions. And I would encourage staff, and I'm sure you will do this anyway, to sort of think about the ways to simplify the RD exemption process. If you, you know, have some sort of regional exemptions or something, whatever makes the most sense from an implementation step, I think having everyone come in specifically for exemptions might be challenging, but if there's a way you can batch different issues, that might be helpful.

Okay. I think that's it. We have a motion and a second. And I will -- is there any further discussion?

I will ask Clerk to please call the roll.

BOARD CLERK GARCIA: Dr. Balmes?

BOARD MEMBER BALMES: Yes.

BOARD CLERK GARCIA: Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Yes.

BOARD CLERK GARCIA: Mr. Eisenhut?

BOARD MEMBER EISENHUT: Yes

BOARD CLERK GARCIA: Senator Florez?

BOARD MEMBER FLOREZ: Florez, aye.

BOARD CLERK GARCIA: Ms. Hurt?

BOARD MEMBER HURT: Aye.

BOARD CLERK GARCIA: Mr. Kracov?

BOARD MEMBER KRACOV: Yes.

BOARD CLERK GARCIA: Dr. Pacheco-Werner?

BOARD MEMBER PACHECO-WERNER: Yes.

BOARD CLERK GARCIA: Mrs. Riordan?

BOARD MEMBER RIORDAN: Aye.

BOARD CLERK GARCIA: Supervisor Serna?

BOARD MEMBER SERNA: Aye.

BOARD CLERK GARCIA: Professor Sperling?

BOARD MEMBER SPERLING: Aye.

BOARD CLERK GARCIA: Ms. Takvorian?

BOARD MEMBER TAKVORIAN: Aye.

BOARD CLERK GARCIA: Supervisor Vargas?

Vice Chair Berg?

VICE CHAIR BERG: Berg abstains.

BOARD CLERK GARCIA: Chair Randolph?

CHAIR RANDOLPH: Yes.

BOARD CLERK GARCIA: Madam Chair, the motion passes.

CHAIR RANDOLPH: All right. Thank you.

Okay. The last item on today's agenda is Item number 22-15-5, Proposed Fiscal Year 2022-23 Funding Plan for Clean Transportation Incentives accompanied by proposed Carl Moyer Program changes. If you are here with us in the room and wish to speak on this item, please fill out a request-to-speak card as soon as possible and submit it to a Board assistant. If you are joining us remotely and wish to comment on the item, please click the raise hand button or dial star nine now. We call on in-person and remote commenters when we get to the public comment portion of this item.

The Clean Transportation Incentives Funding Plan is a critical part of CARB's portfolio of incentives that complement our planning and regulatory program to reduce emissions and increase access to clean transportation. And in addition to the clean transportation incentives, this item also includes a specific change to the Carl Moyer Program.

Our clean transportation incentives continue to support an equitable transition to zero-emission cars as well as to accelerate the commercialization of zero-emission technologies for trucks and buses. They support small owner-operator truck fleets and they improve access to clean mobility options in communities hardest hit by pollution.

This year's investments present -- represent an unprecedented level of funding from the Legislature to support electrification and transformation of the transportation sector. They will drive accelerated deployment of ZEVs and help support and equitable transition to a clean transportation future. The funding plan builds on the investments the State has made over the past decade to support wide-scale employment of ZEVs to meet the targets set forth in Governor Newsom's Executive Order.

With zero-emission technologies now widely available, this is the opportune time for California to double down on supporting equitable access to zero-emission options for priority populations. Building on last year's investments staff proposes to commit at least 60 percent of low carbon transportation investments to benefit priority populations, significantly higher than the 35 percent set by the Legislature.

Given my focus on promoting equity in all aspects of CARB's work, I'm pleased that significant funding is allocated to transportation equity projects that partner with communities to provide a broader range of transportation choices, help people get around without relying on cars, and reducing vehicle miles traveled.

We know we need a system level change of the transportation sector to clean the air, protect public health, and combat climate change. And this plan supports those goals by reinforcing the positive steps that local transit agencies are taking to promote more walkable, bikeable, and transit rich communities.

Dr. Cliff, would you pleas introduce the item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. As you just heard, incentive programs are a critical part of CARBs comprehensive strategy to accelerate the introduction of the cleanest technologies, complementing our regulatory programs. These incentives provide important steps to accelerate the transformation of the transportation sector to zero tailpipe emissions powered by the lowest carbon energy sources.

This year, the funding plan includes almost $3 billion in incentives, our largest plan yet. These investments are designed to scale the ZEV market towards sustainability in the key vehicle segments ready for significant ramp up in commercial development. They continue to expand the focus on equity by increasing access to ZEVs for priority populations and providing emission reductions in the communities most impacted by harmful air pollution. They also provide critical support for communities to redesign and strengthen transportation planning to give people more and better choices not just private cars.

The proposed investments continue to build on commitments from previous budget cycles, while taking steps to shift from Broad purchase incentives to more targeted strategies to support lower income consumers and small fleets facing the greatest challenges. This comes at a great time, with our Advanced Clean Fleets rulemaking underway, this funding will provide critical aid for those smaller fleets and their transition to zero and it further supports significant investments in small off-road engines and commercial harbor craft, also affected by recent regulatory actions.

We have coordinated closely with the California Energy Commission, California State Transportation Agency, and the Governor's Office of Business and Economic Development on the development of this plan. And I want thank Hannon Rasool of the Energy Commission, and Tyson Eckerle of the Governor's Office of Business and Economic Development for joining us today to support the proposed funding plan.

Finally, the funding plan is a key portion of CARB's broader incentive portfolio. And today, we propose changes to one of the other incentive programs within that portfolio, specifically targeted changes to the Carl Moyer Program to address cost effectiveness limits for inflation and increase its off-road zero-emission cost effectiveness limit to mere off-road zero emission cost effectiveness limits.

I will now ask Graciela Garcia of the Mobile Source Control Division to begin the staff presentation.

Graciela.

(Thereupon a slide presentation).

MSCD AIR POLLUTION SPECIALIST GARCIA: Thank you, Dr. Cliff.

Good morning, Chair Randolph and members of the Board. Today, we will be presenting the proposed fiscal year 2022-23 funding plan for clean transportation incentives, accompanied by proposed Carl Moyer Program changes.

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MSCD AIR POLLUTION SPECIALIST GARCIA:

Specifically, today's presentation will cover two topics. After some short background, we will review staff's recommendations for the funding plan for clean transportation incentives our primary topic. Then we will discuss proposed revisions to the Carl Moyer Program. Both of these incentive programs are related and help achieve common air quality, climate change, and equity goals, and they're being presented together today, so that we can make the critical changes needed to quickly target these funds in communities that need them the most.

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MSCD AIR POLLUTION SPECIALIST GARCIA: To achieve its numerous climate change, air quality, ZEV deployment, and petroleum reduction goals, the State has adopted an aggressive multi-pronged strategy that uses incentives to complement regulatory approaches.

Additionally, incentives will play a pivotal role in accelerating the transition of fleets to zero-emission in line with Governor Newsom's most recent Executive Order. We have also given increasing attention to the role our investments play in promoting equity and racial justice.

Our incentives also act as a stimulus and support economic recovery. They have helped draw manufacturers of clean technology to California to open or expand operations promoting economic growth and job creation within the State and making zero-emission vehicles and their components the state's largest export.

We have constantly reevaluated our projects and incorporated strategic changes to build on the successes of past investments and incorporate the lessons we have learned. This year, we are continuing to streamline and enhance our data collection, transparency, and evaluation strategies.

Next, I will discuss the focus of today's presentation and how it fits within CARB's broader incentives portfolio.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Today's presentation is centered around the Low Carbon Transportation Program, the Air Quality Improvement Program, and the Carl Moyer Program. The incentive programs we are discussing today are a part of the broader portfolio of funding that CARB administers to improve air quality, enhance community protection, and reduce greenhouse gas emissions.

CARB strives to maintain a balanced portfolio of available investments to meet the State's air quality and climate goals. While the Community Air Protection Program, FARMER, and the VW Mitigation Trust are not directly tied to today's presentation, we will continue to closely coordinate with these programs to make sure the investments are complementary.

And outside of CARB, other federal, State, and local agencies have complementary funding sources as well. We also coordinate regularly with our sister agencies on these investment programs.

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MSCD AIR POLLUTION SPECIALIST GARCIA: And with that, I will move into our first and largest topic, the funding plan for clean transportation incentives.

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MSCD AIR POLLUTION SPECIALIST GARCIA: The development of the fiscal year 2022 -- 2022-23 funding plan for clean transportation incentives was a collaboration among staff across the California Air Resources Board with further feedback and enhancements provided by multiple key external partners and stakeholders, including those listed on this slide and more.

Staff, at the California Air Resources Board, would like to acknowledge and thank each of these entities for their valuable contribution and continued feedback that shape this year's funding plan. CARB staff is grateful for everyone who has participated during our public process and beyond.

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MSCD AIR POLLUTION SPECIALIST GARCIA: To develop this plan, staff held a robust public process beginning earlier this year that included: three public funding plan development workshops; 12 public work group meetings; several targeted meetings with African American community leaders, a tribal government representative, and labor unions; one community listening session; and numerous one-on-one discussions with interested stakeholders and community advocates.

Additionally, three public work group meetings were held as a part of the recently concluded Incentives Program Advisory Group, or IPAG, the group focused on providing greater support for small fleets and small businesses statewide and further promote program participation by increasing equitable access to zero-emission technologies for heavy-duty vehicles.

While these meetings focused on the Carl Moyer Program, the stakeholder feedback and concepts discussed were also incorporated into the funding plan. We would like to thank Chair Randolph, Vice Chair Berg, and Board members Hurt and Kracov, and the Carl Moyer Program staff for their leadership and participation in this process.

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MSCD AIR POLLUTION SPECIALIST GARCIA: The proposals we'll present today continue our increased focus on outreach and community engagement and introduce many new policies and efforts to further center incentives on communities that need them the most, including priority populations, and small fleets, and owner-operators. These are complemented by dedicated funds for outreach and we will continue to strengthen our community outreach and capacity building efforts in the coming years.

These proposals also address both short-term and long-term needs by focusing limited State dollars in ways that drives ZEV technology development and deployment, but also give local air districts greater flexibility to act on immediate and tailored issues, such as meeting federal air quality goals and addressing local community air protection concerns.

The proposal also takes a step back looking beyond just vehicle replacements to the transportation systems as a whole, and incorporates new technologies and new systems in an integrated package.

Before I address the suite of programs informed by these efforts, let's review the State budget that supports them.

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MSCD AIR POLLUTION SPECIALIST GARCIA: The fiscal year 2022-23 budget included the largest investment the State has made to date to support the acceleration of zero-emission vehicle deployments, improve air quality, and support an equitable transition to a cleaner more sustainable future. This year's budget also complements and builds off of last year's ZEV funding and continues focusing investments on transitioning the transportation sector.

I also want to note that this is the second year of six year, 10 million ZEV investment package agreed to by the Governor and the Legislature. But today's presentation will cover only the 2.6 billion in funding as listed on this slide. And while this is a sizable investment, it is only a portion of the funding that was appropriated to CARB. Additional appropriations were made for FARMER, the Community Air Protection Program, and the Carl Moyer Program.

In addition to the money covered in this year's funding plan, CARB will receive another 1.5 billion over the next three years as a part of the ZEV package subject to further appropriation, which will also allow CARB to expand upon our key efforts in future funding plans and continue to focus funding in areas of the state that need them the most.

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MSCD AIR POLLUTION SPECIALIST GARCIA: This slide demonstrates how priorities have evolved over the last decade and has increasingly focused on priority populations. Early on, many of the programs funded under low carbon transportation were focused on seeding and growing the ZEV market across both the light- and heavy-duty sectors.

In fiscal year 2023-14, there were no funds allocated to CARB to specifically benefit priority populations. And just a few years later in fiscal year 2017-18, approximately 50 percent of funding was allocated to benefit priority populations and our projects began to shift in design to address the needs of these populations better.

In the current fiscal year, staff estimates over 70 percent of the 2.6 billion appropriated is expected to benefit priority populations. And as you'll see in the coming slides, many changes are proposed to help underscore how important an equity focus for these projects has become.

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MSCD AIR POLLUTION SPECIALIST GARCIA: It is also important to note that throughout this year's public process, community members have asked staff to share demographic data for individuals that have participated in CARB's clean transportation incentive programs, particularly from the light-duty purchase incentive and mobility projects. Currently, not every project collects demographic data. And those that have, there is no consistently across the methods in which the data is collected.

Where data is available, staff has included it in the funding plan and staff are also working to expand and standardize data collection for all clean transportation investments within the next year. In addition, staff is exploring ways to ensure the data remains publicly available and accessible.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Before jumping into to key proposals outlined in today's presentation, I'd like to provide an overview of project category allocations for both light- and heavy-duty and off-road equipment. This slide slows the proposed allocations by project category and funding source based on what the Legislature has appropriated for fiscal year 2022-23. It is important to note that much of this funding was appropriated in the State budget specifically to several projects within these categories. Staff will present the detailed proposed project-specific allocations and proposals in the next section of today's presentation.

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MSCD AIR POLLUTION SPECIALIST GARCIA: And now for our clean transportation and light-duty equity investments. The overarching goals of this category projects include: supporting the Governor's Executive Order N-79-20 that calls on the State to accelerate the transformation of California's fleet to zero-emission; supporting the Advanced Clean Cars II regulation; providing zero-emission and clean mobility options tailored to priority population needs; and expanding transportation choices and reducing vehicle miles traveled.

With these goals in mind, I will highlight some key areas where CARB's light-duty vehicle purchase incentive programs have been successful in supporting healthy communities, clean air goals, and growing the green economy in California.

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MSCD AIR POLLUTION SPECIALIST GARCIA: To date, CARB's vehicle purchase incentive programs have: provided over 400 million of vehicle purchase incentive funds to support clean vehicle purchases benefiting priority populations; provided over 2.9 million to support over 700 light-duty electric vehicles for public fleets operating in disadvantaged communities; resulted in the reduction of over 9.6 million metric tons of carbon dioxide equivalent and over 48 million gallons of fuel use avoided; supported the purchase of over 475,000 clean vehicles through the investment of over 1.2 billion in vehicle purchase incentives since 2010; and supported roughly 42 percent of the over 1.1 million light-duty electric vehicles sold in California.

Over the next year, staff will continue to evaluate and refine metrics of success, especially as we begin to administer funding for the current fiscal year, which I will discuss on the next slide.

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MSCD AIR POLLUTION SPECIALIST GARCIA: For the vehicle purchase incentive category, staff are proposing a total of 326 million for six projects. Consistent with legislative direction, Clean Cars 4 All will receive 245 million to support existing air district programs and the statewide expansion. Next, staff recommends allocating 66 million to financing assistance, one million to Access Clean California, and three million to the electric bicycles incentive project.

In addition, staff are proposing to allocate one million to support the California Integrated Travel Project, a newer effort to develop a streamlined payment strategy for transit and electric vehicle charging.

And lastly, 10 million was appropriated for the Zero-Emission Assurance Project established by AB 193 to provide battery replacements or warranties to low-income electric vehicle buyers. Staff are also recommending several changes across all the vehicle purchase incentive programs, which I'll discuss next.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Staff's proposal takes a step towards continued alignment across all three vehicle purchase incentive programs, the Clean Vehicle Rebate Project, or CVRP, Clean Cars 4 All, and financing assistance. After considering feedback from community groups and the public, that incentives are not enough to support low-income car buyers in the current market, staff proposes a significant increase across new and used light-duty purchase incentives.

To illustrate, eligible car buyers can currently receive up to $12,000 towards a new electric vehicle without scrapping an old vehicle and up to $16,5000 when scrapping an old vehicle. With staff's proposed increases to incentives, low-income car buyers will be able to receive up to $15,000 towards a new electric vehicle without scrapping an old vehicle or up to $19,500 when scrapping an old vehicle.

And with staff's proposal to expand CVRP rebate now statewide, this provides the opportunity to apply all stacked incentives at the point of purchase, offering significant support in a market with higher car prices and limited inventory.

Lastly, staff's proposal incorporates legislatively required vehicle eligibility changes by removing conventional hybrids from Clean Cars 4 All by November 2024 and removing plug-in hybrid electric vehicles from CVRP by January 2025.

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MSCD AIR POLLUTION SPECIALIST GARCIA: In addition to updating incentive amounts, staff are also proposing to collapse the current varied income tiers for Clean Cars 4 All and financing assistance into one simplified income threshold for low-income participants at or below 300 percent of the federal poverty level, which equals to about 54,000 a year for a couple and about

83,000 a year for a family of four.

In an effort to minimize overlap, this year's proposal also allows air district run Clean Cars 4 All programs to expand coverage to all areas of their respective jurisdictions, which positions the statewide Clean Cars 4 All Program to support all non-air district run territories. The proposal also includes of charging incentives for low-income CVRP applicants and an increase in charging incentive amounts for financing assistance.

These changes will support at least a year of charging for a low-income car buyer charging exclusively at public charging stations. Eligible applicants would be able to stack these charging incentives, which would boost support to about two years of public charger use for a low-income car buyer.

Next, I will cover air district allocations for Clean Cars 4 All.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Per legislative direction, staff will allocate 125 million to the statewide program and 80 million to the District programs. Staff is also proposing an additional 40 million to the District run programs for a total allocation of 120 million. This record investment in the district programs will enable the districts to expand their programs to all low income residents of their respective jurisdictions.

In addition, staff determined district allocations by developing an allocation formula that is intended to ensure consistent predictable funding and use of database metrics to determine program demand and future growth. Using the formula, the proposed district allocations are listed on the slide. This covers our light-duty vehicle purchase incentives. And I will now provide an overview of our clean mobility metrics and proposed allocations.

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MSCD AIR POLLUTION SPECIALIST GARCIA: CARB has been focused on developing metrics for success across mobility investments as a critical element of program evaluation measuring equity outcomes, increasing transparency through data reporting, and sharing lessons learned across programs.

Similar to our vehicle purchase incentives, these metrics include supporting healthy communities, State air quality goals, and increasing access to affordable transportation and mobility options and growing the green economy. To date, CARB's clean mobility investments have reduced over 2.7 million in net fossil fuel use, saved over 37 million in travel costs, and supported over 1,100 jobs.

Most notably, as a part of the Clean Mobility Options Voucher Pilot Program, approximately 2.2 million was invested to increase clean transportation options for tribal governments. CARB anticipates additional data as we measure benefits and project demand which provides a critical snapshot of program progress and benefits and helps guide investments.

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MSCD AIR POLLUTION SPECIALIST GARCIA: For the currently fiscal year, staff proposes to allocate 55 million to CARB's clean mobility and planning and capacity building programs.

This allocation includes: five million for planning and capacity building to support community-led projects and dedicated localized technical assistance and outreach; 20 million for the Clean Mobility Options Voucher Pilot Program to support projects funded in the first window of 2020 and increase voucher funding for the second application window, which is scheduled to open in early 2023; 15 million for the Clean Mobility in Schools to support holistic, transformative, zero-emission projects in schools, and; 15 million for the Sustainable Transportation Equity project to fund place-based implementation grants.

This funding proposal supports clean mobility investments in the most impacted communities, which expand options available and meet their unique needs while providing needed vehicle miles traveled reductions to promote more sustainable transportation systems.

That concludes the clean transportation and light-duty equity investments portion of the presentation. I will now move into our largest funding category, heavy-duty and off-road equipment investments.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Overall, our heavy-duty and off-road equipment investments strive to continue and expand support for small fleets and disadvantaged communities, expand support for financial assistance and non-financial incentives for ZEVs per SB 372, ramp up efforts to transition heavy-duty and off-road equipment to zero emission, and continue to support multiple regulatory efforts.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Our heavy-duty investments also play an important role in supporting healthy communities, supporting technology evolution, and growing the green economy. These programs have helped fuel demand for zero-emission technologies and have spurred substantial growth in the number and types of zero-emission technologies available. Today, there are over 320 zero-emission vehicles or equipment models eligible in our heavy-duty voucher programs.

These investments also support job creation and have resulted in substantial emission reductions compared to their diesel counterparts. Additionally, our investments have helped generate benefits for disadvantaged communities and support small fleets. In 2022, 63 percent of fleets that requested zero-emission truck and bus vouchers operated a hundred vehicles or fewer, and 20 percent of fleets operated 10 vehicles or fewer.

While we've made substantial progress towards our goals, staff's proposal is designed to continue and to grow the market for zero-emission technologies while focusing benefits to disadvantaged communities and small fleets.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Staff recommends allocating the 2.2 billion for heavy-duty investments to six project categories, including: over 1.7 billion to the Clean Truck and Bus Voucher Incentive Project, known as HVIP, of which 157 million will be for zero-emission drayage trucks; 273 million to the Clean Off-Road Voucher Incentive Project, or CORE; 75 million for our advanced technology demonstration and pilot projects, including green zones, zero-emission rail, port vehicles and equipment, zero-emission aviation and ground support equipment, and zero-emission construction and agricultural equipment.

Additionally, staff is allocating 60 million for demonstration and pilot projects focusing on commercial harbor craft. For the Truck Loan Assistance Program, staff recommends that 28.64 million be allocated to help fleets that don't typically qualify for lending to upgrade to cleaner trucks. And finally, staff is proposing to use five million to launch a new zero-emission truck loan pilot.

These allocations help support the rapidly growing availability of zero-emission trucks, buses, and off-road equipment and prepare the market for recently adopted or upcoming regulations, such as Innovative Clean Transit, Advanced Clean Fleets, the Commercial Harbor Craft Regulation, and the In-Use Locomotive Regulation.

To support these investments, staff are proposing several changes to many of these projects, which I will discuss next.

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MSCD AIR POLLUTION SPECIALIST GARCIA: For HVIP, staff is proposing a number of changes in line with legislative direction to increase benefits for small fleets, small businesses, and disadvantaged communities, strengthen our focus on equity, and expand the market for zero-emission vehicles.

To support early adoption of zero-emission vehicles, this proposal would allow all fleets to continue to access HVIP incentives in 2023, and would introduce several new provisions to support small fleets including tiered voucher amounts, a substantial reserve of funding to ensure small fleets and public agencies have continuous access to incentive funding, and a new bulk purchase requirement for large fleets that is designed to leverage more private capital and encourage manufacturers to grow assembly lines and reach economies of scale.

These provisions delay the introduction of the fleets size limits until 2024, aligning with the proposed Advanced Clean Fleets requirements. Additionally, this year staff is proposing to continued set-asides for drayage trucks, transit bases, and school buses within HVIP that were introduced last year. Staff also plans to add additional funding to the Innovate Small e-Fleets Pilot, which supports our SB 372 goals. With this additional funding, staff will expand support for the smallest fleets in the state while incorporating lessons learned from its launch this year.

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MSCD AIR POLLUTION SPECIALIST GARCIA: This year's funding plans to take significant steps to refocus HVIP on small fleets, while still providing large fleets with incentives to transition to zero-emission prior to regulatory deadlines. Staff expects that the proposal would allow the program to meet demand over the next year and deploy over 400 additional zero-emission trucks or buses. This, combined with requirements for the largest fleets in the state to deploy vehicles in disadvantaged communities, will help reduce harmful emissions in those communities.

Finally, this proposal takes additional steps to help support the smallest fleets in the State by raising the incentive amounts for fleets with 10 or fewer vehicles and ensuring that public agencies and small fleets have continuous access to HVIP incentives, so that they can be confident that when they're ready to purchase a zero-emission vehicle funding will be available for them.

Next, I will cover our off-road equipment investments.

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MSCD AIR POLLUTION SPECIALIST GARCIA: The Clean Off-Road Equipment Voucher Incentive Project, or CORE, has seen incredible growth over the past few years. On the freight side, CORE has more than doubled the number of participating manufacturers and dealers and has tripled the number of eligible pieces of equipment. Last year, CORE expanded to include additional equipment types such as agricultural equipment, commercial harbor craft, switcher locomotives, and professional landscaping equipment.

Many categories of off-road equipment have seen high demand. The construction equipment category, terminal tractors, and transportation refrigeration units were all quickly fully subscribed. And after extensive outreach efforts, the CORE zero-emission professional landscaping category opened for voucher requests on November 7th of this year.

Following stakeholder feedback, staff is proposing to increase the maximum voucher amount for several types of equipment that face higher incremental costs and are new to the market. Staff continues to develop strategies to support small businesses and prioritize the deployment of zero-emission off-road equipment in disadvantaged communities.

And lastly, this year, staff proposes to launch a new category of projects within our portfolio of demonstration and pilot projects, which I will discuss next.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Following legislative direction, staff will allocate 60 million towards projects that will maximize emission reductions from vessels subject to the Commercial Harbor Craft Regulation. A portion of funding will be prioritized for private ferry operators regulated by the Public Utilities Commission. And the remaining funding will be prioritized for public ferries, licensed commercial passenger fishing vessels, research vessels, and excursions vessels.

Currently, staff estimates 60 million will cover about 45 vessels, a mix of smaller cleaner combustion sports fishing vessels and some larger zero-emission vessels like ferries.

In addition, funding for this project will help support compliance for the Commercial Harbor Craft Regulation and will be available for zero-emission and cleaner combustion engines. And lastly, staff will conduct a public process following today's Board hearing to determine how funding will be administered and prioritized.

This concludes staff's summary of the funding plan's key proposal. Next, I will cover specific contingency provisions outlined in the funding plan.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Consistent with previous years, we are proposing several contingency measures to help keep projects running smoothly and without interruptions. These contingencies are comparable to what we have included in past funding plans. Specifically, staff is requesting that the Board grant the Executive Officer authority to allocate a portion of future year's funds to first-come first-served projects and to allocate funds from next year's budget once approved to the current fiscal year in the event that funding runs out.

We will still come back to the Board next year after a full public process to allocate the majority of any future funding. Additionally, staff will utilize the transparent public work group process to help guide any adding or scaling back of funding levels and making technical or administrative changes.

That covers the highlights of the funding plan. Next, I will cover the targeted changes proposed to the Carl Moyer Program guidelines.

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MSCD AIR POLLUTION SPECIALIST GARCIA: As you may know, the Moyer Program is a statewide, air district implemented, emission reduction program which funds cleaner than required heavy-duty vehicles and equipment in multiple vehicle and equipment categories. Moyer projects can include on-road heavy-duty vehicles, locomotives, marine vessels, and off-road agricultural and construction equipment. Participating air districts must meet CARB's guideline requirements at a minimum, but retain the authority to consider additional criteria in order to address local concerns and air quality objectives. In today's proposal, staff proposes revisions to raise its cost effectiveness for optional zero-emission technology in off-road vehicle categories.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Last year, the Board approved similar changes for on-road vehicles as a part of our effort to better support zero-emission vehicles. Consistent with that approach, staff are proposing to increase the cost effectiveness limit for off-road zero-emission technologies to an equivalent level when adjusted for inflation. The proposed increase will support deployment of zero-emission technologies, regulatory efforts, and give the air districts the option to help build a stronger market for zero-emission technology in the off-road sector including CORE.

Staff also proposes to update the existing cost effectiveness limits for other categories to account for increases due to inflation. And lastly, CARB staff plan to continue to work with stakeholders and air districts to develop a broader set of amendments to the off-road chapters of the Carl Moyer Program to address recent regulatory updates for marine, locomotive, and off-road equipment.

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MSCD AIR POLLUTION SPECIALIST GARCIA: And with that, I will move into our conclusion and recommendation.

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MSCD AIR POLLUTION SPECIALIST GARCIA: The proposals presented today support the State's air quality, climate, and equity goals, and also help to build significant momentum to expand the market for clean vehicles and clean transportation options in an equitable manner. In conclusion, staff recommend approving the proposed funding plan and Carl Moyer Program changes.

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MSCD AIR POLLUTION SPECIALIST GARCIA: Thank you for your attention today. Next, I would like to introduce Tyson Eckerle from the Governor's Office of Business and Economic Development to say a few remarks.

TYSON ECKERLE: Great. No, thank you very much. Thanks for having me. Thanks Graciela. Thank you, Chair Randolph and members of the Board. I'm Tyson Eckerle. I'm the Senior Advisor for Clean Infrastructure and

Mobility at GO-Biz. And I'm here to offer strong support for the plan adoption.

I think the plan -- we all know the plan is key to our collective ZEV market development strategy. And, you know, taking a step back to the $10 billion commitment is a huge commitment the Governor and Legislature. And the 2.6 billion that we're talking about today is really a key pivotal piece, especially as it couples with CEC's infrastructure funding plan. And you'll hear from Hannon in just a moment about that.

And we always ask a lot of these funding plans, but the scale of this one is a huge opportunity. And I think we know these investments will be meaningful, because CARB, and CEC staff, and leadership have been incredibly thoughtful in the details, as you saw in Graciela's presentation. And the details really do matter. Investing and benefiting priority populations matters, and that's in the plan. Investing in fleet transitions, both big and small, matters. That's in the plan. Increasing access to clean mobility matters. I'm particular excited about the Cal-ITP program. We're learning a lot about that going forward. And, you know, demonstrating new technologies and ZEV technology's new sectors matters. And I think this plan does all of that in a meaningful way.

It also puts us in a strong position to attract federal investment, in both direct, like the federal hydrogen hubs, and, you know, manufacturing incentives, but -- and also indirect through the tax credits through the IRA.

And, you know, as I hand it over to Hannon, I want to also just take a step back and commend the -- you know, CARB, CEC, and CalSTA for close coordination of funding investment plans. You can really see the work that's paying off as far as how these things are playing out.

And I just wanted to thank you for the opportunity to come here to support CARB's continued great work and very excited about this plan and hopefully move it forward.

So with that, maybe I'll hand it over to Hannon, who is actually online.

HANNON RASOOL: Great. Thanks so much, Tyson.

Good afternoon. My name is Hannon Rasool. I'm the director of the Fuels and Transportation Division at the California Energy Commission. And thank you for the opportunity to be here today for the opportunity to express support for CARB's 2022-23 funding plan for clean transportation.

As has already been mentioned, this represents another really important step in California's significant investments and leadership in decarbonizing the most polluting sector of our industry. California continues to implement important regulations to improve local health, and combat the climate crisis, and also to make key investments to support individual households and businesses.

As you may be aware, the Energy Commission is taking our Clean Transportation Program Investment Plan to a Commission business meeting next month. And our two agencies continue to show strong collaboration and a unified focus on supporting zero-emission vehicles and infrastructure, and equitable outcomes.

I'd like to commend CARB staff and the CARB Board for putting to work the significant investments from the State budget and from the general fund. This investment plan provides a thoughtful approach, the balances they need to make a rapid transition away from combustion vehicles and also have a strong and intentional focus on equity.

This is an exciting and pivotal time to advance zero-emission transportation throughout California, especially in our most impacted communities. And you can see this investment plan shows a strong and thoughtful focus on equity across the board in all vehicle segments.

And finally, I'd like to commend both the CARB and Energy Commission team for strong collaboration and coordination in the investments, and vehicles, and infrastructure. These investments go a really long way to support State regulations and goals. This is true in all segments, including the long-standing work to support the passenger vehicle segment.

However, I'd like to take a moment to emphasize, by way of example, the strong coordination in the medium-duty and heavy-duty truck and bus sectors. Those agencies propose significant and meaningful investments in the medium-duty/heavy-duty sector and coordinate our flagship program such as HVIP and EnergIIZE. There is a strong and intentional focus on making sure we support California's businesses and fleets with an expanding focus on the unique needs of small fleets and small businesses. And this will help eliminate harmful diesel pollution in all of our communities.

In conclusion, CARB's 22-23 funding plan for clean transportation is another meaningful and impressive step in meeting our goals. Thank you very much for the opportunity to present and express our support.

Thank you.

MSCD AIR POLLUTION SPECIALIST GARCIA: Thank you, Tyson and Hannon. So that concludes staff's presentation.

I'd like to hand it back to Chair Randolph.

CHAIR RANDOLPH: All right. Thank you very much.

And thank you to Hannon and Tyson for sharing your thoughts as well. Okay. So here's the plan, we are going to be taking a lunch break before we begin public testimony on this item. But first, we have a short video that highlights a few examples of projects from previous funding plans that are providing benefits in some of our most impacted communities today.

So following the video, I will invite Board members and the public to head outside and visit the zero-emission vehicle and equipment display located right outside the building on 11th street. So take a moment to see up close the variety of vehicles and equipment that this funding helps bring to communities.

So after the video, we will take a one hour lunch break to give folks plenty of time to have lunch and go see the vehicles and equipment.

So Clerk, will you please play the video.

(Thereupon a video was played.)

CHAIR RANDOLPH: All right. Thank you very much. And we will see you all again at 1:30 and go outside and check out the equipment.

(Off record: Ever 12:33 p.m.)

(Thereupon a lunch recess was taken.)

AFTERNOON SESSION

(On record: 1:32 p.m.)

CHAIR RANDOLPH: Okay. We are back from our lunch break and we will now hear from the members of the public who signed up to speak on this item either by submitting a request to speak card or raising their hand in Zoom.

So I will ask the Board clerk to begin to call the public commenters.

BOARD CLERK HARRINGTON: Thank you. The -- we have 15 commenters. And the first is Madison Vander Clay.

CHAIR RANDOLPH: Okay. I think we can go ahead.

MADISON VANDER CLAY: Good morning. My name is Madison Vander Clay with the Silicon Valley Leadership Group. Thank you for the opportunity to comment today. The Leadership Group represents over 400 of silicon valley's most respected employees.

CHAIR RANDOLPH: You might want to pull the microphone down a little bit, so we can hear you more clearly.

MADISON VANDER CLAY: Better?

CHAIR RANDOLPH: Yeah.

MADISON VANDER CLAY: Okay. Thank you.

The Silicon Valley Leadership Group represents 400 of Silicon Valley's most respected employers, many of whom are key players in decarbonizing fleets including businesses with fleets to decarbonize as well as those producing ZEVs.

SVLG is very concerned that limiting the ability of large fleets to access HVIP funding at this time is harmful to the nascent market for electric trucks. In particular, excluding or greatly limiting Larger fleets in HVIP will ZE product availability for small fleets.

Large fleets play a pivotal role in proving out new technologies and driving scale, while small fleets rely on purchasing used trucks from large fleets. Currently, larger fleets represent over half of voucher requests in 2021 and 2022 to date. Assuming an eligibility cutoff of more than 100 vehicles, changes to HVIP must be grounded in data and recognize the central role that larger fleets play in driving near-term demand and scale.

Further with an increasing number of states following California's lead and adopting ACT type regulations and in support of incentive programs, there is going to be increased competition between states for the limited supply of MHD ZEVs. No other states that offer HVIP style incentives have proposed restrictions like those being proposed here to effectively limit the ability of larger fleets to participate. Such restrictions that appear likely to greatly limit the role of large fleets may result in the market shifting to a state that provide the most support curbing California's growing ZEV market into overall business competitiveness.

As a result, we are here today along with our partners to ask that CARB modify the funding plan to remove those conditions that we think will function too largely, if not entirely exclude larger fleets from participating in the program.

We would also ask that the bulk purchase requirement be eliminated. The bulk purchase requirement for large fleets with more than 500 vehicles, which would require them to make very large unsupported commitments to battery electric vehicles before subsequent vehicles can receive HVIP funding is unreasonable and should be eliminated. Given the very nascent state of BEV adoption in the MD/HD space, it is simply not realistic to expect even large fleets to make such a sizable commitment to BEVs without any funding support.

Second, given experience with the program to date, where demand for vouchers is unambiguously driven primarily by larger fleets, we ask that the small fleet set-aside be moderated, so that rather than setting aside 70 percent of funding, the program sets aside 50 percent of funding for small fleets. This is consistent with recent experience in the program, but still allocates a material greater share of funding to smaller fleets than program data would suggest that they have sought over the past two years.

Thank you so much.

BOARD CLERK HARRINGTON: Thank you. Next up, we have Greg Reading.

GREG READING: Okay. Good afternoon. I'm Greg Reading with U.S. Hybrid. Thank you for the opportunity to be here, provide our thoughts on CARB's investment plan. I also want to give our appreciation to the staff for all the work and process that's gone into developing this plan. Who I represent and work for U.S. Hybrid. We're a California-based company with over 60 employees based in our headquarters and manufacturing facilities in Southern California. We specialize in designing, manufacturing zero-emission powertrain components for electric, hybrid, and fuel cell medium-, heavy-duty municipality vehicles, commercial trucks, buses, and specialty vehicles worldwide.

We recently received nearly two million in grants from federal agencies and local air districts to fund the construction of three parallel hybrid Class 8 trucks. These trucks run on both renewable compressed -- compressed natural gas and electricity utilizing near --

near-zero-emission engines in parallel with our batter electric zero-emission propulsion system. This unique combination of powertrains provides vehicles with combined range of 750 miles, including 55 miles of all electric zero emission.

A number of the CARB rulemakings and planning efforts including the Scoping Plan released yesterday and the Advanced Clean Fleets discussions going on cite the ongoing challenge of reaching existing vehicle fleets to address the issues with air pollutants, greenhouse gas emissions, and other combustion related Pollutants. The fact is that we, at U.S. Hybrid, feel like we can reach these existing fleets and convert these existing vehicles to zero-emission.

U.S. Hybrid technology includes geofencing capabilities, so that we can ensure that our vehicles do operate in zero-emission and some of the communities that are more burdened by diesel pollution. CARB's incentive programs have been absolutely critical in advancing the early market for zero-emission vehicles, especially heavy-duty. We think we can create a whole new industry around converting existing internal combustion vehicles to zero emission, and also do this at a more economical cost for business owners.

The ultimate goal of our work is to accelerate the transition to ZEVs and the conversion of existing vehicles to zero emission while still allowing them to run out their useful life. We hope that you will consider this in supporting us and what we are doing with vehicle conversions for the H -- HVIP Program.

Thank you very much.

BOARD CLERK GARCIA: Thank you. And just a quick announcement before we move on to the next speaker. We will be closing speaker sigh-ups for item at 2 p.m. And that applies to in-person and remote commenters this Zoom. So 2 p.m. Sign up before 2 p.m. Thank you.

BOARD CLERK HARRINGTON: Thank you. And the next speaker is Brent Coffey.

BRENT COFFEY: Hi. First off, I want to say on behalf of Sunbelt, we want to thank you for the opportunity to display some examples of our zero-emission equipment from our fleet during our lunch break. So hopefully you enjoyed that and we're appreciative of the opportunity.

Sunbelt operates nearly 1,200 locations throughout North America, with over a hundred of those locations right here in California. With over 15 billion of fleet owned globally, we're one of the largest single owners of combustion engines in the world. However, we're also one of the most active investors in and Market leaders in the purchasing of zero-emissions equipment to serve all things construction and non-construction. We take zero-emissions very seriously.

We've aligned ourselves along our -- with our OEM partners to develop zero-emission products to ensure that they meet the stringent demands of our customers and there's no better example of that than the Bobcat T7X all electric compact track loader that you saw. Sunbelt and Bobcat spent close to three years co-developing this product on customer job sites and in the harshest of environments.

One of those job sites is the Edward and Sanborn Solar and Energy Storage Project located in the Mojave. Not only is it one of the largest of the projects in the world of its kind, it's also one of the most harshest environments to operate equipment in. In fact, the unit that you saw out front was validated there and that is actually the first unit to ever been produced.

The T7X was one of the few products that was qualified for the CORE Program on the construction side. Because of it's advanced technologies, costs have always been one of the concerns when it comes to gaining traction in the marketplace. The CORE Program has closed the cost gap to a point that end users can now rent these products at a price point comparable to the diesel alternative in

California. In doing so, we're already seeing demand grow and expect this trend to continue for the foreseeable future.

Another produce that CORE is helping drive penetration into the market is through portable energy storage solutions. These products allow for companies like Sunbelt to provide a noise-free, emission-free power solution to job sites advanced in other applications. They're used to charge EVs, power electric equipment as well as supplement combustion gener -- power generation.

Sunbelt's investments in energy storage are large. And one of those investments is with a one company called Moxion, a company located just two hours from here in Richmond, California. Our customers range from Fortune 500 companies to the local homeowners and they all have great interest in zero-emission products. However, oftentimes, they find them risky, including reliability, availability, practicality, and cost. It's the rental channel that eliminates those risks, as well as the -- it provides the infrastructure to support the power and charging.

Looking forward, Sunbelt continues to lead the construction industry in advancement and investments in zero-emission products. Our relationship with CARB and the CORE Program has been instrumental in the expansion of zero-emission products in the state of California and we're already working together jointly on what's coming next.

Sunbelt and our customers are thankful for the investments made by the State and we'll continue to be a partner with CARB in the future to bring technology to the market that reduces greenhouse gases on improving productivity and safety.

Thank you for the opportunity.

BOARD CLERK HARRINGTON: Thank you.

Next is Michael Caprio. Make' cap row.

MICHAEL CAPRIO: Good afternoon, Chair Randolph, members of the Board, staff. Michael Caprio, Director of Government Relations for Republic Services, a waste and recycling services provider throughout California.

Appreciate the opportunity to address you today and our comments are geared towards two elements of the funding plan relative to heavy-duty vehicles. But first off, we'd like to thank staff for their inclusion of the 25 percent enhancement to the incentives specifically for refuse trucks. And our comments today are geared towards actually having access to those funds for large fleets, because we think the rule, as it's written today, makes that difficult. So I'm going to focus on two areas.

The first is fleet balance allocation, having equal weight as a primary operating location for the fleet, and the second is the bulk purchasing requirement for large fleets and the threshold that is there today.

As you may know, the industry -- our industry serves priority communities throughout the state through mostly extended term franchise agreements with the communities that we are under contract with. It's a mixed bag of whether or not the trucks that serve these communities are actually domiciled in priority communities. We have many operations that are located not in priority communities, but service multiple priority communities in that particular location where the trucks are domiciled.

The vast majority of the daily operating hours for the vehicles are on the streets in the communities we serve. The time that is spent at the domiciled location of the corporation yard is negligible. The drivers come in in the morning, they do their pre-trip. The truck is turned on for five minutes before they leave the yard, same thing in the evenings. And the truck may get moved back and forth to the maintenance shop, but it's a very, very, very small part of their day where the truck is actually operating in the location where it's housed.

Our simple ask is that our fleets serving disadvantaged communities be given equal access to funding whether or not they are domiciled in the priority community. We have some ideas that we can work with staff on that we think will be easy in terms delineating how to state -- determine whether a piece of equipment or a fleet is operating within a disadvantaged community. And one potential means of doing that is getting the idea of where our franchise agreements are, and if they are in a disadvantaged community, that that wood allow us to have a pretty straightforward test of whether or not the trucks are operating in this communities that are a priority under this ruling and many other actions that the CARB Board is undertaking.

The second topic here is bulk purchasing thresholds for large fleets. Small fleets already have a priority in terms of preference in amount of allocated funds as appropriate. The funding plan requires large fleets to meet a 30 truck purchasing threshold. And numerous priority communities are serviced by large fleets.

The ACF Rule will have an effect upon rates for our service agreements. And the priority communities might be less likely to embrace ZEV trucks if rates impacted. And these communities will take a later on approach in terms of jumping into this space.

Simply put, the bulk purchase threshold is a second layer of coverage for small fleets that may run counter to the intent of the funding plan, which is put -- placing electric vehicles in disadvantaged communities.

Appreciate your time. Thank you.

BOARD CLERK HARRINGTON: Thank you.

Next is Sara Fitzsimon.

SARA FITZSIMON: You said my name correctly. Thank you.

Good afternoon, Chair Randolph and members. My name is Sara Fitzsimon and I'm the Policy Director at the California Hydrogen Business Council.

I'd like to start by thanking staff for your work on this really promising proposal. It's a really exciting time to be in the ZEV industry with your work paired with our members' work and the technology advancements and deployment. So very excited to be reading this proposal and we just have a couple things that we'd like to offer support on and then a potential amendment as well.

So first, I'll start with the hydrogen technology, just as a background. Hydrogen fuel cell electric vehicles are an ideal replacement for traditional gas and diesel powered vehicles, because they enjoy long range, high payload, and short refueling times across all on- and off-road vehicle classes. So that being said, CHBC does support all proposed vehicle purchase incentives that were listed, clean mobility investments, and we encourage when the allocation of funds happens, that there is a technology-neutral approach to allocations that allow the purchaser to choose the zero-emission option that best serves their needs and their duty cycles.

Additionally, CHBC supports amending the HVIP staff proposal to allow for all fleet sizes the opportunity to receive HVIP funding to ensure the highest number of ZEVs can be purchased in the shortest amount of time to transition the highly polluting and GHG emitting medium- and heavy-duty transportation sector to zero emission.

And finally, CHBC supports investment in the CORE program, demos and pilots, including locomotive, cargo handling, and commercial harbor crafts along with ZEV truck loan pilots. And I was really excited to see two of our CHBC member companies Sunline and Hyzon being represented in your presentation. So great to have our technology out there and great to be partnered with all of you, and looking forward to working on this further. Thanks for your time.

BOARD CLERK HARRINGTON: Thank you. Next is Orville Thomas.

ORVILLE THOMAS: Thank you, Chair Randolph and Board members for the opportunity to speak today. Also thank you to CARB staff for the work that you put into the proposed funding plan. My name is Orville Thomas and I serve as CALSTART's State Policy Director in California. I'm here to offer strong support for FY 22-23 funding plan. CALSTART is a California based non-profit organization with over 30 years of vehicle technology development, validation, market transformation, and advocacy experience with over 300 members in the clean transportation technology marketplace. And as the administrator of several CARB-funded programs, CALSTART has a firsthand understanding of the environmental benefits and acceleration of clean transportation technology that previous funding plans have allowed for.

We note that our comments are based on our organizational expertise in this space and do not necessarily represent the consensus of our members.

The Clean Mobility Options Program is a first-in-the-nations program that empowers underresourced communities across California to overcome their mobility obstacles. With past funding, the program allowed for 24 community transportation needs assessments, and many of those awardees are now pursuing funding to implement a local shared mobility service. These projects, such as zero-emissions shuttle service for seniors and eBike rental for low-income residents increase community members access to transit, health care, education, and other essential services.

We support CARB staff's proposal to add funding to CMO, as well as the Sustainable Transportation Equity Project, or STEP, and Clean Mobility in Schools. The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, known as HVIP, is the country's most renowned program for funding zero-emission medium- and heavy-duty vehicles. HVIP is seen as a model by other states as they think through their zero-emission vehicle scoping plans.

Over the past year with the funding the Legislature allocated and staff has programmed, HVIP has distributed more than $400 million in voucher requests for zero-emission trucks and buses. The HVIP team is working closely with CEC's EnergIIZE Commercial Vehicles Infrastructure Incentives Project, also administered by CALSTART, to streamline the funding process and articulate the full incentive journey to end users.

The Clean Off-Road Vehicle Voucher Incentive Program known as CORE has built on the knowledge learned from HVIP. In the past legislative session, CORE was allocated 27 million to provide incentives for professional landscape services in California operated by small businesses. The professional landscape service equipment category launched November 7th with 13 manufacturers and over 300 pieces of equipment, and to date, over 2.5 million worth of vouchers has been requested.

And finally, I want to highlight the importance of CARB's clear zero-emission strategy. Today, at COP27 in Egypt, the United States government officially signed on to the global MOU. This is a gigantic milestone and it was managed by CALSTART's Global Commercial Vehicle Drive, which emerged from CARB's beachhead strategy.

Thank you.

BOARD CLERK HARRINGTON: Next is Ed Manning.

ED MANNING: Good afternoon, Chair Randolph and members. Ed Manning with KP Public Affairs here on behalf Catalina Channel Express and we're here in support of this item.

First of all, a little background on Catalina Channel Express. We're the ferry system that operates each day to and from Catalina Island, eight high-speed ocean-going passenger ferries. And even though we're a private company, we're a common carrier that's regulated by the Public Utilities Commission. About a year ago, we worked very, very hard with your staff and the Board -- Board members here to come up with a solution and a pathway for ferries that made sense to get us ultimately to zero emissions, but try to make path -- create a pathway -- viable pathway for Tier 4 in the interim.

Thank -- we'd like to thank staff -- regulatory staff who aren't here today, but they set in motion -- Heather Arias and her team and effort which we launched to get funding in the -- in this legislative session in the budget for harbor craft and in particular money for ferries and private ferries to be able to access to help them get early emission reductions and start to implement the program successfully. And candidly, that would not have been successful without the work of Chair Randolph and in particular Board Members De La Torre and Kracov, who were so critical in this effort.

Today, we stand here waiting to work with you to implement this. We see a pathway to get -- if we can get adequate funding, to replace one of our ocean-going vessels with a new Tier 4 compliant vessel and take out of operation three vessels in its place. That would get both criteria emission reductions and greenhouse gas benefits that would be tremendous for the local community and set a path, and then allow us adequate time as we explore the path which may be a decade away still to try to get to zero emissions, whether it's through electric, hybrid electric, hydrogen, or green hydrogen ultimately down the road.

But we would -- we would like to thank all of you for your efforts. We're here to support and work with you, and look forward to working with your staff in implementing the program.

BOARD CLERK HARRINGTON: Thank you.

Bill Magavern.

BILL MAGAVERN: Bill Magavern with the Coalition for Clean Air here in support of this funding plan. We've worked on the annual funding plan for many years and I think every year it gets a little better. And this year's I think is especially something to be proud of. It, of course, helps a lot when there's a budget surplus. So, you know, having ample funding is a big part of it, but I also think there are some really sound policy choices that are embedded in this plan and it does come out of an extensive public process that your staff conduct.

So you'll be hearing later through the magic of Zoom from my colleague Chris Chavez on the light-duty components and I'll make a few comments on heavy-duty, off-road, and Carl Moyer.

We all know that for purposes of community air protection, it's crucial to reduce diesel exhaust. And that is, you know, mostly coming from these heavy-duty and off-road engines. You, of course, have been in the process of adopting some very significant regulations to reduce that exhaust. And I see the funding incentives here as an important complement to support those rules like Advanced Clean Trucks, Advanced Clean Fleets, Innovate Clean Transit, and Commercial Harbor Craft.

In the HVIP Program - and I'm impressed that Oroville gave the full name. I'm just going to say HVIP - we support the way that the plan would leverage private capital and bring this in a fleet limit in 2024 to align with the Advanced Clean Fleets Rule, which you're headed towards adopting next year and would really prioritize incentives for the smaller fleets, which are mostly not included in Advanced Clean Fleets, and which need the most help in order to make this transition.

When it comes to off-road engines, the funding would support the Small Off-Road Engine Rule, the Off-Road Diesel Rule that you approved this morning - thank you - and there's some really exciting developments in off-road technology, which we just saw outside. I was really happy to see some that I hadn't seen before.

When it comes to demonstration projects, I think that it does make sense as the plan proposes to invest in some of the hard-to-electrify sectors like aviation, and rail, and marine vessels, and really try to advance those technologies. And then finally, when it comes to Carl Moyer, we do support the increases in the cost effectiveness limits.

Thank you.

BOARD CLERK HARRINGTON: Thank you.

Kristian Corby.

KRISTIAN CORBY: Good afternoon, Chair Randolph and Board members. My name is Kristian Corby and I'm the Deputy Executive Director at the California Electric Transportation Coalition, or CalETC. We'd like to thank the CARB Board and staff for their hard work on this funding plan. My comments today will focus on the proposed changes to HVIP.

CalETC worked with a broad coalition, including labor, fleet operators, OEMs, utilities, charging developers, and the cleantech industry on these recommendations. And I'd like to say I support the comments earlier by the Silicon Valley Leadership Group.

It's important to highlight that the ZEV truck market is still a nascent market. Today, California has less than 600 ZEV trucks and vans on the road. Therefore, it is far too early to restrict fleets from the market today. Additionally, with the Advanced Clean Fleet Rule presumably coming into effect in 2024, fleets subject to ACF will not be able to access HVIP for compliance purposes, so it's worrisome to see many changes to the program that will significantly impact the market for only one year, but a pivotal year, a year in which we should be encouraging all fleets to take early action in advance of the ACF and ACT going into effect.

If we do not continue to accelerate the medium- and heavy-duty ZEV market in the next couple of years, we worry that the market could languish and delay the much needed air quality improvements that we get from converting diesel engines to ZEVs.

Specifically, for fleets of 500 or more, we request that CARB remove the 30 tuck -- the 30 truck minimum purchase requirement and clarify the requirement that trucks need to be deployed in a disadvantaged community. We also recommend reducing the voucher amount for fleets of 500 or more by only 30 percent instead of 50 percent. In accordance with CARB's data on voucher demand, we recommend reserving 50 percent of the standard voucher funds for fleets of 100 vehicles or less.

Given the vital role that larger fleets play in proving out new technologies and driving scale coupled with the substantial share of medium- and heavy-duty vehicles that these fleets represent across the state, we are deeply concerned that the practical exclusion of larger fleets from HVIP will jeopardize the State's efforts to effectively and quickly transition medium- and heavy-duty vehicles to zero-emission alternatives.

Finally, CalETC will continue to advocate in the

Legislature for adequate and sustainable funding for medium- and heavy-duty ZEV trucks. We are your ally and we will continue to fight for these trucks.

Thank you very much for your consideration.

BOARD CLERK HARRINGTON: Denee Evans.

DENEE EVANS: Good afternoon. I'm Denee Evans with the City of Richmond Transportation Services Project Manager. And I'm very happy to be here today to speak on behalf of the City of Richmond and other municipalities that haven't had the opportunity to be here. The City of Richmond has benefited from many of the programs that you are considering funding. And we are supportive of providing additional funding for each.

Specifically, I'd like to speak towards clean transportation initiatives. On that end, the City of Richmond would not have been able to build its EV infrastructure. It would not have been able to create on demand Richmond shuttle service, which you were -- had the opportunity to see the van outside today. You'll have an opportunity to receive the written testimony from some of our community members of how it has impacted their life.

From a municipal standard, the City of Richmond doesn't have the capacity to have a large grant team to apply for grant fundings, and many times we have missed out on many opportunities because of that. But with the

CMO program in particular, it was non-competitive, and it opened the doorway for changing lives in our community.

The reason why we created that program was because we received feedback from seniors that their -- the options for transportation were being operated in silos. The seniors in general, they have limited funding. And trying to fund transfers from BART, bus, and other transportation options were a challenge. So we are very happy to partner with Via Transportation and be amongst the first of the Clean Mobility Options awardees to implement our program. And the first response we received is this is a great program. Why isn't it being expanded throughout the city?

Just to give you the context, I know you're considering 20 million to expand for the first round awardees, and I want to just tell you where a million goes. For the City of Richmond, we used a million dollars to implement three on-demand electric shuttles and it covers a 5.6 square mile area. With additional million dollars, maybe we can extend it another 10 miles. But we have a population of 116,000 and we have a city jurisdiction of 52.2 square miles. So if you're considering giving additional money for first round as well as second round CMO awardees, please consider increasing the amount, because without these funds, we would not be able to provide these services that are changing lives.

Thank you.

BOARD CLERK HARRINGTON: Thank you. And just a note that speaker sign-ups are now closed.

Our next speaker is Rey León.

REY LEÓN: Buenas tardes. Good afternoon. My friend said I should lower this down. Low rider.

(Laughter).

REY LEÓN: Oh, you're the back up for that or --

(Laughter).

REY LEÓN: Well, and I'd like to just thank everybody. It's good to see a lot of familiar faces that I've been seeing for quite a while now, right, originally, as an environmental justice advocate and organizer early in the 2000s, but we continue the good work. And I'd like to say that, you know, I'm fighting less the bad and building more the good. And that wouldn't have been possible without the previous battles and fighting the bad, right?

And I really appreciate the leadership of the Board and helping unfold this vision that I think we had from early on, you know. And, you know, being in the capital back in the days was Dean Florez, the Senator, and, you know, just doing some good policy work there and just going off of that.

But I have some words prepared that I want to share and also talk a little bit about Green Raiteros and what we're doing and how big of an impact it is that CARB is able to invest.

Some general statements in terms of low-income communities are the first and worst hit from emission-producing operations. Farmworker communities are the most vulnerable to remedy consequences for bad air, heat waves, and the climate crisis. Historically, infrastructure and mitigation investments have been absent. It is of utmost importance to not just have equitable investments, but to go beyond that for communities that have been disproportionately impacted by pollution, lack of infrastructure, and irresponsible industries that have contributed to undermining quality of life for the lifeblood of our economy and champions of the nations food chain.

I'm a descendant of farmworkers, my father a bracero farmworker, may be rest in peace, and our folks work too hard to not have the best. Communities like Huron need attention from the State's resources to address a decade's worth of negligence. Our Fresno County achieved for a second year in a row, the highest agricultural revenue in the state. California, the fifth strongest economy on the planet -- or is it the fourth? I think it changed, right? We beat out Italy. Sorry, guys -- or Germany, somebody. Yet, Huron and five other agriculturally based cities are simultaneously identified as the poorest cities in the state, in the county that has the highest ag revenue. This only highlights the deep roots of inequity in our area, the situation and being overlooked, underinvested, and even undermined.

But again, I congratulate your leadership for being bold to create change to improve lives in the San Joaquin Valley, and Huron proper, and other parts of California. CARB and other agencies cognizant of the economic, environmental, and climate justice needs in our community are in the best position as champions for all the right reasons. The programs that have been unfolding are exemplary and they're also evolving to become greater resources for the communities in most need. Bridging the most vulnerable to their essential appointments, including medical appointments, while not polluting the air is an amazing thing. No contradiction -- no contradiction in the public health work.

The opportunity even goes further to be able to train a workforce, provide employment, careers, and stimulate the local economy, all of this, while advancing amenities, infrastructure, and the better quality of life.

As I conclude, continue the good work, but emphasize on those communities that have historically been left out and that currently are bound by industries that do not provide them high road opportunities. The LEAP Institute and myself are more than happy to innovate, plan, and proceed with progress punches for economic, transportation, health, climate, and environmental justice. All of it together is -- I call it the Clean Power Punch. Si Se Puede.

And I want to also remind you that in Huron, we have a rail, the only city in the county that has -- is connected to the cross-valley rail. And the whole idea is the light passenger rail that will connect our community and 13 others to the HSR and Amtrak.

CHAIR RANDOLPH: Rey, you've got to -- you've got to wrap up.

REY LEÓN: But that's my concluding remarks.

CHAIR RANDOLPH: Okay.

REY LEÓN: And come over to Huron. We've got the best tacos west of the Mississippi. And I'll give you a tour so you can see what beautiful things that are happening for our farmworker families.

Thank you.

CHAIR RANDOLPH: Thank you.

BOARD CLERK HARRINGTON: Thank you.

Next is Adam Harper.

ADAM HARPER: Chair Randolph, member of the Board. Adam Harper, California Construction Industrial Materials Association. I just wanted to say a few words thanking the Board, the State of California quite frankly, the air districts and community that have supported this funding coming forward over the -- over the years. Our members operate across multiple of these different programs that are all absolutely critical to helping support this evolutionary change in technology that we are accomplishing in our State and targeting in our State, and quite frankly which we have been engaging in for many years.

Obviously, the -- the pollution reduction impacts are important. The cost impacts are obviously important as well. So as you use this technology, we would encourage you to listen to the words about technology neutrality. The producers on the ground really do know the work they need to accomplish to fill their role in the economy meet our society's needs and making sure they can find the right technologies for their niche in the economy really is important as we work through this process. So thank you and thank you for the funding, and we appreciate it.

BOARD CLERK HARRINGTON: Thank you.

Keshia Thomas.

KESHIA THOMAS: Keshia Thomas. Thank you.

I would first like to say that I appreciate, number one, for you all listening to us and supporting the hard work that many of us are doing in our communities.

I am in complete support of the resolution 22-20. Thank you for creating a clean transportation funding, because without it, Fresno would not have been able to do the clean transportation work in the lower socioeconomic areas in which we have been doing.

We, the Clean shared Mobility Network, are honored to assist in the continuing -- in continuing the focus on disadvantaged communities, equity, and environmental justice. In Fresno, we are working very hard to ensure our underserved communities are a part of the transition to clean transportation. We are doing this by working with partners to deploy electric cars and bicycles into the community and creating a space for our community to own the transition and embrace the project, which I call Uber on steroids.

Many of our community members are excited about the program and lastly thank you for coming out to look at what we are offering outside. And thank you, Supervisor Serna, for taking the time to visit us and taking a ride on our electric bicycle. I can't wait to see how we all improve cutting climate pollution and improving public health. Thank you.

BOARD CLERK HARRINGTON: Andy Schwartz.

CHAIR RANDOLPH: Supervisor Serna was having way too much fun with -- on that electric bike.

ANDY SCHWARTZ: Hello. Good afternoon. Chair Randolph, members of the Board thank you so much for the opportunity to speak today. My name is Andy Schwartz here on behalf of Tesla.

I want to thank you for your leadership in the clean energy space. Absolutely fundamental as we all seek to advance sustainable energy in California and globally. I want to thank you for all the work you've done on the funding plan. And I also want to thank staff for all the hard work you guys have put in the funding plan, even though, as you know I'll relate in moment, we do have some concerns with a few aspects of the plan.

I'm here to ask the Board to specifically modify those provisions related to HVIP that will de facto exclude fleets with more than 500 vehicles from participating in the program. Under the funding plan, larger fleets interested in battery electric vehicles would be required to purchase 30 of those vehicles without any incentives and only would be able to access HVIP incentives for subsequent purchases. This condition is counterproductive and will serve to inhibit near-term ZEV deployments by these large fleets at the very time we need them to start taking action. There is no evidence to suggest that any fleet operator would be willing to make such a substantial commitment to ZEVs without any assistance or that the promise of HVIP incentives will motivate them to do so.

Notably, this bulk purchase requirement only applies to battery electric vehicles. Fuel cell vehicles are exempt from this requirement. Just to give you a sense for the impacts on the incentives that these large fleets would receive, the bulk purchase requirement does dramatically reduce the per vehicle incentive that would effectively apply to these vehicles.

You know, for example, a large fleet buying Class 8 battery electric sleeper cabs is ostensibly eligible for a per vehicle incentive of $60,000. But when one factors in the 30 vehicles they would need to buy without funding to get -- to access that incentive, the per vehicle insensitive drops to $2,000 per vehicle. This is not much of an inducement to make that investment, considering that CARB's own estimates suggest that a Class 8 sleeper cab would cost over $300,000 in a battery electric format.

The pur -- even for a fleet that purchases 60 vehicles, the per vehicle incentive that that fleet would be eligible for would drop to something that's around 75 -- that's 75 percent below the base level incentive. Again, you know, the bulk purchase requirement really dramatically impacts the efficacy of HVIP in motivating large fleets to pursue those vehicles.

The purpose of HVIP is to offset the higher up-front cost of ZEVs, as well as overcome the technology risks that limit the willingness of fleets to deploy them in advance of the compliance obligation. Even for larger fleets, these re -- these concerns remain a significant barrier. We note the medium- and heavy-duty ZEV deployment remains practically non-existent today, with data from the CEC suggesting that only 306 battery electric trucks are on the roads today in California. In light of the ACF Regulation, the next year is a critical period to prime the market by supporting early action by those large fleets that have a central part to play in proving out the business case these vehicles.

I would note that CARB is already taking steps to ensure that smaller fleets have priority access to funds via the proposed 70 percent set-aside. Given this, it's hard to understand why this limitation on large fleets that participate in the program is needed and we would ask that that condition be removed.

Thank you so much.

BOARD CLERK HARRINGTON: Thank you.

Raef Porter.

RAEF PORTER: Good afternoon, Chair and members of the -- of the Board. I first want to thank staff for all the hard work they put into this funding plan and we're very supportive of many of the elements in it. We're really happy that the plan continues to implement local, State, and federal goals related to air quality and climate change. And we also want to highlight the focus on small and medium fleets in disadvantaged communities.

This emphasis help the adoption and use of zero-emission technologies and makes it more of a reality for certain portions of our State's population that typically can't afford this technology.

We're also supportive of the cost effectiveness changes made to the Moyer Program and feel that this greatly improves the program's ability to deliver impactful projects. The increase of funds to existing and statewide Clean Cars 4 All Program is an example of the State's commitment to reducing transportation related emissions and providing opportunities for lower income residents to have clean, safe, and reliable transportation. Sac Metro Air District staff looks forward to increasing the reach of our current Clean Cars 4 All Program and working with CARB staff to make this program efficient and effective.

One area, however, that we feel the proposed plan falls short is the shift of funds out of equity-focused projects. It's our understanding based on conversations with CARB staff that $60 million was shifted out of a specific equity-focused program area into another sector. While we understand that all sectors need to reduce emissions, shifting funds from equity projects, projects that provide mobility solutions and emission exposure reductions for communities that are most vulnerable to poor air quality and climate impacts, communities that can't afford their own vehicle even with incentives, and communities that live in areas with little or no transit service, this is not only sending the wrong message, it perpetuates a broken system that underfunds and underresources these communities.

Sac Metro Air District has been working with community-based organizations over the past four years to provide safe, reliable, and clean transportation opportunities in these communities. Our community car share program is in 11 different communities with plans to expand the services to more and more residents that need ways to get to work, to school and to basic services. However, while we have made strides to find resources to make this program and others like it more sustainable and not reliant on State funds, the simple truth is that providing services in these communities, communities that our system has neglected takes both time and money.

Again, we have been told that there will be no -- there will no longer be funds for this in similar projects, which means that we have to face the real possibility of removing these services from the communities in which we have made a real positive impact.

We support the expansion of many of these programs as well as the guidelines to the changes to the Moyer Program. We hope to continue to work with CARB staff on many projects. We hope that you consider finding ways to keep funds within these equity-focused programs. We do understand that this is largely driven by a legislative change, but we do think that you have some flexibility in these funds.

Thank you for your time.

BOARD CLERK HARRINGTON: Thank you. This concludes all the in-person commenters and now we will hear from the remote.

BOARD CLERK GARCIA: Thank you. And currently we have 21 remote commenters for this item. And just another reminder, the speaker sign-ups are closed for this item.

So first, we will hear from Terry Manies, Loma[SIC] Avila, Christopher Chavez, and Colin Wilhelm.

So Terry, I have activated your microphone. Please unmute and begin.

TERRY MANIES: Hi. Thank you. Thank you for giving me the opportunity to comment. I'm Terry Manies from Orange EV. We're the OEM of America's most deployed pure electric terminal truck.

Orange EV appreciates CARB's prioritization of projects benefiting residents in overburdened communities, where terminal trucks often operate in distribution centers, ports, intermodals, and other goods movement operations. OEV trucks have been commercial -- excuse me. OEV trucks have been in commercial operation since 2015, and as of this month have driven more tan 7.2 million miles and logged over 2.1 million key-on hours.

Through the breadth and duration of these employments, we've received a great deal of input, comments, and opinions from terminal tractor operators, many of who have said we could do even more to reduce emissions if CARB were to prioritize point-of-sale funding programs and voucher programs like CORE.

While customers appreciate the savings -- excuse me. While customers appreciate the savings reimbursement programs, like Carl Moyer, they often point out that they would convert even more equipment to zero emission if incentives did not require them to destroy assets like older equipment and/or bear the full cost for replacement technologies at the time of purchase.

Towards this end, we are glad to see that CARB staff recommendations have made recommendations to increase CORE's budget for fiscal year 22-23. And Orange EV hopes CARB will consider following this trend over time by continuing to increase funding for point-of-sale vouchers like CORE, as you set future funding priorities with a heightened view towards benefiting small businesses and residents in overburdened communities.

Thank you for all you do.

BOARD CLERK GARCIA: Thank you.

Loma[SIC], I have activated your microphone. Please unmute and begin.

LORNA AVILA: Hello, everyone. First, I want to say thank you for taking the -- for the speaking opportunity and for CARB's work on the funding plan. My name is Lorna Avila and I'm the Environmental Justice Planner at T.R.U.S.T. South LA and I am also specialist for BlueeLA.

BlueLA is one of the founding investments from CARB in clean mobility and pulled together partners that include the Los Angeles Department of Transportation, Blink Mobility, the LA Department of Water and Power, Mobility Development Partners and six community based organizations like ours that make up the program steering committee.

BlueLA has a fleet of 100 electric vehicles stationed in the public right of way in the disadvantaged communities throughout central Los Angeles. Over the next two years, this program will grow to 300 cars with major expansion in South LA, Boyle Heights, and East Hollywood. The program serves some of the most disadvantaged and pollution-burdened communities in California providing much needed clean transportation for access to health, education, and employment opportunities.

The steering committee, the City of Los Angeles, and Blink Mobility work together in a unique partnership that ensures that the voices of neighborhood residents are built into the DNA of the program and that these voices stay relevant as the program expands. Steering committee members have shifted focus over the years as we continue to support the program from program advocacy and negotiation to building a awareness for and guiding expansion of the program. What has stayed consistent is the need for continued public advancement in not only the program itself, but als in capacity building for partner community organizations like ours to support BlueLA's goal.

T.R.U.S.T. South LA is equipped to deliver cost effective results for LA's disadvantaged communities, so steering committee specialist works with the program team including Mobility Development Partners to spread the word about the program and solicit feedback back about station expansion. Our work is led by community organizers and we outreach to be a long-term commitment for our organization and for our community, so invested in capacity building it's critical at this point in BlueLA's evolution.

We are in urgent need of support to expand the program through other regions in California. We're encouraged to see a boost to the capacity building allocation this year and ask CARB to consider advancing these funds quickly, so that we can support CARB's continued deployment of this program.

Thank you again for the opportunity to provide comments and CARB's ongoing support.

BOARD CLERK GARCIA: Thank you.

Christopher, I have activated your microphone. Please unmute and begin.

CHRISTOPHER CHAVEZ: Yes. Good afternoon, Board members. My name is Chris Chavez, Deputy Policy Director at Coalition for Clean Air.

I'll be speaking about the light-duty programs as well as a couple other issues related to the funding plan. We appreciate CARB working with stakeholders to develop an expansion plan for the Clean Cars 4 All Program that will expand services throughout the state, while continuing to prioritize disadvantaged communities.

Key to this is increasing the Clean Cars 4 All incentive amount for residents of disadvantaged communities. This way the program can expand while still keeping centered on communities that need the most amount of assistance transitioning to cleaner transportation.

CARB's vision for implementing a needs-based application process is certainly laudable. And we -- but in our conversations with staff, we've mentioned, you know, we want to see this application process develop in the public transparent process. I know that CARB is moving forward with its joint solicitation, but as that moves forward making sure that the program is -- or the application is designed in a way that addresses community needs and is compatible to current Clean Cars 4 All Program is going to be important.

Also, in terms of looking towards expanding both Clean Cars 4 All and financing assistance statewide, we urge CARB to consider include and find opportunities to work alongside existing community partnerships that will preserve the built community capacity and knowledge.

I also want to agree with comments from the Sacramento Air Quality Management District that we do need to make sure that our mobility programs do not languish. That was unfortunately, you know, a choice between two very worthy programs. But going forward, we need to make sure that these programs -- mobility programs do not languish.

Lastly, you know, I think it needs to be pointed out that next year's budget is starting to look rather grim. We can't forget that the states often mention $10 billion investment in clean transportation is a multi-year funding arrangement, something that can fail to fully materialize. Meanwhile, the defeat of Proposition 30, spurred on by the Governor's opposition, further complicates matters. And the State has chosen to forego a hundred billion dollars in climate investments over the next 20 years, half of which would have benefited disadvantaged communities.

Given all of this, we urge California not to renege on the promised funding in the State's prior budget commitments when the going inevitably gets tough. We also urge the State to continue to center its efforts on the -- on where the barriers to clean transportation are highest in low income and disadvantaged communities.

Thank you for your time.

BOARD CLERK GARCIA: Thank you.

And after Colin, we will Ashley Gerrity, Chris

Shimoda, Tom Van Heeke, Parth Ruparel, Greg Hurner, and Sasan Saadat.

So Colin, I have activated your microphone. Please unmute and begin.

COLIN WILHELM: Thank you. Thank you, Board members. Thank you, CARB staff, for allowing me to be here. My name is Colin Wilhelm, Policy Manager of Lightning eMotors, a zero-emission vehicle OEM that produces Class 3 through 8 commercial electric vehicles, including cargo vans, trucks -- passenger vans and trucks, school buses, ambulances, and more.

I'm here today to join CalETC and others in requesting that the Board modify the proposed funding plan of the HVIP Program. First, I join in asking the Board to reserve 50 percent of the funds for small fleets to provide them ample opportunities to take advantage of HVIP without being blocked by larger fleets.

Next, I join in asking the Board members to remove the restrictions on fleets of 500 or more vehicles, because this amounts to a practical exclusion of those fleets from the HVIP Program. Although we agree that large fleets might enjoy economic advantages compared to small fleets, we do not agree larger fleets will purchase battery electric trucks regardless of whether they receive incentive support.

Staff assumes battery electric -- electrics have achieved some level of mainstream acceptance amongst larger fleets. This is simply not true. The California New Car Dealer Association has released information showing that when removing public agencies from the equation, there are only about 600 medium- and heavy-duty battery electric vehicles deployed in California. That number is far from mainstream acceptance.

At Lightning, we see firsthand that our larger fleet customers, when properly incentivized, are heavily investing in the very necessary charging and grid infrastructure advancements. At Lightning, we could scale up to manufacturing over 2,500 -- 25,000 medium- and heavy-duty vehicles a year, but that would be meaningless without these needed upgraded charging and grid infrastructure advancements and investments from the larger fleets.

It's not hyperbolic to declare that reducing or onerously restricting incentives available to large fleets will directly lead to less investment in the needed infrastructure, thereby putting the entire program's mission in jeopardy. So I urge the Board to adopt the CalETC's recommendations and the proposed funding plan.

Thank you.

BOARD CLERK GARCIA: Thank you.

Ashley I have activated your microphone. Please unmute and begin.

ASHLEY GERRITY: Thank you. Madam Chair, Board members, my name is Ashley Gerrity. And on behalf of The Greenlining Institute I'm calling in to voice our support for CARB's fiscal year 22-23 funding plan. Low-income communities continue to bear the brunt of poverty and pollution. The continued increase in gas prices are impacting family budgets and this is why we ask CARB to prioritize investments and incentive programs that empower working families in low-income communities of color to switch to electric cars, trucks, and buses that are pollution free and cheaper to own and operate.

We appreciate CARB's commitment to invest at least 70 percent of their funds to priority populations, these populations being disadvantaged and low-income communities. We ask CARB to go a step further and target their incentive programs to the hardest to reach communities, those who have seen a limited participation in their programs, low-income households in disadvantaged communities.

Currently, several of CARB's incentive programs continue to only have an income require -- requirement, but not a disadvantaged community requirement, reducing the air quality impacts such incentives have on our most polluted communities. We ask CARB to reevaluate their approach and adjust and pivot them to be more intentional about who is receiving those incentives and how are they -- how they are providing direct and meaningful benefits to the state's most impacted communities.

We cannot continue down this path of first-come first-served incentive programs, as they are inherently inequitable. We ask CARB to pivot its programs to a need-based approach that targets incentives and projects to those who have limited participation and access to State funding and programs. With the most recent budget allocations, the Governor has made it clear that we need to prioritize equitable vehicle incentive programs.

With no new funding for CVRP, we urge CARB to develop a comprehensive plan to sunset the program. This plan should be developed by summer 2023 and the funds that once went to CVRP should be redistributed to equity focused programs that deliver equity outcomes.

We deeply sport the development and implementation of clean mobility projects. Creating additional mobility options is critical to ensure that we meet the needs of our communities. The clean mobility programs received limited funding this year. We ask CARB to prioritize these projects moving forward, including advocating for more funding in future years.

We also support CARB's proposal to prioritize small trucking fleets for incentives funds. These smaller fleets are those least likely to be able to afford the higher sticker prices for zero-emission trucks, so incentives will help them realize the savings that zero-emission vehicles offer through sharply lower fuel and maintenance costs.

Lastly, with the significant funding available, we encourage all agencies implementing clean transportation and equity programs, CARB, CEC, CPUC, to coordinate to help streamline the application process and help deploy those technologies faster.

We thank you for your time and consideration.

BOARD CLERK GARCIA: Thank you.

Chris, I have activated your microphone. Please unmute and begin.

CHRIS SHIMODA: Good afternoon, Chair Randolph and Board members. Chris Shimoda with the California Trucking Association. Thank you for the opportunity to participate today.

Here to support comments submitted by a broad coalition of EV manufacturers, charging providers, labor, and trucking regarding HVIP. The coalition continues to urge CARB not to place unreasonable restrictions on HVIP vouchers for larger fleets. We submitted three recommended changes in this letter.

First, remove the 30-truck minimum bulk purchase requirement. Second, provide at least 70 percent of the standard HVIP voucher rather than the 50 percent called for in the funding plan. Third, given that fleets will electrify first at locations with enough circuit integration capacity, clarify requirements to deploy in DACs. For instance, deployments in DACs could be provided enhanced incentives rather than have strict requirements for operation in those communities.

Finally, CTA continues to urge CARB to reconsider implementation of strict fleet size caps in 2024. With fewer than 500 of the 1.8 million trucks on the road today being zero emissions, it is premature to exclude fleets of any side from participating in these incentives.

Thank you.

BOARD CLERK GARCIA: Thank you.

Tom, I have activated your microphone. Please unmute and begin.

TOM VAN HEEKE: Thank you. Good afternoon. Thank you Chair and members of the Board for the opportunity to speak today. My name is Tom Van Heeke, Senior Policy Advisory at Rivian. Rivian is a California-based company focused on the design, development, manufacture, and distribution of all electric adventure vehicles. Today, this includes our R1T pickup, R1S SUV and a commercial delivery van.

Rivian applauds the State's preparedness to invest billions of dollars in accelerating the ZEV transition. We also recognize that even with this commitment, in developing the funding plan, staff has balanced many competing priorities and work within a limited budget. It's no easy task. We appreciate the hard work that went into developing the plan and we thank both staff and members of the Board for your engagement with stakeholders.

We submitted more extensive written comments including on the positive changes to CVRP proposed in the plan, so I'll focus here on a summary of our top line concerns regarding proposed restrictions to large fleet participation in HVIP. And in this, we support the comments submitted earlier by CalETC.

The transition medium- and heavy-duty ZEVs is only just beginning to take hold. We're concerned that the proposed restrictions and limits that would govern large fleet participation in HVIP would work against CARB's goals. Cutting the voucher amount by half and requiring those same entities to meet bulk purchase and disadvantaged community deployment requirements introduces significant barriers participation. At risk is the near-term pace of ZEV uptake among larger operators, the availability of used ZEV inventory a few years hence, and climate and air quality benefits.

We respectfully urge the Board to reconsider these proposed conditions. Rivian recommends applying a more reasonable discount of 30 percent to vouchers for large fleets and removing the bulk purchase requirement. More information and analysis are also needed to support the requirement that vehicles be deployed in disadvantaged communities.

At present, it is unclear to what extent this requirement would deliver superior air quality benefits versus a no requirement alternative, more indeed how CARB will assess compliance. We believe direct regulatory approaches, including zero-emission zones and initiatives like South Coast's Warehouse Indirect Source Rule are likely to be far more effective in tackling the pressing challenge of local air pollution and its disproportionate harm to certain communities. Alternatively plusing up funding for deployments in those communities would also be an alternative that would make sense.

Thank you again for this opportunity and your continued leadership in funding the ZEV transition. We look forward to the plan's finalization and continued discussions.

Thanks.

BOARD CLERK GARCIA: Thank you.

Parth, I have activated your microphone. Please unmute and begin.

PARTH RUPAREL: I'm Parth Ruparel with ConMet eMobility, part of Amsted Industries, working towards electrifying trailers and trailer TRUs that are currently deployed and doing food deliveries in California.

Firstly, thank you, Madam Chair and the members of CARB for giving ConMet a chance to comment on the current and wise proposals for incentive programs, targeting the electrification of trailer TRUs. We really appreciate the steps being taken towards adopting a hundred percent zero-emission trailer TRUs so far, and the fantastic amount of work required in drafting the complex proposals that CARB has so far.

With this being said, and after speaking with fleets and presenting our technology and significant advantages to CARB's Carl Moyer and CORE members over the past two years, we feel that the current proposals and incentives program can serve a wider audience by diving deeper into real-life data when it comes to goods deliveries that utilize trailer TRUs and providing incentives to our customers and use cases.

The nuances of refrigerated food and goods delivery play a significant role in understanding how difficult it can become to introduce 100 percent zero-emission TRU technology in the trailer space. By this, I mean, 100 percent electric, on-road, non-axle drag, usage technology that also uses a small enough battery for fleets to be able to afford in light of bigger battery costs and keeping the overall gross weight lower.

All this, while incentives asking the fleet to scrap already purchased diesel TRU units when there are retrofits such as the eHub technology that is available and that utilizes the diesel units without using the diesel engine itself.

We all know that California's current infrastructure cannot support battery chargers and shore power installations at all the heavy-duty fleets that want to utilizes zero-emissions or near-zero-emissions technology, and hence incentivizing transitional technologies that can utilizes an insignificant amount of drag to generate on-road power is very important.

And so smaller fleets and disadvantaged communities can afford zero-emissions and near-zero-emissions tech, while making sure they're participating in a healthier California and planet.

While understanding that opening up gates to incentivize transitional tech can flood the space with lots of clean technologies, having measures such as diesel usage limit per year for transitional technologies can be one of the great ways to ensure that everyone is involved in this collective effort in sustainable fashion.

Having said that, we would like to request CARB to work with companies such as ConMet and use the data generated from real life fleet deliveries that we're collecting as we speak to offer incentives that can help the greatest number of fleet purchases. Fleets purchase our technology as opposed to a zero percent or a hundred percent ZE Trailer TRU -- TRU scrappage focused zero drag incentive program that can hinder the adoption of eTRU tech, that can also hinder the reduction of GHG emissions in California.

Again, I would like to thank all the Board members and implore that we can collective work on real-life delivery data to offer incentives to a wider spectrum of ZE near-ZE technologies and avoid future revision of the regulations as much as possible.

Thank you.

BOARD CLERK GARCIA: Thank you.

Greg, I have activated your microphone. Please unmute and begin.

GREG HURNER: Good afternoon, Madam Chair and members. Greg Hurner on behalf ha the Sportfishing

Association of California and the Golden Gate Fishing -- Fishermen's Association.

As you know, commercial passenger fishing vessels were making up 80 percent of the marine projects under the Carl Moyer Program, but now will become ineligible for that funding with the adoption of the Commercial Harbor Craft Rule. However, we have worked extensively with the Legislature to gain funding to Carl Moyer funding, so that we can continue those emission reduct -- reduction projects.

Staff have been working closely with us and we've discussed ways where we think that we can continue those emission reduction projects with the limited funding the Legislature provided, but also worked with the Legislature the amount of need in the commercial harbor craft area, and we will continue to work on staff -- with staff in those areas.

We also support the cost effectiveness changes under the CORE Program for commercial harbor craft and believe that there's some other changes that might be beneficial under the CORE Program and the $60 million for harbor craft to be able to continue to do emissions reductions on more vessels than were estimated. So we want to continue and we hope the Board would grant flexibility with -- for the staff to continue to work on those types of changes.

Lastly, we just want -- staff have been extraordinarily cooperative throughout this process and very supportive in how to make sure that we utilize the funding to the maximum ability possible. And we look forward and thank the Board for everything that's -- that we've worked with you on this past year.

Thank you.

BOARD CLERK GARCIA: Thank you.

After Sasan, we will hear from Natalie Nax, Alexia Melendez Martineau, David Avina, Nick Russo, and Graham Balch.

So Sasan, I have activated your microphone. Please unmute and begin.

SASAN SAADAT: Thank you. Yeah, Sasan Saadat on behalf of Earthjustice. Thank you, Chair and members of the Board. I'm excited to celebrate this investment plan, because it's a record down payment on getting to some of the most urgent zero-emission goals and we really appreciate all the ways staff have attentively incorporated diverse feedback and I think they've come up with a plan that manages to be inclusive, progressive, and Ambitious all at once. I'll focus my comments on two points related to heavy-duty funding, one in support and one recommended change.

So first, we strongly support the proposed reforms to HVIP, which function to make the program much more equitable and we believe much more effective. Boosting voucher amounts for the smallest fleets and the set-asides for transit fleets and drayage are vital to enable the vulnerable fleets to benefit the most from this transition. And at the same time, staff have generously extended the ability of the largest fleets to participate, which we think is a good move in the year before ACF kicks in.

But to continue receiving additional funding, they have to adhere to the bulk purchase concept, which we think appropriately graduates these mega fleets of 500 or more trucks to pitch in some of their own private capital to access HVIP funds. Large fleets will be able to access the handsome 30 percent federal commercial EV tax credits, which they're very well capitalize and positioned to fetch. And according to Tesla's written comments, a mega fleet buying 40 trucks would Get an effective per voucher of -- per truck voucher of 15K. So if you stack that on top of the 30 K from the IRA that's not a bad bargain for a FedEx or an Amazon facing looming ACF requirements.

This is a good way to leverage both private and public funds maximally to start moving large actors away from one-off subsidized purchases towards larger simultaneous orders, which is really the next step in this market transition, and it will help achieve larger earlier pollution reductions in disadvantaged communities that are overdue for relief. So we support these very equitable and strategic updates.

One concern we do have is that these requirements are not applied in a technology agnostic manner. So large fleets actually evade the purchase requirement by buying hydrogen fuel cell trucks, which would be counterproductive from a fleet transition standpoint, since that -- that requires distinct fueling infrastructure. It's a whole different, you know, infrastructure they'd need to install just to continue getting HVIP. Plus, fuel cells get a hundred percent voucher enhancement. By contrast, placing a vehicle in a disadvantaged community gets you a 15 percent voucher enhancement. So even though fuel cells are really expensive, we can't think of any climate or environmental justice justification for offering them five times as large a voucher enhancement as a vehicle gets for being place in a DAC.

So we'd urge staff to even out those requirements for fuel cells and electric trucks in the large fleets and moderate that huge voucher incentive.

Overall though, we're really appreciative of the staff for working with communities and stakeholders to maximize the climate and EJ impacts of what we think is really a landmark investment in cleaning up our transportation system.

So thank you so much.

BOARD CLERK GARCIA: Thank you.

Natalie, I have activated your microphone. Please unmute and begin.

NATALIE NAX: Hi. Good afternoon. Natalie Nax on behalf the California Vanpool Authority, also known as CalVans. CalVans is joint powers public transportation agency that provides safe and affordable commuter and farmworker vanpool services for counties across the state. We pay for the cost of gas, insurance, maintenance, and repairs and riders only have to pay a small fee for their ride.

Clean mobility investments are integral in moving towards a clean California. The Governor's May revise recognized this need and proposed 126 million for Clean Mobility Options Pilot Program. However, the Budget Act of 2022 allocated 381 million for both light-duty vehicle incentives and clean transportation equity incentives, which left only 20 million total for CMO.

It was discouraging to see such a significant reduction in funding for a program which would have called for CalVans to transition its 800 plus fleet to zero emission. This program is essential for underserved communities, who have historically lacked the resources to fund community needs assessments in clean shared zero-emission transportation projects. We respectfully urge the Board to reconsider increasing the proposed allocations for CMO.

Thank you.

BOARD CLERK GARCIA: Thank you.

Alexia, I have activated your microphone. Please unmute and begin.

ALEXIA MELENDEZ MARTINEAU: Good afternoon, Chair Randolph, members of the Board, and staff. Thank you for the opportunity to speak today and all of the hard work that has gone into the development of this plan. My name is Alexia Melendez Martineau, and I'm speaking on behalf of Plug In America, a non-profit that represents the voice of the EV consumer.

I'm here today to comment in support of staff's recommendations in the plan on the equity and light-duty investments. We support staff recommend -- staff's recommendations to increase vehicle purchase incentive amounts for lower income car buyers, including for prepaid charging card incentives. These new changes are essential to provide access for lower income consumers to purchase and reliably use clean vehicles as well as experience the significant benefits of these vehicles.

Additionally, though we expect the cost of EVs to fall over time, a variety of factors has driven costs higher over the past year. In June 2022, Kelley Blue Book estimated that the average EV was over $65,000, and that the average EV price rose 13.7 percent from June 2021 to June 2022. This made EVs cost almost $19,000 more than internal combustion engine vehicles on average.

Furthermore, the federal EV tax credits were significantly altered. Treasury and the IRS are currently working on implementing the credit, but it's current -- it's likely that no vehicles will qualify for the full $7,500 federal credit, which is often a significant or critical factor in a consumer's decision to purchase a clean vehicle. For context, robust EV incentives are necessary to accelerate EV adoption, which we clearly know all here today. Every $1,000 offered as a rebate or tax credit increases average sales of electric vehicles by 2.6 percent.

The changes staff proposed will help provide a path to electrification for low income Californians, while federal support remains uncertain. I'd also ensure that communities that have been historically burdened with negative climate and environmental impacts can receive the significant benefits of clean transportation.

Additionally, given the factors noted above, Plug In America supports staff's proposal on CVRP to defer implementation of a second decrease to the income cap for standard rebate eligibility and decrease in rebates amounts initially planned for February 2023. Overall, as consumer education, clarity, and certainty continue to pose challenges to EV adoption, we support staff recommendation to align incentives programs to make the incentives easier to understand and access.

Thank you very much for your time and consideration of our comments.

BOARD CLERK GARCIA: Thank you.

David, I have activated your microphone. Please unmute and begin.

DAVID AVINA: Thank you. My name is David Avina. I am a Pilots Manager at LACI. I'm addressing the Board on behalf of the Los Angeles Cleantech Incubator. And thank you for the opportunity to provide comment on the fiscal year 2022-23 funding plan for clean transportation incentives accompanied by the proposed Carl Moyer Program changes.

We strongly support the proposed continued investment for community identified clean mobility options and urge you to approve additional funding for insurance premiums. The Clean Mobility Options Projects are an essential tool and equitable -- in equitably transforming California's transportation system to zero emissions and in order to achieve the State's air pollution and climate goals.

LACI is working to ensure that the Los Angeles region meets aggressive goals for the transition to transportation electrification by 2028. Specifically, we are aiming for 30 percent of all light-duty passenger vehicles in the region to be zero emission and shifting over 20 percent of all trips in single occupancy vehicles to zero-emission public and active transit by 2028.

Increasing the funding for the Clean Mobility Options Projects will allow each voucher awardee to focus on low-income, vulnerable, and disadvantaged communities. The CARB -- the CARB-required insurance coverage is negatively impacting the ability to serve the most vulnerable to climate change. It has been LACI's experience that the insurance premium costs dramatically cut into the provided voucher amount. The CARB CMO Rancho San Pedro eBike Library annual insurance premium is $60,000 for a fleet of 20 eBikes. This is over 75 percent of the operating budget for a two-year program. Ultimately, insurance cost is a barrier to implementing a sustainable and scalable solution.

We strongly urge you to support the funding plan for the clean transportation incentives, with the proposed amendments addition for additional funding to cover the costly insurance premium. And we stand ready to work with you to ensure that success of the Clean Mobility Options Projects and a zero-emissions future.

Thank you.

BOARD CLERK GARCIA: Thank you.

Nick, I have activated your microphone. Please unmute and begin.

NICK RUSSO: Hi there. My name is Nick Russo and I am addressing the Board on behalf of Pedal Movement, where I serve as President of operations. I get to work closely with David, who you just heard from. So I thank you for the opportunity to provide comment on this funding plan and for all of the work that goes into making these programs successful.

Pedal Movement is a small business headquartered in Long Beach, California within and in close proximity to some of the most negatively impacted communities in the region, when it comes to air quality. We provide an eBike share and eCargo Bike Share Program called Good To Go Bikes with funding from a CMO grant in San Pedro, California in collaboration with LACI, the Los Angeles Cleantech incubator, as well as the staff and residents of the Housing Authority of the City of Los Angeles in the Rancho San Pedro development. In addition, we also operate the City of Long Beach's Bike Share Program and provide educational resources to our communities around bicycling and transportation.

We aim as a private business to provide career opportunities in the green economy while transforming the way that people move about their communities by enabling more people to access alternatives to internal combustion engine vehicles and single occupancy vehicles.

Similarly, we strongly support the continued investment in community identified Clean Mobility Options Projects and urge you to approve additional funding again specifically to cover insurance premiums. As David mentioned, Clean Mobility Options Projects are key to transforming and improving both California's Air quality as well as California's innovation in the ways to get to improving air quality and environmental impacts.

So increasing the funding for Clean Mobility Options Projects will allow each voucher awardee to focus on low-income, vulnerable, and disadvantaged communities. Unfortunately, we've discovered that the insurance coverage required by CARB is negatively impacting the ability to serve the most vulnerable to climate change. Because the shared micro-mobility industry is so new and so innovative, insurance carriers who are willing to provide the required coverage are severely limited in their number, and therefore able to charge much higher premiums as David mentioned previously.

So we strongly urge you to support the funding plan for Clean Transportation Initiatives with the proposed amendments for funding to cover the costly insurance premiums and we stand ready to work with you to ensure the success of the CMO projects and a zero-emissions future.

Thanks for your consideration and we look forward to working with CARB.

BOARD CLERK GARCIA: Thank you.

And after Graham, we will hear from Matt Schrap, LaDonna Williams, Ivana Munguia, Omar Gonzales, and Michael Sigala.

So Graham, I have activated your microphone. Please unmute and begin.

GRAHAM BALCH: Hi. Green Yachts converts marine vessels from diesel to zero-emission electric platforms and applauds the efforts of the California Air Resources Board to fund clean transportation initiatives. CARB has historic -- has a historic opportunity to create a new funding paradigm for marine zero-emission projects with the $60 million dedicated to marine zero-emission projects.

To date, CARB efforts to adapt funding programs designed for diesel to diesel repowers, such as Moyer, and land-based clean equipment programs, such as CORE, hasn't worked the way CARB wants them to when applied to marine zero-emission projects.

The five keys to effective funding marine zero-emission repowers are: due to the 10X cost difference of a zero-emission versus diesel repower, understand that for a vessel operator who has 50 percent of a diesel-to-diesel repower funded by Moyer, 94 percent funding of a zero-emission project is needed for the out-of-pocket costs to be the same for the vessel operator.

Two, a funding formula for marine zero-emission projects based on the size and scope of the conversion, as well as the distance traveled, should replace Moyer's surplus emission funding. Funding based on surplus emissions, eliminates funding for vessels with zero-emission requirements, such as the short-run ferries.

Three, eliminate the use of the word "hybrid" and the outdated thinking behind it. Instead, differentiate between internal combustion engine platforms and zero-emission platforms. This is a paradigm shift from today, in which CARB uses the word hybrid for both internal combustion engines with an electric assist and zero-emission platforms with an auxiliary generator. Zero-emission platforms allow renewable energy technology to easily be swapped in as it evolves. Internal combustion engine platforms with an electric assist do not.

Four, provide milestone base funding instead of end-of-project lump sum funding. Lump sum awards work for a three-month, $300,000 diesel conversion, but not for a four-year had $4 million zero-emission conversion.

Five, create equitable access for vessel operators in disadvantaged communities, minority and women led operations, and SBA classified microbusinesses by funding the required U.S. Coast Guard design review and approval of a zero-emission conversation for these operators. The U.S. Coast Guard design review takes two years on average and costs $400,000 before equipment can be ordered and a zero-emission project can begin. Disadvantaged and small operators cannot complete the U.S. Coast Guard design review and have equitable access to zero-emission repowers without financial assistance.

We want marine zero-emission projects to succeed in California and set an example for how it should be effectively and equitably done in the other 49 states and countries around the world. To do this, CARB needs new approaches to marine zero-emission project funding. We stand ready to help CARB think about this any time in order to help California decarbonize the marine sector.

Thank you.

BOARD CLERK GARCIA: Thank you.

Matt, I have activated your microphone. Please unmute and begin.

MATT SCHRAP: Thank you, Madam Chair and Board Members for the opportunity to comment here today. My name is Matt Schrap. I am the CEO of the Harbor Trucking Association. We are a non-profit association representing motor carriers who move most of the containerized cargo coming to and going from maritime ports in California. Our memberships includes some of the largest truck fleets in North America, as well as many small fleet operators, all of whom are critical to the efficient movement of goods within the international supply chain.

I am here before you today to continue to request increased funding for truck procurement and infrastructure deployment for drayage operators of all sizes in order to help drive adoption of zero-emission technology within this sector, especially since the first requirements of the Advanced Clean Fleets Rule beginning in just over 13 months from now are targeted at drayage operators, which includes, small, medium, and large fleets operating at cargo facilities in California.

We are also here to express support for the comments of a diverse coalition of stakeholders, some of which you have heard from today, made of truck OEMs, charging providers, labor, industry, and business groups, including the International Brotherhood of Teamsters, California Trucking Association, and Harbor Trucking Association. As included in the written comments submitted to the Board, the coalition is imploring CARB to move away from the unreasonable restrictions on HVIP vouchers for fleets of 500 or more, especially since these fleets are critical in populating a secondary marketplace for used vehicles within the drayage sector.

Any funding restrictions for fleets of this size should be limited to no more than 30 percent of voucher amounts and be coupled with the removal of the 30-vehicle minimum bulk purchase requirement for battery electric drivetrains. These modest changes will undoubtedly result in increased deployment of commercially available ZE technology, since contrary to staff's assertion fleets of this size will not likely be motivated to adopt advanced technology ahead of regulatory requirements without meaningful incentive support. The up-front costs are still too prohibitive regardless of fleet size.

Furthermore, as consistent with CARB's data on voucher demand, the coalition is also recommending that the funding plan reserve no more than 50 percent of standard voucher funds for fleets with a hundred vehicles or less. While it's important to provide enhanced -- enhanced access to smaller fleet operators, a 50 percent set-aside will provide ample opportunity for small fleets to take advantage of HVIP as it exceeds the overall share of vouchers that small fleets had requested in 2021 and 2022.

HTA and our coalition partners feel that these reasonable change requests will result in increased deployment opportunities for fleets of all sizes and it will assist in moving us closer to the State's goal of 100 percent drayage operations in 2035. With less than 50 zero-emission vehicles operating out of over 200,000 who are registered to do business in ports and intermodal railyards here in California, there is clearly a massive need for increased incentives, as ZEV vehicles can cost in excess of $500,000 and infrastructure for the 75 percent of drayage users who rely on public facing infrastructure is non-existent.

We appreciate the opportunity to comment here today and look forward to further engagement.

Thank you.

BOARD CLERK GARCIA: Thank you.

LaDonna, I have activated your microphone. Please unmute and begin.

LaDONNA WILLIAMS: Good afternoon. LaDonna Williams All Positives Possible.

First, I want to say thank you to CARB for your blood-curdling alarm and thank you to TikTok, because it has forced us to learn how to get to the point, because we all got the attention span of a gnat these days. Everything is quick, quick, quick, rapid-fire talking, and I wonder how much do you guys listen.

And I'm glad to say the response from CARB staff I do want to appreciate that. I really almost didn't give a comment today because I was pissed about the last minute notification to be able to go through so much material in so little time, but I do want to commend them that they have listened to us, particularly when it has come to Black communities, African American communities that has continued to be the least funded and least supported. They've heard us. I see it in the documents. You're listing it, but the angel is in the details. And I haven't yet been able to grab a clear understanding of what it is, but it looks like you're making an honest attempt, so that I commend you.

But when I'm looking at the price increases -- or the voucher incentive increases, I just want to be sure that you're also recognizing there needs to be some restriction in place that these dealerships, once they get the cars, because we've been looking in so far, they don't have them, but they're not able to increase their price that will offset any benefit that our low-income communities would get out of this.

And also, I want to caution the City of Richmond, because we're in Richmond and any of these other large entities who claim to speak on our behalfs about the changes that our lives are receiving through programs that they're just now admitting they're engaging in, I say talk directly to the impacted residents, because these services are still not available in the lowest, poorest, most vulnerable areas, which is what you are committing to outreach to and including, but will yet -- we have yet to see how this is going to actually be executed.

And especially when it comes to eBikes, that so many could have benefit of, they're yet not seeing the benefits or the availability of these types of opportunities and services in their areas. And we will commit to working with CARB and stay invested in this process. But in the end, we want to see some real benefits to our communities that have been left out for all these years -- these last 12 years and now you're trying to catch up to speed, we want to be sure that the intermediaries and these other folks that are now using environmental justice to put themselves in the forefront gobbling up these funds don't happen, that it actually comes to our communities and our groups that need this support the most.

Thank you.

BOARD CLERK GARCIA: Thank you.

Ivana, I have activated your microphone. Please unmute and begin.

IVANA MUNGUIA: Hello, everyone. My name is Ivana Munguia, the Thai Community Development Center's Outreach Specialist. Thai CDC is part of BlueLA's steering committee. The steering committee's outreach specialists work with the program team including mobility development partners to spread the word about BlueLA and gather feedback from the community about station expansion.

As part of Thai CDC, my outreach work focuses on the disadvantaged communities -- community members living in East Hollywood, which includes Thai, Latinx and Armenian residents. Thai CDC is a community-based organization that has been serving low-income communities for almost 30 years addressing the need for housing, food, health care, education, legal, and social services, advocacy, and economic opportunities. We were also behind the successful campaign to designate East Hollywood as Thai Town.

Our outreach in East Hollywood -- in the East Hollywood area for BlueLA has included tabling at our COVID vaccination clinic and our East Hollywood certified farmers market, both of which are located at the Hollywood and Western Metro Portal Plaza, reaching disadvantaged residents in the area who come to our clinic and/or shop at our farmers market.

We also perform outreach at other community events hosted by different council offices at colleges and universities and to other non-profit community-based organizations, while also canvassing at affordable housing units. All of these outreach efforts has generated more engagement between BlueLA and the communities that Thai CDC serves, as well as the community serves by other institutions and organizations in Los Angeles.

The excitement and interest shown by the -- by many of the individuals that I have engaged win -- engaged with has demonstrated how a program like BlueLA has the ability and potential to help community members who simple do not have access to a vehicle with mobility.

We are in urgent need of support to expand the program throughout our region and California. We're encouraged to see a boost to the of capacity building allocation this year and ask CARB to consider advancing these funds quickly, so that we can support CARB's continued deployment of these programs.

In order to increase this kind of mobility throughout Los Angeles, there must be investments in capacity building for BlueLA.

Thank you for providing us with the opportunity to submit comments and for CARB's ongoing support.

BOARD CLERK GARCIA: Thank you.

Omar, I have activated your microphone. Please unmute and begin.

OMAR GONZALES: Good afternoon Chair Randolph and members of the board. My name is Omar Gonzales calling on behalf the Nikola Corporation. Nikola is a technology and compliance solution provider manufacturing heavy-duty battery electric vehicles, fuel cell electric vehicles, and developing the entire hydrogen ecosystem.

We're currently in production of our battery electric Class 8 day cab, the Tre BEV, which is listed on the HVIP catalogue and has a range of up to 350 miles. And we will begin production of our Class 8 fuel cell electric day cab truck in 2023 which will provide a range of up 500 miles.

First, we'd like to echo comments from other stakeholders calling for the removal of the fleet size limits, bulk purchase requirements, and voucher reductions for large fleets. In short, Class 8 ZEVs are dependent upon incentives to achieve diesel TCO parity. Small- and medium-sized fleets are often dependent upon large fleet's adoption of ZEVs to support TCO competitiveness and large fleets can make a bigger impact in reducing emissions.

Next, we encourage the Board to consider bolstering fuel cell investments. Forty-eight BEV Class 8 buses -- 48 Class 8 buses and trucks are currently available on the HVIP eligibility list. Manufacturers such as Hyzon and New Flyer already have fuel cells that are HVIP eligible. And Hyundai and Nikola plan to have fuel cell day cabs HVIP eligible by 2023.

Given the current availability of Class 8 BEV vehicle models, but nascent availability of fuel cell modes in the HVIP program that would meet various fleets operational requirements, Nikola encourages the continued incentivization, including both the hundred percent modifier and fleet size exemptions of fuel cell Class 8 vehicles through HVIP for an equivalent amount of time or for an equivalent amount of vehicles incentivized as BEV Class 8 vehicles have been able to secure through HVIP program to date.

California has led the way in ZEV purchase programs and now is the time to create fuel cell carve-outs in HVIP and Carl Moyer Program and to ensure equitable funding availability for the market maturation of fuel cells as economic alternatives to BEV vehicles, particularly for fleets that have operations that make adoption for BEVs impractical or uncompetitive.

This program so popular that with 430 million available in March 2022, it was almost immediately oversubscribed in the area needed most, drayage trucks. However, various fleets in the medium- and heavy-duty trucking industry will struggle to adopt BEVs into their operations. Similar to other set-asides, a fuel cell set-aside for trucks and buses would ensure funding availability for these hard-to-decarbonize fleets and would send the right market signals to manufacturers for further technology development, especially to address long haul trucking.

Additionally, the set-aside could be leveraged for California's public-private partnership effort ARCHES being coordinated by GO-Biz to secure match funding for the U.S. Department of Energy for the development of California's hydrogen economy, thus contributing additional funding to CARB's efforts to phase out emissions from medium- and heavy-duty transportation.

Thank you to CARB staff for their work on the funding plan and for the Board's leadership on this issue and consideration of our comments.

BOARD CLERK GARCIA: Thank you.

Lastly, we will hear from Michael Sigala. Michael, I have activated your microphone. Please unmute and begin.

MICHAEL SIGALA: Hello. Thank you. Thank you, Board. Michael Sigala here, Board President of the San Joaquin Valley community shared mobility non-profit doing business as Miocar. Miocar is one of the founding investments from CARB and includes partners such as the Air District, MPOs, UC Davis, and many others. The program provides car sharing to low-income rural communities and we have a fleet of electric vehicles stationed at affordable housing developments throughout the San Joaquin Valley.

Post-COVID, we are experience an -- experiencing an uptick in demand. Implementing this transformational pilot program as a purpose built non-profit has been rewarding as it has proven to be difficult. For example, finding capital to purchase electric vehicles, then waiting sometimes over nine months to be reimbursed from CARB is very challenging.

Miocar is well equipped to deliver cost-effective results for disadvantaged communities, both through multiple STEP and CMO voucher rewards and through support of partner agencies like CEC, but investment and capacity building is critical at this time.

As you noted in the lessons learned, we support ongoing targeted and dedicated resources to rural disadvantaged communities, particularly in non-attainment areas like the San Joaquin Valley. We are in urgent need of support to expand the program throughout our region and California. We are encouraged to see funding for capacity building this year and ask CARB to consider advancing these funds quickly.

Another way CARB can help non-profits like ours and like Green Raiteros, for example, is by assisting us in establishing strategic partners in the automobile and EV industries. This would also help us achieve self-sufficiency and better serve disadvantaged communities throughout California. Thank you for your -- thank you for the opportunity to provide comments and for your ongoing support.

BOARD CLERK GARCIA: Thank you.

And that concludes the commenters for this item.

CHAIR RANDOLPH: All right. Thank you.

Staff, are there any issues raised in the comments that you want to address before I close the record?

MSCD DIVISION CHIEF VERGIS: Yes. Thanks you, Chair and members. Sydney Vergis again, Division Chief.

So two factual corrections I would like to make. So we heard a lot of numbers about the number of zero-emission medium- and heavy-duty vehicles that are on the road today. Just for your reference, there are 1,923 zero-emission trucks and buses on the road. There are, of course, a lot of ways to cut that data, so this is as good a time as any to mention that today CARB unveiled a first-of-its-kind medium- and heavy-duty zero-emission dashboard that combines data from all of our incentive programs into one place, so VW, Carl Moyer, CAPP, HVIP, all in one place, so a fun dashboard for you to play with.

The other thing is we heard some confusion from stakeholders about Board flexibility for moving funds. To be clear, the Board does not have discretion to move funds between the heavy-duty pot of funding and the light-duty pot of funding. That was established by the Legislature.

Slide 12 in the staff presentation has a lot of great detail on that, if you'd like a visual reference.

Thank you.

CHAIR RANDOLPH: All right. Thank you. I will now close the record on this agenda item.

And Dr. Sperling.

BOARD MEMBER SPERLING: Thank you very much.

So, you know, it's really impressive how much funding is now available. You know, having been on the Board for a while, we didn't used to have money -- much money to be spending and allocating. So it's a -- it's a great opportunity, but it's also a great responsibility.

So I just wanted to -- okay. So the last -- this morning, I came up with ideas of how to make work easier for Dr. Vergis and her team. Now, I have an idea for how to make more work for them. So this is a question of we as a Board member, it's almost impossible to really make any judgments about this spending plan, I think. You know, there's -- you know, we're not -- you, the staff, is the expert on this, is talking to others. The Board is just, you know, at a high level. But then we come in and we know a lot of the funds are already allocated, you know, by the Legislature, directed by the Legislature to particular programs, and there's various other constraints.

But having said all that, given that this is so much funding, and given -- you know, I think we have a real responsibility here to be a little more rigorous in evaluating them, even though I appreciate, one, you know, there's a lot of constraints in how the money is spent, and two, there's -- its -- it is difficult to do real evaluations. But I think the money has gotten so large and we pride ourselves on being a science-based, databased organization.

So I think I'd like to encourage going forward more of an effort at evaluating these different programs and funding. And I know it's hard. You know, I just -- just this minute, I was sitting down, okay, what are the challenges? Okay. You know -- you know, there's cases where these are pilot projects, and so, you know, how do you evaluate the benefit -- you know, the cost effectiveness of a pilot project? Some of the projects are infrastructure, so there's essentially no emission benefits.

So there's a lot of reasons why it's difficult, but yet, you know, I look -- the staff did -- you know, when I mentioned to this -- this to the staff, they say, well, we do evaluate it and pointed me to appendix H buried in the report. And you look at that and the numbers are -- so these are cost effectiveness analyses. The numbers are all over the place. You know, they range from -- I'm just looking at it now for criteria pollutants, you know, everywhere from 29,000 up to -- up to four mill -- you know, $5 million per ton. And on GHG, it ranges all the way from $350 up to, you know, $67,000 per ton.

And these numbers are all, you know, way above what you would normally think is the threshold. So even in the -- this morning, when we had in the staff report, the estimate was that the ben -- the -- in terms of benefit -- the cost effectiveness was $22,000 per ton for criteria pollutants. So that seems to be these days about where the threshold is about where you want to invest in pollution reduction.

So these numbers are way higher, every one of them. And so I guess I'm saying I know, there's explanations as I was just noting a moment ago. But if we're going to -- and I know there's constraints, but we, the staff, and now the staff actually is proposing that the Executive Officer will be making more decisions on funding as well, it seems like we should be putting more effort into doing some kind of cost effectiveness analysis in evaluation of these programs. And a lot of these we haven't done much before. And so I know we don't have a lot of experience in it, but I just make that suggestion going forward, putting more resources, more effort into making it a little more science based.

And again, I know there's different goals. There's CO2 benefits. There -- you know, there's co-benefits. There's CO2 benefits. There's criteria benefits. There's EJ benefits. So I'm not discounting it, but I just think that's an important -- important for this agency to be doing more of in the future, and especially in this case with the incentives where -- where there is a lot of money and we do have some amount of discretion in how to spend it.

And now, I have a course to teach and my TAs are all on strike, so I've really got to get there, 175 students. So I appreciate, you know, unions and striking, but in my particular case --

BOARD MEMBER BALMES: He actually has to work now.

(Laughter).

BOARD MEMBER SPERLING: So they're worth -- I have come to appreciate they're worth the money they're paid --

BOARD MEMBER TAKVORIAN: And more.

BOARD MEMBER SPERLING: -- and more.

CHAIR RANDOLPH: Thank you, Dr. Sperling. Are you -- so you're done?

BOARD MEMBER SPERLING: Yes.

CHAIR RANDOLPH: Okay. All right. Thanks.

I just wanted to clarify one thing about cost effectiveness. Based on that presentation, that $22,000 was like a strikingly low cost effectiveness amount and it was -- and in the Moyer changes, we were actually increasing the cost effective for zero-emission, because we recognized that that cost more and that is a value that we have to get those reductions in zero-emission equipment, and we want to ensure a higher cost effectiveness amount.

So I guess I would just sort of emphasize the latter part of what you said, which is there's a lot of different values we're trying to solve for, and no one single cost effectiveness number is the right number. More analysis is always good, but we do need to recognize that we are -- we are solving for several different problems with these programs.

Okay. That was my editorial comment as you head off to class.

BOARD MEMBER SPERLING: To be my -- to proselytize to my students. But, yes, you know, you're exactly right. And that's why I say, it is hard to do, but yet, how do we make decisions? And having somewhat more quantitative framework has to be helpful.

CHAIR RANDOLPH: All right. Okay. Thank you.

All right. Board Member Riordan.

BOARD MEMBER RIORDAN: Yes. Thank you, Madam Chair. To the staff, it's never easy to make recommendations on the disbursal of money, so understand that.

Going beyond that though, I need a bit of a clarification. One of the early speakers was speaking representing, I believe, the waste management type of trucks that we have in and around our communities. And he talked about the ability to distinguish -- you may be domiciled where else, but you're serving many of the impacted, overburdened, low-income communities as you pick up the trash weekly. And I wanted to be sure that if what he was saying was accurate or if there was a way to recognize that, yes, they're kept in a yard that probably isn't in that community necessarily. In fact, you wouldn't want them in some of the residential communities, but they serve the community. Could you help me with that distinguish that for me?

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Yes. Thank you. And I'd like to get started with that. Peter Christensen MSCD.

The -- I believe that the speaker was referencing the disadvantaged community requirements for the very large fleets --

BOARD MEMBER RIORDAN: Right.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: -- those of over 500 vehicles in California.

BOARD MEMBER RIORDAN: Um-hmm.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: And that is a provision that only applies to those very large fleets. And the intent there is that we're focusing our limited dollars, especially in the communities that need those reductions the most, in the disadvantaged communities. So for a very large fleet -- remember this is at least 500 vehicles, and for a fleet that has multiple locations in California, the intent there is to say, okay, let's focus on the fleets that are in this disadvantaged community and provide that funding there so we're maximizing the benefits in disadvantaged communities.

HVIP as a whole has been very successful. About two-thirds of the funding in the program has benefited disadvantaged communities. But this is a unique provision that only applies to the very large fleets, partly because they tend to have multiple locations, and again we want to focus those benefits in the disadvantaged communities.

BOARD MEMBER RIORDAN: Well, is there something that though -- would that qualify -- would that be a qualifier for that advantage to the large fleets to say, okay, we're not necessarily housed there, but we service the whole -- you know, we service that area, so we are essentially providing better air quality in those areas by utilizing electrified trucks.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Yeah, and I think that gets to part of the implementation challenge. Part of the -- one of the guiding principles of HVIP is that it's a simple program. It's simple to access, simple to understand, simple for fleets and dealerships to -- you know, to understand what funding is available.

BOARD MEMBER RIORDAN: Um-hmm.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: In terms of looking at a particular truck and the particular route that that truck would be serving, it's pretty challenging to figure out a mechanism that tracks that truck throughout its useful life and determines where it's moving. The technology is there, but connecting that to the funding is a challenge.

What tends to happen, especially in larger fleets, is that a particular truck or a particular bus is going to serve multiple routes throughout its lifetime.

BOARD MEMBER RIORDAN: Right.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: It's not always going to be operating in a disadvantaged community. It's going to operate in one in one day, and then on another day, it's going to -- it's going to move to a different route. So in terms of kind of sticking to that guiding principle of keeping it simple in HVIP, we do think that it's important to identify if the truck is based in a disadvantaged community, we know that it's going to be starting and finishing its day in that disadvantage community.

BOARD MEMBER RIORDAN: Okay. I think there's an issue there. I mean, I -- I'm going to let you all figure that out, but, you know, let's it's domiciled there in the disadvantaged community, leaves that community and spends the entire day outside, and never really -- short of let's say two or three miles in the disadvantaged community where the trash truck every -- you know, they would have to calculate it and you'd have to verify it, but I will leave that to you. That's going to be for you to implement.

CHAIR RANDOLPH: Can I ask a follow-up question about that same topic. So can you just clarify exactly what domiciled means in the context of a company that may have a headquarters and then several different places where they have their trucks.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Yeah, domiciled refers to where the truck is based. Usually, if it's returning to a base every night, it's the location, it's the yard where that truck parks overnight.

CHAIR RANDOLPH: Right. So if you are -- if the truck is domiciled in the disadvantaged community, it may be coming and leaving from that community. So you know if it's domiciled in that community, that there is a truck operating in a disadvantaged community. And it's that next level of information that would be more challenging to obtain, which is it leaves the yard and where exactly is it going.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Exactly.

CHAIR RANDOLPH: Okay. All right. That's helpful.

Supervisor Serna.

BOARD MEMBER SERNA: Thank you, Chair.

I was hoping that staff -- I'm not sure who's most appropriate to respond here, but hopeful that staff can help me understand the issue that was raised by Sac Metro Air Quality Management relative to what they were referring to as equity-focused projects, and kind of the -- a mysterious accounting according to them of $60 million that is now unavailable, I guess, for those projects. And I think they prefaced it with this is some -- you know, a decision that was largely or perhaps entirely made at the Legislature. But maybe someone could help me understand how that shift occurred or why.

MSCD INNOVATIVE LIGHT-DUTY STRATEGIES INCENTIVES SECTION MANAGER MACUMBER: Yes. Hi. Lisa Macumber with MSCD.

The -- what they're referencing is the difference between the Governor's proposed budget and what ultimately happens at the Legislature with the final State budget. So the original Governor's proposed budget did have a larger allocation in the mobility pot of about $60 million. And the final budget was about $60 million less. And that $60 million really affected a whole suite of project. It affects our Financing Assistance Program, eBikes, the Clean Mobility Options Program, our STEP Program, pretty much everything outside of Clean Cars 4 All.

So what we did was we took the allocation that they provided us and we divided that amongst the programs in a way that we felt could meet the need over the next year recognizing that it wasn't as much as we had expected and what we had been planning for with the stakeholders.

BOARD MEMBER SERNA: So in terms of again referring specifically to the local air district here in Sacramento, and having been very involved in some of the community clean car rental programs that are occurring in places like South Sacramento, is there an opportunity this fiscal year to look at other resources to make sure that they are at least on life support until the next budget?

MSCD INNOVATIVE LIGHT-DUTY STRATEGIES INCENTIVES SECTION MANAGER MACUMBER: Absolutely. The funding that we've allocated or that we're proposing to allocate within this plan does Include $20 million towards the Clean Mobility Options Program, of which about half of that or so will be to support the existing projects on the ground. And the remainder will be for another window of opportunity for the districts and other entities to compete for their -- for their projects. So there will be funding available for this year.

BOARD MEMBER SERNA: Okay. Great. Thank you.

CHAIR RANDOLPH: All right. Dr. Pacheco-Werner.

BOARD MEMBER PACHECO-WERNER: Thank you so much to the staff. I mean this is -- this is so incredible in terms of the historic investment we'll make today in California, and that I hope, you know, will make it to those disadvantaged communities and provide that change in their daily lives.

I wanted to echo Dr. Sperling's comments around, you know, how we can get or invest through other ways, getting data back about some of the programs and some of what we're seeing and really understanding more the gaps that we continue to see.

And I really wanted to emphasize that one of the things that I feel like we want to understand -- I would like to understand more is as we begin to change the way that we have the funds between the State and the district on the -- on the incentives that we -- that we understand how the Clean Cars 4 All allocations -- you know, kind of like how that program is going and how the -- how we're being able to distribute, and also if there are any gaps in the priority populations, which we want to target with some of these funds.

And so I would like to see that, especially as we embark on this new way of doing this. And also, I -- you know, I really thank you for thinking through so thorough around how to embed in each and every one of these programs that prioritization of these disadvantaged communities. One of the things that's out of our control, but that I hope maybe we can talk about and elevate to part of the State discussion is really my concern with the phasing out of the plug-in hybrids in the CVRP program.

And the reason that I say that is that because large families still need those options that aren't really available in other types of vehicles yet and -- or to the degree that they can afford them. And so I'm -- I'm talking specifically about large vehicles, you know, seven-passenger vehicles that families here in the San Joaquin Valley regularly need to move around, that farmworkers use to move themselves, and their -- and their neighbors around to work. And so some of that I'm still not seeing being available as much in the market, and yet the phasing out of that incentive is going to -- going to leave those folks out. And so I just -- I know that's a legislative deal, but I would want us to think about elevating that issue. Thank you.

MSCD INNOVATIVE LIGHT-DUTY STRATEGIES INCENTIVES SECTION MANAGER MACUMBER: Great. Thank you. Lisa Macumber. I can comment on both of those points that you've made. With regard to the data and making sure that the data is available, you know, a lot of these projects have been - I think, you guys have heard - pilots, a lot of them have been -- they've changed a lot over the last several years. And so the way that we've collected data has also changed and it hasn't been consistent necessarily across each of the programs. And so this year, we have already begun and will be continuing to embark on finding ways to have a more streamlined approach to how we are collecting data for the programs and being able to report that data back out, for example, demographic data within Clean Cars 4 All and how what we're collecting from each of the districts and what we're able to actually provide has been very sporadic across each of the different districts.

And so we'll be implementing a universal survey across each of the programs, so there's one survey. We're collecting similar data across it. And we're going to work to make that available within online dashboards and things like that, so that you can see that data more routinely as the projects move forward.

And then to your second point about the phaseout of plug-in hybrids in the Clean Vehicle Rebate Project, thought that was legislatively prescribed and so we will have to phase them out in that program, I'd hope that it's encouraging to know that we will still be able to fund those vehicles within the other equity programs within the Clean Cars 4 All Program and within the financing assistance programs. While they won't get the additional incentive necessarily for new in the outer years, right now, they can get that coupled. And then in the future years we'll be able to at least continue to support them in the used space.

BOARD MEMBER PACHECO-WERNER: Great. And so I hope that we can think about, you know, in those future years, how we have that parity in terms of being able to help people that still can't afford them, you know, still be able to make up for what's not available in other funding as well.

Thank you so much.

CHAIR RANDOLPH: Board Member De La Torre.

BOARD MEMBER DE LA TORRE: Hello. Thank you. I've got a few comments here. On harbor craft, I want to emphasize that we stick with staff's recommendation on the funding for that. When we did the Harbor Craft Rule, there were a lot of commitments that were made and -- not commitments, expectations that were raised, and I think we need to follow through on those expectations, particularly with -- I'll say this again with Catalina. It's the only off-shore scheduled service that goes to a populated island in the state of California. It's very important to the population of Catalina, because it's the only way they could get to the mainland from there.

On the fleets, you know, so many people spoke about this large fleet issue. We are already making an adjustment. They were supposed to -- the large fleets were supposed to -- up over a hundred were supposed to be removed completely by 2023. That's not going to happen. They are going to be eligible in 2023. And in terms of those large fleet/small fleet issue, if they are right, and not all of the small fleet money gets spent, guess what, we can redirect it. So it's going to be in the pot and it's not going to go away. It will be there. And so, you though, we're all going to see whether that's true or not.

But to gripe now and say we need to make adjustments right now is just not -- it's premature. There is a market transformation taking place here. And we need to support -- in the heavy-duty sector and we need to support across the Board. And that's what we're doing with this plan. Also, I'll say it again, I've said it last month, ACF and ACT, the Advanced Clean Fleet Rule and the Advance Clean Transit Rule -- Transportation Rule, I'm sorry, are going to be working hand in hand to create this market transformation. We are going to revisit ACT next year after we complete ACF, so that those two are very much in sync. The finished product of the Advanced Clean Fleet Rule and we'll revisit the Advanced Clean Transportation Rule, so that those two are completely in sync going forward, and really guide and push the market transformation in the heavy-duty sector.

I also want to support the Clean Cars 4 All Program. This -- the funding that we have here is again record amounts. Also goes to the secondary car market, which the study is going to be done that we supported earlier. It's also setting us up to maximize the benefit of the Federal IRA legislation, which was signed by the President a few -- a couple months ago.

And then finally, I just found it interesting that Tesla is here griping to us about heavy-duty trucks and HVIP when they have not even applied to be in HVIP. So maybe when you're part of the program, then we can have conversations about how you -- how things can work or not work according to your perspective.

Thank you.

CHAIR RANDOLPH: All right. Vice Chair Berg.

VICE CHAIR BERG: Thank you, Chair, and great job, staff. I want to echo my fellow Board members, this is just amazing time in my tenure. I can remember when we were very excited about 125 million, and here we are today with transformational aspects along with transformational funding, so that is very exciting.

I wasn't going to make a -- comments, but I really did want to jump in and backup Board Member Riordan. I do think that staff needs to consider that there are heavy-duty vehicles that service neighborhoods day in and day out. These are the trucks that if they go up and down their streets providing those services, that those neighbors are going to see. Very few neighbors are going to see a lot where a truck leaves and goes and gets on the freeway and comes back, because they're domiciled there.

There is technology available. Put it on the -- on the fleet to come back to you to say how they're going to prove to you that they're in that community, because there's hardware -- I mean, software. They're tracking their trucks all the time. I track my trucks. I know where they go every minute of every day. And so put it back on the fleets. If they truly want to participate and show you, come up with something that's going to work, but I do want to echo what Board Member Riordan said.

The other thing I would like to bring up, and I know it's in the weeds, but it was in the presentation, and that's really what is our policy, Board members -- my fellow Board members, on when we look at giving the Executive Officer the ability to carry-over wait list to the following year? I found this so fascinating, as we looked at the earlier years and we would sell out, and all of a sudden we'd have 25 percent wait lists that was taking money the following year, and now we have what two point plus billion dollars and we're still wait listing -- thinking about wait listing and carrying over for the following year. So maybe staff can give us a little bit more information, how deep are you going to get into next year, what's our policy thinking on that wait listing? Not the wait listing itself, but carrying over a commitment to the following year and starting out in the hole in your next funding year.

Thank you so much.

MSCD INNOVATIVE LIGHT-DUTY STRATEGIES INCENTIVES SECTION MANAGER MACUMBER: Great. Thanks. This is Lisa Macumber. So that's a great question. Our contingency plans that are in the funding plan are pretty consistent from year to year. And what we -- what we expect with this amount of money is not really to be in a wait list situation, but should we be, we always evaluate what it looks like. And we've always been very careful to not overcommit the State or put us in a position where we're --we are initiating a wait list and funding has not been approved by the Legislature, or we don't foresee funding coming.

So the key things that we would look at at the staff level and that we would advise the Executive Officer on is whether or not there is funding coming to us to be able to support and ensure those wait lists that are in place -- or to be established. We also have had situations where we have cut off wait lists at points, where we recognized that it will exceed dollars that we expect to come. But again, this year's infusion of funds is so significant that we do anticipate the program to just stay open year round at this point. We've built in those contingencies, because we don't know exactly what will happen. And we've built in the alternative where we have programs that don't have demand and we do have funding flexibility to potentially move from programs that are flush with funds to those that could use the funding should the authority within the State budget be there.

VICE CHAIR BERG: So I'm just wondering, Lisa, though -- and I appreciate that explanation. That was fabulous. But, you know, how much -- there is such a great need. And so are we going to set up our funding programs where in one year, because of the need in the transformation, we spend 125 percent and carry 25 percent over? How much are we -- you know, from a policy perspective, how much are we willing to dig in -- even though we know we have the money, but how much are we willing to dig in and do we have any carry-over from last year to this year?

MSCD INNOVATIVE LIGHT-DUTY STRATEGIES INCENTIVES SECTION MANAGER MACUMBER: That's a great question again. You know, we don't have a policy of a specific amount, because it really varies project by project. When we're looking at what we have traditionally called first-come first-served projects, which now we're really moving towards more of a needs-based project, again, we've just -- we've evaluated the program project itself and what we think the needs would be to carry us just until we could get to the Board. I don't -- without going back and looking at numbers, I don't think we've ever committed more than -- or over 25 percent even. It's always been a relatively small amount.

That said however, now that we really moving towards needs-based, at least in the light-duty section, our plans are to kind of be able to cutoff the general

Applicants and make sure that the funding really does last for those consumers, those participants that need the money the most, so that we aren't ending up in wait list situations, that the dollars are really staying there and they're really prioritized for the consumers that need them. And we're finding ways to bring that across as many of the projects that we can. And so again, we don't have a policy on the number specifically, but we -- we look at a lot of different factors to figure that out and how we would move forward for each project.

VICE CHAIR BERG: Well, I do really appreciate the fact that you mentioned, and you're so correct, that we are in a little bit of a new paradigm going from first serve -- first-come first-served to needs based and it will be really interesting for this year and we'll look forward to your feedback next year on what angst did that create for those that weren't in the needs category, but got their application in, but they got bumped by the needs category, and what's fair. So I'll be really interested in your thoughts and your team's thoughts on how this is going to work this year -- how it does work this year and what you see that we really do need for next year.

I would just want to be cautious that we have a full funding cycle for each year, and, you know, what you have for one funding cycle doesn't majorly spill over to another.

Thanks for listening.

CHAIR RANDOLPH: All right. Board Member Kracov.

BOARD MEMBER KRACOV: Thank you, Chair. I want to thank staff for all the work that's been put into this. I see Graciela Garcia, Lisa Macumber, I think a little bit of Peter Christensen there today. Also, I want to thank our friends and colleagues from the Energy Commission and GO-Biz, Hannon Rasool, and Tyson Eckerle for coming, and again want to nominate them to have honorary seats up there in our staff table. For all the different things that we're doing, we really need that partnership, need their presence and need that coordination, so really appreciate that.

I've got just a couple three substantive type of comments. The first will focus on HVIP, Chair. Board Member De La Torre just asserted this, but I would like to ask a question to staff about it. We have heard about this issue with the percentages for the small fleets versus the big fleets over 500, a concern that seems to emanate from the possibility that the small fleets may not, you know, use all the money and therefore the demand that we need, that the manufacturers need won't be met by just giving the incentives in proportions that we're proposing.

Hector seemed to suggest that, well, if that happens, we could just give the money to the bigger fleets that -- it's not like we're going to lose the money or the money goes away. Can staff clarify where we stand on that?

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Sure. Happy to. So the proposal in the funding plan reserves 70 percent of the HVIP funding for small fleets, fleets of under 100, and for public agency vehicles. That means that there's $127 million available for larger fleets, for fleets over 100. So $127 million, that's 30 percent of the HVIP funding. And that was selected because it aligns with the large fleet demand that we saw in the -- in the prior cycle in the prior year in HVIP. So we do expect that we will be able to fully fund the demand across the Board for fleets of all sizes next year.

Now, if the small fleet demand doesn't materialize as we think it will, as it has grown over the past couple of years, we have a couple of milestones throughout the year that make that funding available for lager fleets. It starts on July 1st. If there's $100 million left that small sheets haven't used, we start to make that funding available for large fleets. And then ultimately, if we still have funding left in the program in November, all of the funding becomes available for fleets of all sizes.

So we -- the bottom line is we expect to meet demand for fleets of all sizes and the plan includes mechanisms to make sure that throughout the year, if there's funding available that we provide that funding where the demand is.

BOARD MEMBER KRACOV: Terrific. Thank you for that clarification. The other question I have -- and I see I forget you, Dr. Vergis, there. And this isn't necessarily for you. I'm just acknowledging your work on this as well -- drayage -- coming from the South Coast, drayage is so important. We heard Matt Schrap from the Harbor Trucking Association speak today about drayage. You know, I totally agree that we have to make sure that we get drayage right. I'm going to be interested to see with the turnover of truck and bus at the end of this year how we're doing? I suspect we're going to do okay. And some of the gloom and doom out there actually is not going to come to light, which I'm really hopeful for and proud of for this agency.

But we're going to have another transition starting in 2024. It's going to be a small transition at first. It's going to gather steam until we get to 2035 and the total phaseout, but we are going to require a lot of zero-emission purchases starting for drayage first in 2024. So I think having a focus on drayage, set-aside for drayage, making sure we're really paying attention to getting the first tranche of ACF right makes sense to me.

If I can ask another question through the Chair, if we can just spend another minute or so explaining our approach on drayage in the HVIP Program.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Yeah, the plan that you have in front of you today continues that strong focus on drayage. A couple of things to point out specifically. First, this is the second year of the drayage set-aside. So this year we have 157 million specifically for drayage trucks in HVIP. And when that 157 million is exhausted, drayage trucks can continue to be funded with the HVIP standard funding.

In terms of the outlook for drayage, we are continuing the additional enhancement for drayage trucks, so an additional $30,000 per truck. So that brings the base drayage voucher to 150,000, and plenty of opportunity for turning over drayage trucks within their useful life throughout the next few years, include -- because we can continue to fund that zero-emission technology since the drayage trucks are able to register in the drayage truck registry through their useful life.

So plenty of good opportunities for drayage trucks continuing that strong focus that we started last year and moving forward with the momentum that we started with project 800.

BOARD MEMBER KRACOV: And thank you so much, Mr. Christensen for that. Just sign me up whatever efforts I can put in to get the word out and to make those allocations and our proposals for drayage successful working with folks like the harbor truckers, just let me though. But really pleased to hear about those aspects of the proposal.

Chair, just the last couple of things. On harbor craft, I also am really excited about seeing the money there. I know a lot of hard work went into that. And it's sort of a culmination. I'm not sure culmination, because that implies an end, but it's certainly an important step among the process for the Harbor Craft Rule that we passed earlier this year. I'm supportive of the staff proposal on this.

Noted that there is some public process in the future. Maybe a few of us our a glutton for punishment, but sign me up for that too if there's a way that we can help, and make sure that that process goes well. Again, a lot of these vessels are in the South Coast and certainly the Catalina folks that Hector emphasized are as well. So very pleased to see the harbor craft in there.

The last thing, Chair, is on Moyer. I've heard a lot of good things about the proposals that we have made as a Board and then the staff followed through with the on-road changes to Moyer, including the cost effectiveness, but, you know, really a whole bunch of other changes to make sure that the districts are able to spend the Moyer money effectively. The districts seem happy with it, so I'm very pleased with the work that we did on on-road. And appreciate Graciela Garcia also giving a shout-out to the iPad work that Vice Chair Berg, Mayor Hurt and I put together on the VIP part of Moyer, where there's some also some guidance changes aligning with the other parts of Moyer, that the Board is going to see a memo on once those are finalized.

And I'm proud of the work that we did, working with staff with Mr. Segall's group, Femi and Sandra also led that. I think that's a good example of Board members being able to lean in and working with stakeholders it affords a good outcome. I note that we're going to sort of try some of this for Moyer off-read now and look forward to that, and hoping that the process goes as well for off-road as I believe it has for on-road.

So those are my comments on the funding plan. Thank you, Chair.

CHAIR RANDOLPH: All right. Thank you.

Board Member Takvorian.

BOARD MEMBER TAKVORIAN: Thank you, Chair. Thank you to staff. This is a -- this is not -- this is a really historic day, not just because I think of the resource -- the amount of resource that's on the table in front of us. When I said that to my husband at 4 o'clock this morning when I got up, he's like well, how do you even wrap your -- how many pages is that and how are you wrapping your mind around that. Well, that's why it's 4 o'clock in the morning. I'm on my way. So he said I think you're going to need multiple cups of coffee for that.

So I know that you all have had many cups of coffee over this long period to make that all work. But the key thing is not the amount of money, although that's awesome, it's really because it pulls together so many of the priorities that CARB has been working so hard for for so long. And it really reflects the plans and the priorities that we -- that we've articulated, that we've put in the policy. So I think it's really putting our money where our mouth is in a lot of ways. And for so long, we didn't have the ability to do that, so I really appreciate this moment, because in every area, the plan really prioritizes zero-emission and equity. I mean, it just screams that from every corner.

I also appreciate the innovative and diverse methods that we're using to advance what I think is really a culture shift. Yes, this is a regulation. Yes, there are incentives, but we're really talking about a culture shift that I think is -- it dominated a lot of our conversations in kind of a negative way for a long time, that this just couldn't happen. We wouldn't get there, but we are getting there. We are -- and you're -- and the work that you've done really demonstrates that we can do it. I was thinking about it really compares to voter outreach. And the traditional way you do that is that you reach out to high propensity voters, the voters that vote all the time, and you don't spend money on the voters that don't vote.

Well, what happens? Those voters still don't vote and the ones that vote all the time, vote. So what you're doing is trying these innovative methods to get people to vote, to make that culture shift. And some of them will work and some of them won't work.

So while I appreciate Dr. Sperling's ideas about evaluation, which I think we need to do, I just want to make sure that we're -- that we're eval -- we're looking at the outcomes that we really want to make sure happen, right? And they're very different, so we have to be broad I think in our evaluation.

I want to say that I really appreciate that the plan provides significantly more resources for low-income car buyers for both new and used cars finally -- well, not the first time, but we're increasing it for use cars. The Clean Mobility Options I think are coming up. For bike and transit riders, that equity is really coming to the fore. I've said it before, I'd like to see clean mobility and cars be at an equal level, so some day we'll be there, I hope.

And I think the commercial harbor craft has -- as has been noted is really important. That's -- that's really a revolutionary change from where we started on that. So I'm really excited that those are included and there's a lot of those in San Diego and I think the community will really benefit and appreciate that.

I want to say with I guess all due respect to my colleagues, Peter I really appreciated your explanation of the domicile requirement. And I had questions about it as well, but I really do think that it's an important element to keep -- to keep in. It's a requirement that I think we need to include, because we have bus yards in our communities, we have ports in our communities. When you have all of these large fleets that are domiciled, located in a particular community, that's a whole lot more traffic right there that I think is what you're trying to get at.

And I just want to make clear that that -- that's a whole different impact than the trucks that may be going through communities, which are important as well, but I think we're getting at those with the Port drayage truck rules and the incentives that are available. The Buck and -- the Bus and Truck Rule, I think, provides some of that.

So we are hitting those fleets that -- and those trucks that are going through communities regularly because we can identify where they're going, like to a port. I think with things like warehouses, if we start to have maybe more ISR rules or statewide ISR, then we could be evaluating those, because we know where they're going and coming from. But I think it would be really difficult, unless I'm missing something, for us to really track where those -- where those vehicles are going. So I would say stick with what you have in the plan at this point.

I did have two questions -- three questions actually. So I appreciate the focus on the smaller heavy-duty fleets and what you're talking about in terms of the alignment with the ACF priority fleets. It says in the plan I believe 50. I know that we have a discussion about whether it would stay at 50. So is -- are you saying alignment with the whatever we land on or what? Let me ask you that.

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Yeah. Thank you. Fifty is the fleet size limit that would take effect in 2024. Before that limit takes effect, we'll be back in front of the Board with the next funding plan.

BOARD MEMBER TAKVORIAN: Oh, okay. I see, so that it can be aligned once they -- because ACF will come first. Okay. Thank you.

I had a question about the issue that was raised about the 1099s that were being issued by some of the -- some of the districts, I believe, to those who were receiving incentives. And I thought that there was a discussion about whether that would need to continue.

EXECUTIVE OFFICER CLIFF: Thanks for that.

BOARD MEMBER TAKVORIAN: Um-hmm.

EXECUTIVE OFFICER CLIFF: We were very much aware of that issue and working on it, and would be happy to brief you about how we're thinking about that.

BOARD MEMBER TAKVORIAN: Okay.

EXECUTIVE OFFICER CLIFF: We're not quite ready to roll that out here, but happy to do that offline.

BOARD MEMBER TAKVORIAN: Okay. Awesome. Thank you. And then lastly, I did receive some communication and I think you did too, about folks who are concerned about the school bus incentive amount being pinned to the amount of the value of the buses. And these folks were suggesting that perhaps if it was not pinned to the value of the bus that the incentives could go farther, if they were on a sliding scale. So I wondered -- I have no information about that. And I just wondered what you all thought about it and whether you would consider a incentive amount that would reduce, because what they were saying was that the amount of the buses was elevated because of the amount of the incentive. And I just wanted your thoughts about that.

MSCD DIVISION CHIEF VERGIS: Sure, no problem. Sydney Vergis. Thank you for raising that issue. Yeah, we have heard those concerns.

CHAIR RANDOLPH: Into the mic, Syd.

MSCD DIVISION CHIEF VERGIS: Should I turn it on also?

(Laughter).

CHAIR RANDOLPH: There's an idea.

(Laughter).

MSCD DIVISION CHIEF VERGIS: Well, Sydney Vergis. Thank you so much for the question. We, too, are concerned. We are hearing concerns about basic price inflation happening in the school bus market, because incentives are very generous, so that's something we'll be looking at certainly. The funding that we received is from Proposition 98. So we also need to work within the confines of the proposition. So as we learn more about Prop 98, that's certainly an issue that we'll be looking at as well, but also trying to stay true to our Proposition 98 requirements. So, absolutely.

CHAIR RANDOLPH: All right. Thanks.

Dr. Balmes.

BOARD MEMBER BALMES: Thank you, Chair Randolph. And, you know, I will just add to the litany of thanks to the staff for their hard work on this. And like Dr. Sperling, I've been -- and Ms. Berg, and Ms. Riordan, we've been through a lot of history with regard to our incentive programs. And it's really nice to see how much money is available now and how we're trying to make the programs align better, and to have an equity lens with regard to distribution of the money.

So most of my comments that I would have made have been made by other Board members, so I'm not going to make those again. But I do have a question to staff, and I may have missed this. I was going in and out, various Zoom calls that I was scheduled for. We have generous funding now, but we have a $25 billion State deficit projected for next year. Is that going to impact the amount of money that we're -- that we've been discussing today?

MSCD DIVISION CHIEF VERGIS: In short, no. The funding that you are looking at is funding that has been allocated from the legislature already. So that's done. I think the funding projections that you're looking at will make for very interesting conversations in the January budget time frame.

BOARD MEMBER BALMES: Yeah, and I -- this next piece will just be a comment, you know -- and this is politically incorrect, but, you know, there was a proposition on the ballot that would have provided a steady stream of funding, even with the crazy budget surpluses and deficits that we go through in California, because we have a tax structure that is totally out of whack with the State's needs, especially during times of economic downturn. That was for Bill.

CHAIR RANDOLPH: Okay. All right. So I, too, will echo my thanks to staff. I am comfortable with the -- with the proposal as presented by staff. I did have one question I -- and it's more kind of a practical implementation question, which is in answer to Board Member Kracov's question about if the smaller fleets don't use the funding, then there's point at which more funding will become available.

One of the concerns I've heard from large fleets is that presents a challenge in planning, which I understand, but I'm not sure how to fix that. But one way that would be helpful is if it -- if there's not a big lag between the point at which you know the funds are available and the point which you can access the funds. So maybe you guys could walk me through the process for July 1st there's money available. How quickly can that be distributed?

MSCD INNOVATIVE STRATEGIES BRANCH CHIEF CHRISTENSEN: Absolutely. So the implementation mechanism is actually pretty straightforward on that. So when July 1st -- we'll know what the funding amounts are looking like even as we approach July 1st, so we'll have a pretty good sense of that and we'll be posting that information in real-time on the HVIP website, so that fleets, and manufacturers, and everybody who's interested can track it. As soon as we hit that milestone on the 1st, if the -- if the funding is available, we'll make that available right away. It's -- it happens in -- it happens right there and then on that day. And then the same thing happens in November, if there's additional funding left, we'll make that available to all fleets right away. So there will be transparence as we approach those milestones, and then the implementation will happen right there on that day.

CHAIR RANDOLPH: Okay. Thank you. That's

helpful.

All right. The Board has before them Resolution number 22-20. Do I have a motion and a second?

BOARD MEMBER SERNA: I'll move.

BOARD MEMBER TAKVORIAN: Second.

CHAIR RANDOLPH: Okay. I have a motion and a second. Clerk, would you please call the roll.

BOARD CLERK GARCIA: Yes.

Dr. Balmes?

BOARD MEMBER BALMES: Yes.

BOARD CLERK GARCIA: Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Yes.

BOARD CLERK GARCIA: Mr. Eisenhut?

BOARD MEMBER EISENHUT: Yes.

BOARD CLERK GARCIA: Senator Florez?

BOARD MEMBER FLOREZ: Florez, aye.

BOARD CLERK GARCIA: Ms. Hurt?

BOARD MEMBER HURT: Aye.

BOARD CLERK GARCIA: Mr. Kracov?

BOARD MEMBER KRACOV: I'm going to put a tickler on my calendar, Mr. Christensen for July 1st to see how we're doing.

Aye.

(Laughter).

BOARD CLERK GARCIA: Dr. Pacheco-Werner?

BOARD MEMBER PACHECO-WERNER: Yes.
BOARD CLERK GARCIA: Mrs. Riordan?
BOARD MEMBER RIORDAN: Aye.
BOARD CLERK GARCIA: Supervisor Serna?
BOARD MEMBER SERNA: Aye.
BOARD CLERK GARCIA: Professor Sperling?
Ms. Takvorian?
BOARD MEMBER TAKVORIAN: Aye
BOARD CLERK GARCIA: Supervisor Vargas?
Vice Chair Berg?
VICE CHAIR BERG: Aye.
BOARD CLERK GARCIA: Chair Randolph?
CHAIR RANDOLPH: Yes.
BOARD CLERK GARCIA: Madam Chair, the motion passes.
CHAIR RANDOLPH: All right. Okay. So our meeting for today is now adjourned. We will reconvene tomorrow, November 18th at 8:30 a.m. That' 8:30 a.m.
(Laughter).
CHAIR RANDOLPH: So make sure you are here with bells on for day two of our November Board meeting.
Thank you all. See you tomorrow.
(Thereupon the Air Resources Board meeting adjourned at 4:07 p.m.)

CERTIFICATE OF REPORTER

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Air Resources Board meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of December, 2022.

JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063