JOINT MEETING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

AND

ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

COASTAL HEARING ROOM

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, SEPTEMBER 14, 2023 4:05 P.M.

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

# APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

John Balmes, MD

Hector De La Torre

John Eisenhut

Senator Dean Florez

Eric Guerra

Gideon Kracov

Supervisor V. Manuel Perez

Susan Shaheen, PhD

Diane Takvorian

Nora Vargas

### ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE:

Martha Dina Argüello, Co-Chair, Physicians for Social Responsibility, LA

Dr. Catherine Garoupa, Co-Chair, Central Valley Air Quality Coalition

Juan Flores, Center on Race, Poverty & the Environment

Kevin Hamilton, Central California Asthma Collaborative

Thomas Helme, Valley Improvement Projects

Matt Holmes, California Environmental Justice Coalition

Luis Olmedo, Comité Civico Del Valle

ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE:

Jill Sherman-Warne, Native American Environmental Protection Coalition

Sharifa Taylor, Communities for a Better Environment

LEAD MEDIATOR/FACILITATOR:

Martine Watkins

#### STAFF:

Steve Cliff, PhD, Executive Officer

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

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

Edna Murphy, Deputy Executive Officer, Internal Operations

Rajinder Sahota, Deputy Executive Officer, Climate Change and Research

Sydney Vergis, PhD, Deputy Executive Officer, Mobile Sources and Incentives

Ellen Peter, Chief Counsel

### STAFF:

Matt Botill, Chief, Industrial Strategies Division

Ashley Georgiou, Program Manager, Office of Environmental Justice, Tribal Affairs, and Border Relations (OEJTB)

Dana Grubaugh, Senior Attorney, Legal Office

Meena Kaypour, Attorney, Legal Office

#### STAFF:

Radhika Majhail, Chief, Environmental Justice and Equity Branch

Abigail May, Senior Attorney, Legal Office

Johnnie Raymond, Air Pollution Specialist, OEJTB

Deldi Reyes, Director, Office of Community Air Protection

# INVITED GUEST SPEAKER:

Michael Wara, PhD, Stanford University

#### ALSO PRESENT:

Patricia Ramos Anderson, League of United Latin American Citizens

Maria Arevalos

Suncheth Bhat, EV Realty

Neil Black, California Bioenergy, LLC

Chris Bliley, Growth Energy

Michael Boccadoro, Ag Energy Consumers

Adam Browning, Forum Mobility

Todd Campbell, Clean Energy

Daniel Chandler, 350 Humboldt

Steve Compton, Sevana Bioenergy

Tom Conlon, Transition Sonoma Valley

Casey Coward, Service Employees International Union, United Service Workers West

ALSO PRESENT:

James Duffy

Evan Edgar, California Compost Coalition

Mikayla Elder, Electric Vehicle Charging Association

Cassandra Farrant, AMP Americas

Sara Gersen, Earthjustice

Woody Hastings, The Climate Center

Jovan Houston, Service Employees International Union

Jamie Katz, Leadership Counsel for Justice and Accountability

Ryan Kenny, Clean Energy

Mauro Libre

Jeanne Merrill, Center for Food Safety

Kathy Moreno

Colin Murphy, University of California, Davis Policy Institute for Energy, Environment, and the Economy

Brent Newell, Leadership Counsel for Justice and Accountability

Zaray Ramirez, Leadership Counsel for Justice and Accountability

Nicole Rice, California Renewable Transportation Alliance

Maria Romero, Service Employees International Union, United Service Workers West

Phoebe Seaton, Leadership Counsel for Justice and Accountability

Sean Trambley, American Biogas Council

Floyd Vergara, Clean Fuels Alliance America
Sam Wade, Coalition for Renewable Natural Gas

Jan Warren, Interfaith Climate Action Network of Contra Costa County

LaDonna Williams, All Positives Possible

ALSO PRESENT:

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1

# PROCEEDINGS 1 CHAIR RANDOLPH: All right. Good afternoon. 2 Welcome to the September 14th joint meeting of the 3 California Air Resources Board and the Environmental 4 Justice Advisory Committee. 5 CARB Board Clerk, would you please call the roll 6 7 of the CARB Board members. 8 BOARD CLERK GARCIA: Yes. Dr. Balmes? 9 Mr. De La Torre? BOARD MEMBER DE LA TORRE: Here. 10 BOARD CLERK GARCIA: Mr. Eisenhut? 11 BOARD MEMBER EISENHUT: Here. 12 BOARD CLERK GARCIA: Senator Florez? 13 BOARD MEMBER FLOREZ: Here. 14 BOARD CLERK GARCIA: Assemblymember Garcia? 15 16 Mr. Guerra? BOARD MEMBER GUERRA: Here. 17 BOARD CLERK GARCIA: Ms. Hurt? 18 Mr. Kracov? 19 20 Dr. Pacheco-Werner? Supervisor Perez? 21 BOARD MEMBER PEREZ: 2.2 Here. 23 BOARD CLERK GARCIA: Senator Stern? Dr. Shaheen? 24 BOARD MEMBER SHAHEEN: Here. 25

2.

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BOARD CLERK GARCIA: Ms. Takvorian?
1
             BOARD MEMBER TAKVORIAN: Here.
2
             BOARD CLERK GARCIA: Supervisor Vargas?
 3
             Chair Randolph?
 4
             CHAIR RANDOLPH: Here.
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             BOARD CLERK GARCIA: Madam Chair, we have a
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7
    quorum.
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             CHAIR RANDOLPH: All right. Thank you. Now, I
9
   will ask CARB staff member Johnnie Raymond who has been
    supporting the Office of Environmental Justice Tribal
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   Affairs and Border Relations to call the roll of the
11
   Environmental Justice Advisory Group.
12
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
13
                                                       Thank
14
   you.
             Martha Dina?
15
16
             MARTHA DINA ARGÜELLO: Here.
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
17
   Catherine?
18
             DR. CATHERINE GAROUPA: Here.
19
20
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
                                                       Thomas
   Helme?
21
             THOMAS HELME: Here.
2.2
23
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
                                                       Matt
   Holmes?
24
             Luis Olmedo?
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3

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LUIS OLMEDO: Here.
1
             OEJTB AIR POLLUTION SPECIALIST RAYMOND: Jill
2
 3
    Sherman-Warne?
             JILL SHERMAN-WARNE:
                                  Here.
 4
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
5
                                                        Sharifa
    Taylor?
6
             SHARIFA TAYLOR: Here.
7
8
             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
                                                       Kevin
9
   Hamilton?
             Angel Garcia?
10
             Kevin Jefferson?
11
             John Harriel, Jr.?
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             Juan Florez?
1.3
             JUAN FLOREZ: Here.
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             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
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                                                       Mayor
   Rey León?
16
             MAYOR REY LEÓN: Here.
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             OEJTB AIR POLLUTION SPECIALIST RAYMOND:
                                                        And we
18
19
   have a quorum.
20
             CHAIR RANDOLPH: All right. Thank you.
                                                       Okay.
                                                               Ι
   will now take a moment to address a few housekeeping
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2.2
    items. We are conducting today's meeting in person with
23
    remote options available to the public by phone and in
    Zoom.
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accordance with Government Code Section 11123.5 and some Board members may also attend remotely in accordance with Section 11123(b)

2.2

Anyone who wishes to testify today in person should fill out a request-to-speak card available in the foyer and turn it in to 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 lobby. In the event of a fire alarm, we are required to evacuate the room immediately and go down the stairs to the left of the elevator and out of the building. When the all-clear signal is given, we will return to the hearing room and resume the hearing.

A closed captioning feature is available for those joining us in the Zoom environment. In order to turn on the subtitles, please look for a button labeled "CC" at the bottom of the Zoom window as 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.

2.2

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 on today's procedures.

BOARD CLERK GARCIA: Thank you. Good afternoon, everyone. My name is Lindsay Garcia and I'm one of the CARB Board clerks. I will now provided some 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 we will be calling on commenters who are joining us remotely. If you wish to make a verbal comment at the end of today's meeting, you must be joining using Zoom webinar

or calling in by telephone. If you are currently watching the webcast on CAL-SPAN, but you wish to comment, please register for the Zoom webinar or call in. Information for both can be found on the public agenda for today's meeting.

2.2

To make a verbal comment, we will be using the raise-hand feature in Zoom. Please virtually raise your hand 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 star nine to raise your hand. Even if you previously indicated which you wished to speak when you registered, you must still raise your hand so that you can be added to the queue.

If you will be giving your verbal comment in Spanish and require an interpreter's assistance, please indicate so at the beginning of your testimony and our translator will assist you. During your 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 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, 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. This is especially important in the remote -- if you are calling in remotely.

We will have a time limit for each commenter. The normal time limit is two minutes, though this could change based on 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 then when your time is up. If you require Spanish interpretation for your comment, your time will be doubled.

And 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.

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'll turn it back to Chair Randolph

25 now.

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CHAIR RANDOLPH: Okay. Thank you. As the Board Clerk mentioned, there will be an opportunity to provide public comment at today's meeting. And that opportunity will take place following the presentations and joint discussion between the Environmental Justice Advisory Committee and CARB Board members.

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So if you're with us here in the room and wish to get in the queue to comment at the end of the joint discussion, go ahead and fill out a request-to-speak card as soon as possible and submit it to the Board assistant. And if you are joining us remotely and wish to make a comment, go ahead and click that raise hand button or dial star nine now.

Assembly Bill 32 directed the California Air Resources Board to convene an Environmental Justice Advisory Committee to advise the Board in developing a Scoping Plan and any other pertinent matters related to implementation of AB 32. The Environmental Justice Advisory Committee is comprised of environmental justice and community leaders from throughout the state. They play a critical role in addressing concerns of residents from the state's most pollution-burdened communities.

This is the first joint meeting of the Board and EJAC since both bodies adopted the EJAC charter earlier this year. These meetings provide a critical opportunity

to elevate priorities identified by the EJAC to the Board and build upon and complement EJAC meetings that occur throughout the year.

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I'm looking forward to this conservation this evening. It offers the Board an important opportunity to hear directly from the EJAC and develop a shared understanding of the challenges and the opportunities that are lie -- that lie ahead for all of us. We all share a commitment to address the current climate crisis in a way that benefits communities the most impacted by both pollution and the impacts of climate change, and I'm looking forward to a productive discussion.

As we work together, we do so with a shared understanding of the scope of the Environmental Justice Advisory Committee. It is an advisory body required by statute to advise the Board on the Scoping Plan and matters related to implementing the Global Warming Solutions Act, which is AB 32. EJAC's mission, as described in that charter that was adopted by both CARB and EJAC, is to advise the Board on environmental justice considerations, prioritizing racial equity related to the implementation of AB 32, and pertinent matters related to both the Scoping Plan updates and implementation.

I want to acknowledge the interests of the EJAC in supporting CARB's goal to be a workplace free of

discrimination, particularly in light of the events of June 2nd that so negatively impacts EJAC co-chair Kevin Jefferson. As you will hear from Executive Officer Cliff, this matter will be addressed through an investigation that is currently underway. And I've also asked Dr. Cliff to share some highlights of CARB's efforts to integrate equity, particularly racial equity, internally at CARB. Staff have committed to regularly update the Board on these efforts. And most of the members of the Board have recently participated in a training on racial equity.

I appreciate that we have the opportunity to get an update from Dr. Cliff, particularly since those internal operational issues around workforce and internal operations are not really part of the statutory role of the EJAC. But Dr. Cliff came on board since our last joint meeting, and I think it's a perfect opportunity to hear from him directly about how he is working to implement the Board's direction to do our work with equity as guiding principle.

Dr. Cliff.

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EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. I'm honored to be here, as you mentioned, at my first joint meeting with the AB 32 Environmental Justice Advisory Committee and CARB Board members since my appointment as Executive Officer a year ago this week.

It's Tuesday just in case anyone wants to know. In January of this year, I shared my priorities to implement our ambitious climate and air pollution reduction policies, regulations, and programs to tackle the state's climate emergency.

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I know that you'll recall that I also provided an overview of our plans to integrate environmental justice and racial equity into all that we do, which was reiterated in the March 2023 Board meetings. In keeping with that commitment, I want to take this opportunity to acknowledge the experience of EJAC Co-Chair Kevin Jefferson on June 2nd when he asked the security guards for assistance in finding his meeting room in this building. Kevin described in the EJAC meeting that afternoon that he asked for help and was threatened with the police.

We immediately, through CalEPA, initiated a third-party independent investigation into the incident in the lobby on June 2nd. Although the report is not yet final, we expect it soon to be and will share the public findings. In addition, CARB is examining our own protocols for meetings with external visitors and will adopt process improvements to eliminate barriers to accessing and participating in our meetings.

I want to pause here and reflect on my own

learnings about racial equity. In March of shared with you our plans to provide training to the workforce on implicit bias and on structural racism and the tools to address it. The events of June 2nd are a snapshot that formed one piece of a larger more complex picture.

Through my learning, I've realized that we live in a society in which the privilege I hold as a white man means that I don't have to worry that if I lose my temper or act frustrated in front of those in positions of authority that I will be threatened by police. I don't have to explain my dress, or appearance, or make my case for why I belong.

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Kevin, I don't know if you're on. We have spoken directly back in late June, but I want to reiterate that I'm very sorry for your experience that day, but more generally in the ways in which is signifies structural inequities in our society overall.

When the investigation is complete, we will announce a suite of recommendations to ensure we provide meaningful, equitable access to our physical spaces and that we will do our part to make sure that our space is welcoming and inclusive for you and everyone.

Chair Randolph, you asked me to share a few highlights our work to integrate racial equity throughout CARB. Since my priorities presentation to the Board in

January, we have committed to updating our 2016 Civil Rights Policy and External Discrimination Complaints Process. This is the key policy that applies to CARB programs and activities and provides a complaint process for any member of the public who believes they have been discriminated against in the implementation of CARB programs. While this policy is very important and can benefit from updates, CARB is implementing and developing additional work to incorporate environmental justice into specific programs, including through the development of racial -- the racial equity lens.

2.2

We must also be proactive in assessing the equity impacts of our major actions, including regulations, and policy decisions. We will do this by asking a set of questions, such as who benefits from and who is burdened by a particular action or policy.

CARB's racial equity lens is being piloted and learnings from the pilots will support updates as it is expanded in its use. Making the use of tools like the racial equity lens part of our everyday practice is how we work towards being an affirmatively anti-racist organization. Staff are introduced to the racial equity lens through a six-hour training called advanced racial equity -- advanced racial equity at CalEPA. Over 30 percent of the staff have taken this training and it's

mandatory for all CARB managers.

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CHAIR RANDOLPH: Dr. Cliff, apparently the translation channel is not working, is that correct? Sorry.

BOARD CLERK GARCIA: We'll take a quick technical break.

(Technical difficulties).

CHAIR RANDOLPH: All right. It looks like it has been resolved. So sorry, Dr. Cliff, go ahead.

EXECUTIVE OFFICER CLIFF: Thank you. Apologies for the technical difficulties. I was mentioning that staff are introduced to the racial equity lens through a six-hour training called Advanced Racial Equity at CalEPA. Over 30 percent of staff have taken this training and it's mandatory for all CARB managers. Over 60 percent of managers have already taken the training as well as many Board members. In addition to this programmatic work, CARB's Diversity and Racial Equity Task Force is made up of CARB staff and is focused on internal equity for the workforce.

DARE is working on a three-part training on microaggressions. Whether focused internally or outward, our work is grounded in our vision for racial equity and a racial equity framework that is available on our webpage. In March, I shared our plans to develop a model for

meaningful community engagement and I'm pleased to share that we will have in-person workshops later this year with the community leaders who are helping us refine that model.

For today's meeting, we will hear presentations from CARB staff, EJAC co-chairs, and their invited guest speakers in support of a well-rounded discussion on critical climate and air quality topics. The Board and EJAC will discuss the presentations and implementation of the CARB climate programs, including EJAC's recommendations to the Board on the LCFS regulation update. The Board and EJAC may also discuss Cap-and-Trade Program regulation updates, Senate Bill 905 carbon capture utilization and sequestration requirements, and natural and working lands, with a focus on the process moving forward and considerations for how and where collaboration can take place so as to support the EJAC as it develops its advice to the Board.

I look forward to a productive discussion and the continued work with the EJAC in the months and years to come. I will now turn it over to my colleague, Deldi Reyes, Director of the Office of Community Air Protection, who is speaking on behalf of Deputy Executive Officer for Racial and Environmental Justice, Chanell Fletcher.

Deldi.

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OCAP DIRECTOR REYES: Thank you, Dr. Cliff. Good afternoon, EJAC members and CARB Board members. My name is Deldi Reyes. I'm the Director of the Office of Community Air Protection and I'm acting today for Deputy Executive Officer Chanell Fletcher. Dr. Cliff has shared a few highlights of CARB's work to advance racial equity. I know Chanell would want to share the news that under her leadership, we are launching a new Office of Racial Equity within the Environmental Justice and Equity Branch in our Executive Office. CARB's Office of Racial Equity adds to our capacity within CARB to advance racial equity. Staff in this office will work at all levels within the organization, partnering internally and externally to address environmental injustices, and advance racial equity in the achievement of our mission.

2.2

Dr. Cliff also highlighted the critical topics that will be addressed in our joint discussion this afternoon. One of the major responsibilities of the Office of Environmental Justice, Tribal Affairs, and Border Relations is the support of the now ongoing Environmental Justice Advisory Committee.

I want to lift up the efforts of the new team in OEJTB that includes Branch Chief Radhika Majhail, Manager Ashley Georgiou, team members Bobbi Ruch, Meghan Kaff, and Orji Ezieme, and in particular EJAC Coordinator Johnnie

Raymond. You'll hear more from Johnnie about OEJTB's role in supporting EJAC in just a moment. But first, I'd like to introduce Martine Watkins, who will facilitate today's discuss between the EJAC and the Board. Martine is lead mediator and facilitator with the Consensus and Collaboration Program at California State University, Sacramento.

Martine.

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FACILITATOR WATKINS: Thank you. Well, good evening, everybody. As was mentioned, my name is Martine Watkins. I'm here with Sac State and it's a pleasure and honor to be here. I'm honored to facilitate today's meeting and this vita discussion on the implementation of California Air Resources Board's Assembly Bill 32 climate programs where CARB and EJAC converge to chart a new path forward.

As was mentioned, equity is a guiding principle. And this commitment to equity is the critical threat that runs through the deliberation on LCFS, cap-and-trade, carbon capture, and sequestration. The desired outcomes of today's meeting is for me to facilitate a meaningful dialogue and inquiries between the Board, EJAC, and the staff, and to hear from the public, and to ultimately to collaboratively chart a path forward.

As your facilitator, I'm committed to ensuring

our time together is productive and inclusive. We have a full agenda and I will diligently manage the time and do all that I can to create an environment that allows for everybody to participate and to contribute meaningfully.

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So the sequence of discussion topics are as follows. For the next hour, we will hear presentations by CARB and EJAC co-chairs as well as have a brief presentation from guest speaker Michael Wara. At approximately 5:30, we will transition to the joint discussion. We will then plan for a short 20-minute break and return at approximately 7 p.m. for public comment and closing remarks. We will support the discussion as was mentioned by monitoring hands in the room and on Zoom. The Board Clerk will have a list of people signed up as was said to speak in the room and the Chair will organize a queue of Board members as well.

Before we begin each section, I will remind folks of the approximate timing that has been allotted for that agenda item and will give gentle reminders, if needed, so that we are able to get to all the items on tonight's agenda. Of course, we will be flexible based on the conversation and are certainly committed to not cutting off the joint discussion or public comment too short.

I would also like to remind folks that we'll keep in mind that the comments could be around two minutes.

We'll likely have about three minutes for both in person and on Zoom, but that will be up to the Chair and the Board's direction.

2.2

We have a few agreements that were shared and have been a part of EJAC as far as I was made aware of how we'd like to approach our time together, and those are as follows: to approach our time together with mutual respect, curiosity, and mindfulness; to be present and courteous with electronics as well as any side conversations in the spirit of mutual respect; to provide equity of air time and to be mindful to allow others to speak; and all ideas and points of view are valued and naturally it's acceptable to not agree on points and approach it from an open-minded solutions-oriented perspective.

As mentioned, we have a full agenda this evening and limited time, so please, if possible, be as distinct with your comments. And in addition to that, if you have something you want to add to the discussion, it's okay to say ditto, or duplicate so-and-so's comments in brevity.

And at this point, I would like to just briefly close by saying your active participation is truly vital to achieving the outcomes of tonight's meeting. And I, as I mentioned, am here to support the discussion. And I want to thank you for entrusting me to guide us through

tonight's meeting.

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So we'll go ahead, at this time, and transition to our presentation. I'd like to now introduce the two CARB staff presentations. One will frame the work being done with EJAC and the other will provide information on the Low Carbon Fuel Standard rulemakings, including next steps and milestones. And I will now hand it to Johnnie Raymond and then Matt Botill.

(Thereupon a slide presentation).

OEJTB AIR POLLUTION SPECIALIST RAYMOND: Okay. Thank you. Greetings. My name is Johnnie Raymond and I am lead staff -- CARB lead staff and liaison to the AB 32 Environmental Justice Advisory Committee. I was lead staff with the original EJAC back in 2007, and just recently reassigned to work with the EJAC in may of this year. So it's kind of a coming home for me to work with my colleagues again on EJAC.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: This slides provide an outline of my presentation. First, I will provide an EJAC background and summarize the charter work. Next, I will cover the 2023 EJAC meeting schedule followed by slides on CARB EJAC support.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: When the

global swarm -- when the Global Warming Solutions Act of 2006, or AB 32, was signed in 2006, it created the Environmental Justice Advisory Committee. CARB convened the first EJAC in 2007 to provide recommendations on the first Scoping Plan. Then for every five years after that, the EJAC was reconvened to provide recommendations on the update to the AB 32 Scoping Plan in 2013, 2017, and 2021. The Board reappointed members for an ongoing EJAC earlier this year. These appointments demonstrate the Board's commitment to integrate environmental justice and equity as a cornerstone of the CARB's climate change programs.

2.2

Each of these members bring a unique perspective from their community. By partnering -- by partnering together, we can reduce greenhouse gas emissions and address historic inequities by advancing environmental justice and equity in our implementation of the Scoping plan. Per AB 32, EJAC's role in State law is to advise the Board in developing the Scoping Plan on matters related to AB 32 implementation.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: CARB also adopted the first EJAC charter, which the Committee members and CARB worked together to then develop. EJAC members unanimously approved the charter during the March 15th public meeting. The charter sets clear goals for

CARB and EJAC members, as well as provides accountability, transparency, and outlines the working relationship as it relates to governance for the ongoing EJAC.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: In 2023, EJAC has been busy. EJAC has met five times thus far. We have today's joint meeting with a regular EJAC public meeting tomorrow here in Sacramento. To round out the year, we have two additional meetings tentatively planned in October and November respectively.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: We have dedicated resources, people, and funding to work with EJAC as part of our commitment to equity and environmental justice. As you can see, CARB's budget for EJAC-related activities spans across several CARB programs. CARB support of the EJAC, as led by OEJTB, includes contributions from six staff and managers at least part of their time. Additionally, we rely on six points of contact in key divisions throughout CARB to support EJAC.

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OEJTB AIR POLLUTION SPECIALIST RAYMOND: CARB will continue to support an ongoing EJAC. We look forward to working collaboratively in developing priorities. We anticipate EJAC will set priorities for 2024 and determine

key topics for focus for meetings next year.

2.2

CARB staff recently posted an online summary of past EJAC meetings in 2021 to 2022 to support EJAC's desire to analyze past recommendations and progress. The goal will be to build on progress made in areas requiring further focus as determined by EJAC.

The EJAC plans to have continued dialogue on climate programs the LCFS, Cap-and-Trade, SB 905, and natural and working lands. The 2024 EJAC meeting schedule and plan is seen here. EJAC will keep to a minimum of eight EJAC meetings plus the annual joint meeting with the Board. Next year's joint meeting will be held on September 12th, 2024. Please save the date.

This concludes my staff presentation. Thanks for your time. I would now like to pass it back to Martine.

FACILITATOR WATKINS: Thank you. And I will pass it right to Matt Botill for a presentation at this time.

(Thereupon a slide presentation).

ISD CHIEF BOTILL: Good afternoon, everybody. My name is Matt Botill. I am the Industrial Strategies

Division Chief here at the California Air Resources Board and I oversee the Low Carbon Fuel Standard program. It's my pleasure to be here today to provide some more information about the program and about our rulemaking process.

Next slide, please.

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ISD CHIEF BOTILL: You probably recall this slide from the 2022 Scoping Plan process. And what it shows is that California is the midst of a rapid transition to cleaner fuels and carbon neutrality and that we have just a short amount of time, just a little over 25 years, to transition from today's significant fossil fuel usage to a future that uses much cleaner fuels and technologies.

This slide helps to put the State's climate goals into perspective and helps to illustrate our past success as well as the challenge ahead of us. The graph shows annual emissions from 2000 to 2020 and California's statutory GHG emission reduction targets for 2020, 2030, and now 2045.

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ISD CHIEF BOTILL: Last year, the Board approved the 2022 Scoping Plan update, which assessed progress to the 2030 greenhouse gas target and charted a path to achieving carbon neutrality by 2045. Many of the strategies that we're using to address climate change and achieve carbon neutrality are the same strategies that will also drastically improve air quality. Because transportation emissions, primarily from the use of fossil

fuels, are our single biggest source of greenhouse gas emissions and poor air quality, we are working hard to increase the number of zero-emission vehicles on the road and deploy cleaner fuels. If we're successful in meeting the clean fuel and vehicle goals identified in the Scoping Plan, we expect we'll be able to reduce fossil fuel use by 94 percent by 2045.

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And I want to emphasize this point, that even with an unprecedented and rapid transition to zero-emission vehicles and clean fuels, we'll still have some remaining demand for liquid fuels in the transportation system, given the legacy combustion vehicles, aviation, and also potentially some off-road vehicles that will continue to operate in the State into the future.

The Board has already taken steps towards the goals identified in the Scoping plan by adopting regulations, such as Advanced Clean Cars II, Advanced Clean Fleets, Advanced Clean Trucks, Innovative Clean Transit, and others, that promote and hasten the deployment of low- and zero-emission vehicle technologies.

The LCFS is part of that overall transportation decarbonization story. It provides the economic incentives to produce the cleaner fuels like electricity, hydrogen, and biofuels needed to displace fossil fuels and

reduce transportation sector emissions.

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ISD CHIEF BOTILL: The program has been in place since 2011. And since its inception, it has helped to reduce the carbon intensity of California's transportation fuel by 12.6 percent. This carbon intensity metric is the measure of how much CO2 and other greenhouse gases are released per unit of fuel throughout the whole lifecycle of that fuel from the production of the fuel to its end use.

The LCFS ha supported the displacement of over 25 billion gallons of petroleum fuels with lower carbon alternatives. In 2011, Californians were consuming almost 3.6 billion gallons of fossil diesel annually. By 2022, that number had declined to almost two billion gallons of fossil diesel. And in the first quarter of this year, we past and important milestone, where over 50 percent of the diesel used in the state came from non-fossil resources.

There's a similar story playing out on fossil gasoline, where we've seen a drop of almost 900 million gallons of annual fossil gasoline use. This has occurred over a period where vehicle and economic activity has continued to grow in California.

Without these alternative fuels, we risk returning to higher levels of fossil fuel use and missing

out on the important climate and air quality benefits it provides the state.

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more general information on how the LCFS works on displacing fossil fuels and reducing emissions. It works by establishing an annual declining carbon intensity target for transportation fuels used in California. It's represented by those little dots and the black line on the graph above. The lower carbon --

(Lights dimmed).

ISD CHIEF BOTILL: Setting the mood. Very good. (Laughter).

ISD CHIEF BOTILL: The lower the carbon -- carbon -- lower carbon a fuel is, the more credits can be generated in program per volume of fuel.

Entities with high carbon fuels generate deficits and they need to purchase credits to comply with the annual target. Each fuel that generates credits ina program has to go through an evaluation by CARB staff and a third party to validate the fuel is, in fact, low carbon. This evaluation happens initially at the application stage and an ongoing basis after the fuel is reported and the entity starts generating credits in the

program.

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And as the CI targets get lower each year, fuels generate fewer credits. Some fuels, depending on their CI score, may eventually flip from being a credit generator to a deficit generator. In this way, the LCFS structure creates a strong incentive to deploy only the lowest carbon fuels in California and to continually innovate to reduce the carbon intensity of the existing fuels.

As you can see by the green -- very faded green line on this chart, the program has outperformed our benchmarks, meaning even more reductions are happening than originally anticipated. This is a great outcome for the program, and given our long-term climate goals, it means we have an opportunity to continue to accelerate reductions.

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ISD CHIEF BOTILL: As I mentioned earlier, it's been a success. We've been successful in doubling the volume of low-carbon fuels consumed since the beginning of the program. And in 2011, the only alternative fuel was ethanol. Thanks to support from LCFS, other fuels have significantly ramped up since then. You can see this on the chart in front of you.

We have seen strong growth in renewable diesel and electricity. And electricity in particular has

generated a growing share of annual LCFS credits in the last few years and is now the second largest credit generator behind renewable diesel. And much of this electricity is now zero carbon electricity from solar and wind. Biomethane has also increased in volume over time and successfully displaced almost all the fossil CNG currently used in transportation in California.

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ISD CHIEF BOTILL: Our team -- our LCFS team is evaluating ways to update the regulation to help the State reach its GHG reduction and carbon neutrality goals. To take the next step in the rulemaking process, CARB staff released the Standardized Regulatory Impact Assessment, commonly referred to as the SRIA, just last Friday, September 8th.

The SRIA is a preliminary evaluation of the economic impacts of updating the LCFS and is one of the required pre-rulemaking activities. It is not an actual regulatory amendment proposal and updates to the LCFS will not be complete until the Board adopts and OAL approves updates to the LCFS.

For the next step in the process, staff is planning to release a specific rulemaking proposal later this year, evaluating the following key components:

First and foremost, increasing the stringency of

the program to keep the pressure on to reduce our dependence on fossil fuels; next, strengthen the program's equity provisions to promote investment in disadvantaged, low income, and rural communities; supporting electric and hydrogen truck refueling; strengthening our signal to decarbonize jet fuel; incentivizing more production of clean fuels needed in the future, such as low-cab hydrogen; and supporting methane emission reductions and deploying biomethane for best uses across transportation and potentially other sources.

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ISD CHIEF BOTILL: In preparation for the 45-day proposal and to support the SRIA, our staff ran some high-level scenarios to look at what LCFS updates may result in. We're going to continue to iterate on these scenarios as part of the 45-day proposal. But what I'm showing here are the results of the scenario we modeled targeting a 30 percent carbon intensity reduction by 2030 and a 90 percent carbon intensity reduction by 2045. This scenario also reflects implementing the Advanced Clean Cars II, Advanced Clean Trucks, and ACF Regulations adopted by our Board. It gives a snapshot — this chart gives a snapshot of how this scenario would support the continuing ramping of clean fuels to displace fossil fuels over the coming decades.

Through 2045, staff expects the makeup and volume of electricity and hydrogen used in ZEVs in the program would significantly increase. You'll also notice that biodiesel and renewable diesel are still likely needed -- are still likely to be needed for remaining internal combustion engine trucks in 2045, although the vast majority of credits will support zero-emission refueling.

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Biomethane from various sources, such as landfills and dairy operations are reflected on this chart as well. If you look very, very closely -- it's hard to see in the -- in the bright light, but the orange colors on the graph represent the biomethane in 2024 and 2045. This represents roughly seven percent of the total diesel fuel volumes in 2024 and then declines to one percent by 2045 under staff's analysis. This reflects the broader deployment of ZEVs that is occurring, as well as the transition of RNG combustion out of the transportation sector consistent at the policy direction in the 2022 Scoping Plan and the Board-adopted ACF Resolution.

The increase in hydrogen use by 2045 will be primarily in hydrogen vehicles deployed in the medium- and heavy-duty vector. And lastly, you'll notice an increase in alternative jet fuel volume as we work to decarbonize the aviation sector, which is another goal identified in the Scoping Plan.

All things considered, this gives a sense of the scale of this move away from fossil fuels, the majority of support going to zero-emission technology and an ongoing role for alternative low-carbon fuels as part of the transition.

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ISD CHIEF BOTILL: As we deploy clean fuels and technologies, we'll see significant reductions in criteria pollutant emissions, particularly in disadvantaged communities and communities impacted by transportation. This slide shows just the fuels side benefit that we analyzed as part of the LCFS SRIA, but we know the outcomes from both cleaner vehicle technologies and fuels will result in great health benefits than shown here.

As part of the Scoping Plan process, we estimated almost 200 billion in annual health savings from achieving carbon neutrality. And in 2022, OEHHA released a report showing some of the greatest beneficiaries of reduced emissions, particularly from cutting diesel emissions from trucks, are going to be communities of color and disadvantaged communities.

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ISD CHIEF BOTILL: As part of both the Scoping Plan process and during individual regulatory items, the Board has consistently commented on the importance of

increasing ZEV infrastructure deployment in California in order to support the growing number of ZEVs called for by our regulation -- our regulations. The LCFS has and will continue to address the ZEV infrastructure buildout in California.

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Currently, the program provides credits for the unused capacity of light-duty electricity or hydrogen refueling stations, to encourage this new infrastructure to be built while consumer demand increases across the state. To date, the program has approved applications for 3,800 fast charging electricity supplies -- stations and nearly 70 hydrogen stations. To help address the call for more help on infrastructure by the Board and others, particularly for the medium- and heavy-duty ZEV fueling, CARB staff are considering two main concepts as part of the upcoming rulemaking: first, a new infrastructure crediting provision for medium- and heavy-duty refueling for ZEVs, and second, an extension of the existing light-duty vehicle provisions with a focus on equity projects.

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ISD CHIEF BOTILL: And while we haven't released a formal staff proposal yet, we have already conducted extensive engagement to inform the upcoming release. So far, staff has held nine workshops and two community

meetings to gather input on potential amendments to the program. I won't read all of the points here, but the input has been valuable and informative to staff's thinking on regulatory concepts. We know there's a lot of opportunity with the LCFS and we want to send the right signals to support the clean transportation future we need.

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ISD CHIEF BOTILL: And lastly on timing, we only have about six years until 2030. And given the recent influx of federal dollars for climate action and the relatively long lead times that exist for building clean fuel production, we want to make sure we're moving quickly to update the LCFS and provide opportunities for that federal money to flow to California.

Leveraging these federal dollars now means less financial burden is placed on Californians in the future, and so we're looking to make the regulation effective in 2024. To meet this goal, we plan to release the regulatory proposal later this year and expect to bring the LCFS proposed regulations to the Board for a vote in the first guarter of 2024.

And with that, I'm done. I want to say thank you for inviting me to speak today. I will look forward to the dialogue and answering questions you may have.

FACILITATOR WATKINS: Thank you. I want to thank you thank you for your presentation and notify the Board that we will pause for questions after the next presentation. So if you can please hold your questions, at which time we'll pause and we'll acknowledge you first at that time.

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Okay. So now we'll go in -- ahead into our presentation from our EJAC co-chairs on LCFS, including resolution language with recommendations. So that will be with our co-chairs Dr. Catherine on the LCFS recommendations. Later and after the LCFS guest speaker, we will hear from co-chairs presentation by Martha Dina and John Kevin Jefferson, III on the Cap-and-Trade, Senate Bill 905, and natural and working lands.

As a reminder about the flow, as mentioned, we will pause for initial comments, reflections, or questions after the EJAC co-chair presentation on LCFS and then turn to our guest speaker Michael Wara on his presentation on LCFS, and then back to the co-chairs for the remainder of the presentation on Cap-and-Trade, SB 905, and natural and working lands.

So at which time now, I would like to hand it off to Dr. Catherine.

Excuse me, Martha Dina.

(Thereupon a slide presentation).

MARTHA DINA ARGÜELLO: It's like forgetting to unmute on Zoom.

So. I just wanted to ground us a bit in a little bit of AB 32 history and lore. The EJAC actually was -- emerged as both a compromise and an admission that AB 32 had the potential to make things worse in low-income communities and communities of color by increasing pollution and creating hot spots, and that the trading program also meant to us that other things like thou shalt not pollute and figure out a way not to separate carbon from air pollution could happen. And so I want us to remember that, that the reason the AB 32 EJAC Committee was created was to foresee and forestall any of these increased pollution burdens and which equate to health burdens in lower income communities. And it's with that spirit that we have engaged with the EJAC many of us from multiple rounds of scoping plans.

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MARTHA DINA ARGÜELLO: That's our goal. And really what we've been trying to do now that we are permitted is to provide actionable recommendations that can be integrated into the fabric of AB 32 climate programs, but also begin to find new ways of working with environmental justice communities and find new ways of

tapping into the immense knowledge that exists in low-income communities. And so we take our job very seriously. And for over the number of years that we have been engaged, we have been asking for information that would allow us to make those judgments, things like adaptive management, and tools to actually make this program agile and be able to make real-time changes when things aren't working.

And so we take that very seriously. We're very excited about being able to meet with the Board today and engage on the Low Carbon Fuel Standard. And I -- you know, also on many other issues that are going to come before the regulatory process within the AB 32 context. And with that, I'm going to hand it over -- oh, yes.

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(Laughter).

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MARTHA DINA ARGÜELLO: So I think with each of the -- and I did not add the last Scoping Plan, because I was gone when that happened and so somehow it's very foggy in my head. Each time we've asked for a number of things, and that is a full life-cycle assessment, health impact assessments of the regulatory -- of the regulations that are being promulgated through AB 32 and data, so that we can actually evaluate the program. The program should be

evaluated not because programs are running well, but because the air is getting better and eventually health is getting better. And it's -- so we will continue to remind CARB that it's the California Air Resources Board and it's not -- the "C" does not stand for just for carbon. And I think that that's a really important element to continue to remember as we develop our regulations.

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And the other is as we decide to innovate and find solutions, we should find those that are actually rooted and centered on justice, because AB 32 was never rooted and centered on justice. We exist, our Committee exists, because there was an acknowledgment of that. And so as we move forward, we will certainly hold that very close to our hearts that that is our job to ensure that these programs do not have a negative impact. But also, we want to be partners with you to figure out what a just transition looks like, because no one has been able to figure it out. And without that, we don't have a path forward. And those just transitions should not rest on expanding, and defending, and allowing the fossil fuel industry to continue its infrastructure that is on the backs, right?

And I've said this before, our communities are the living embodiment of the externalities of the fossil fuel industry. And we need public agencies that are

willing to start holding them accountable for the -- you know, the uncalculable harm to the health of our communities.

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And so with that spirit, I want to hand it over to Catherine.

DR. CATHERINE GAROUPA: Thank you, Martha Dina, and good evening, Board members, Committee members, and members of the public. My name is Catherine and I work with the Central Valley Air Quality Coalition, or CVAQ for short. As Martha Dina was just speaking to, one of my goals in participating in EJAC is to ensure that the State's climate strategies are not worsening air pollution in the San Joaquin Valley, which is the most polluted air basin in the United States for fine particles and one of the most polluted for ozone, and also collectively to strive for equity.

I've had the distinct pleasure of being the Carbon Markets Work Group convener. And we started out as the Cap-and-Trade Work Group. And about a year go, I'll be honest, I was very reluctant when the Committee came to us and said, oh, well, cap-and-trade and Low Carbon Fuel Standard are both carbon markets. So could you please combine them and take them both on, because I knew that these were really big and important programs. And I've seen firsthand how the Low Carbon Fuel Standard has

exacerbated air pollution problems in environmental justice communities in the San Joaquin Valley. So I knew that was not going to be a small undertaking.

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What we're going to present to you and discuss today is a critical survey that we conducted as a work group and with our Committee members, as we made the transition into being a permanent body. And so I really want to appreciate the amount of work that we put in over the last few months to help inform your decision making. And I'm very proud of what we were able to accomplish in such a short period of time.

I also recognize that California has incredible significance as the fourth largest economy in the world, and because we've positioned ourselves as leaders on environmental issues. And programs like the Low Carbon Fuel Standard absolutely have global implications. So bearing in mind what we've seen just even over the last few weeks in terms of floods, and fires, and droughts, are we doing enough, are we moving fast enough as climate impacts accelerate?

So again, this has been a huge undertaking and I really want to thank the Carbon Markets Work Group team, a whole bunch of other non-EJAC members and organizations who also helped us with their technical expertise, and the entire Environmental Justice Advisory Committee for

dedicating a significant amount of time to this in our July and August meetings. We, as a Committee, have leveraged tons of resources from our EJAC Committee members, and from non-EJAC organizations, and outside experts, and elevated important environmental justice perspectives and implications to ensure that those are meaningfully included.

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We have also gotten support from Board Member
Kracov and the Chair. And I really want to appreciate and
apologize if I missed anyone, because when we're in
person, we actually can't see who's on the Zoom, but I
know that Board members Takvorian, Hurt, Balmes, and
Shaheen also sat in on parts of our EJAC meetings. And I
know that you all are very busy and working on a lot of
other things, and that there have also been a lot of CARB
staff who have listened in our meetings, and ISD staff,
Matt and Cheryl have made themselves available to us to
answer questions.

So as we mark this occasion of our first joint meeting with EJAC being a permanent body, I really want to acknowledge that we're at the beginning of a critical and ongoing dialogue. And I appreciate the amount of time and work that all parties have put into that.

I also want to underscore the ask from our facilitator for decorum from public commenters today and

every meeting to focus on critiquing ideas and not people. Personally attacks, name calling, and denying people's lived realities should not be condoned, and that happened to us in August EJAC meeting. I absolutely want to hear from members of the public and engage in respectful and professional dialogue.

So carbon markets is a complex and far-reaching topic with a lot of implications. And our focus as EJAC is on EJ communities that don't have the same resources as industry. And we took an evidence-based approach in developing the resolution that I'm going to start to walk through now.

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DR. CATHERINE GAROUPA: As I've already mentioned, we dedicated two meetings to having panel discussions as the Environmental Justice Advisory Committee. So I'm going to try to briefly highlight what we learned during those meetings and weave in the points of the eight-point resolution that we adopted that is in front of you all today.

So in July and August, we had a lot of public comments. We had a robust set of panelists and really robust discussion as a Committee as well.

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DR. CATHERINE GAROUPA: So we started with orienting ourselves to the ultimate goal of the Low Carbon Fuel Standard, which is to lower the carbon intensity of fuels on our path towards electrification. So in theory it's an elegant idea and then it becomes complicated by human scientists thinking that we know exactly how to measure everything. And so CARB staff assign a carbon intensity to different types of fuels. And these scores are important for guiding investment and sending market signals.

The program no doubt generates significant revenue for electrification. If I remember correctly, it was something like \$4 billion last year alone, so I understand that there is a lot of money involved in this program. And overall, what we've found is that the program does need recalibration to achieve our climate goals and to address environmental justice concerns, and that we can strive for win-win solutions. And I was glad to already see some alignment today between our resolution and what staff is recommending.

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DR. CATHERINE GAROUPA: So from this -- the theory that we started from, it's important to recognize

that according to CARB's own data where the credits have been going towards has been heavily weighted towards biofuels, recognizing that we're seeing that yellow slice of the pie, electricity, starting to grow, which is encouraging, but that also that hasn't necessarily been the case over the history of the program.

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DR. CATHERINE GAROUPA: So food for fuels is a theory that a few decades ago was very popular but has not panned out. And again, this is part of where we see really significant global impacts in terms of things like deforestation and waste by-products that are created in an effort to create biofuels. Depending on the feedstock, you'll have different kinds Of impacts. So there's corn, soy, and palm oil. I learned that corn's act -- corn actually does something called corn sweat, which can create a heat island effect when there are very large plantations of corn. There are by-products that are produced that create new waste streams. There's overapplication of fertilizers. There are a lot of implications when we consider the fuel life cycle of biofuels.

So on the next slide, you'll see that --

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DR. CATHERINE GAROUPA: -- two of the points for our resolutions -- sorry, the next slide after that.

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DR. CATHERINE GAROUPA: This is where I'm going to start to weave in the points from the resolution that we adopted. The first point being our ask to conduct and incorporate a full life-cycle assessment of all air pollution and greenhouse gas emissions for all of the pathways in the Low Carbon Fuel Standard, with special consideration for their implications for environmental justice communities.

And then specifically about biofuels, crop-based fuels, we recommend capping the use of lipid biofuels at 2020 levels until there can be an updated risk assessment to determine a phaseout timeline for high-risk, crop-based feedstocks based on just the very, again, brief summary of some of the impacts that I just mentioned.

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DR. CATHERINE GAROUPA: So confined animal feeding operations, there's definitely a lot to say. I'm going to comment on this, but I really wanted to start this conversation with a brief overview from Carbon Markets Work Group and fellow EJAC member Juan Florez with Center on Race, Poverty, and the Environment who is on

Zoom.

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JUAN FLORES: Thank you. (Inaudible)

MARTHA DINA ARGÜELLO: We can't here you.

DR. CATHERINE GAROUPA: Juan, we heard you start to speak, but you're breaking up now.

Juan, we might be having issues hearing your Zoom connection. If you don't have a strong internet signal, you might want to try calling in the phone line, so that we can hear you more clearly. So maybe what I'll do, so you can do some tech troubleshooting in the background is I'll make my comments on confined animal feeding operations and then we'll come back to, Juan, and see if your connection is stronger.

So confined animal feeding operations, or CAFOS for short, unfortunately we have a lot of these in the San valley. Roughly, half of the emissions are enteric and they're unaddressed by something like a dairy digester. So we're talking about cow farts and burps are letting out a lot of emissions, not to mention things like truck trips and other impacts from these large facilities. Essentially, when you concentrate this number of animals in that small of a space, you're producing waste streams that are not sustainable for the local ecosystem and you're negatively impacting local communities. And the program as it currently exists is worsening the problem,

because of the incentives going towards dairy biogas.

According to CARB's own emissions inventory, emissions from the livestock sector are actually not going down. So again, here is a challenge where we have to question whether a climate strategy is actually making air pollution problems worse. According to CARB's own 2022 analysis on SB 1383, there is a need for refining the emissions inventory and gathering more accurate operational and activity level data in order to assess methane mitigation strategies and calibrate emissions models. So this is a recognition from the staff that more accurate data needs to be collected.

With that, I want to pause again and see if we can go back to Juan and see, Juan, if we can hear you now.

Yes. We also need better internet access.

(Laughter).

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DR. CATHERINE GAROUPA: Okay. So we'll keep going and then maybe we can try you one last time again at the end, Juan. And I know we'll also have speakers on the -- these impacts today. But on here, you see these -- I actually made sure to get images of confined animal feeding operations from the San Joaquin Valley.

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DR. CATHERINE GAROUPA: So we also heard from

some of our panelist speakers about the unintended consequences and missed opportunities of having such a heavily weighted negative CI score for dairy biogas, so much so that it's earning exponentially lower scores than even electric vehicles, and wanted to acknowledge Phoebe Seaton from Leadership Counsel for Justice and Accountability for helping present this information to us, who also reminded me that it was a large coalition of groups that worked with her and helped her put this slide deck together that she presented to us.

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DR. CATHERINE GAROUPA: Her presentation also called out that the way the program is currently designed, one natural gas truck and three diesel trucks are getting more credits than four electric trucks. So again, just logically that's not the direction that we want to be headed in.

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DR. CATHERINE GAROUPA: So this is just a survey of media coverage over the last year or so of this issue. For people who want to learn more, I made sure that there were live links that they -- that were clickable, because again this is an incredibly complex and detailed-oriented

topic. So for people who are interested in learning more, this is just a beginning -- a starting point for folks who would like those resources.

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DR. CATHERINE GAROUPA: So based on this information, we adopted in our resolution these three asks, conduct a full accounting of the emissions associated with pathways that rely on the production of fuel from livestock and dairy manure, eliminate avoided methane credits effective January 1st, 2024, and limit credit — eliminate credit generation for pathways relying on the production of fuel from livestock and dairy manure for emissions reductions that otherwise would have occurred or were legally or contractually required to occur. And the numbering on there you'll notice is meant to align with the original resolution, because I'm not presenting them in order just for people who want to track.

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DR. CATHERINE GAROUPA: I'm not going to try to summarize, because we have the benefit of having Michael Wara here from Stanford who's going to present their analysis of the EJ scenario. So mainly again wanted to

thank him for his analysis and underscore the fact that there is the opportunity for a win-win in improving the program and achieving equity goals.

For the next couple of slides, I'm going to pass it back to Martha Dina to talk about aviation and marine fuels.

MARTHA DINA ARGÜELLO: One of the things that emerged through our engagement was that marine, aviation fuels were left out. We were able to include that in our recommendation and -- yeah, next slide.

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MARTHA DINA ARGÜELLO: So this a sector that is often ignored. It's an incredibly polluting sector.

We've been hearing from workers who are working in the airports near the planes and listening to their stories around the health impacts. And so we're really happy to see that CARB wants to take on aviation and marine fuels, whether you live near the airport or you live near the ports, you understand what it means to have, you know, that level of air pollution literally falling from the sky on you. And then, you know, certainly throughout the ports in California, Los Angeles, Wilmington, we've got to do better. And so we're very excited.

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MARTHA DINA ARGÜELLO: We're glad that you're considering the inclusion of interstate jet fuel and marine fuels as a deficit generator and providing the analysis for this option as part of the Low Carbon Fuel Standard.

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DR. CATHERINE GAROUPA: Thank you, Martha Dina. So one topic that I wanted to highlight, that again is one that we did not adopt specific recommendations about in our resolution, but we heard from Adam Browning of Forum Mobility about equity issues. Specifically in his case, he was talking about owner/operator drayage truck drivers that do short trips to and from ports, that there are equity issues in terms of them being able to afford the upfront costs of trucks and also considerations in terms of infrastructure. Once you have to rely on being able to charge your truck what proximity those should be in and ensuring that there's reliable infrastructure in order to get these small independent owner/operators into these trucks.

So this is an area that we would encourage continued investigation and discussion, because we know that there are still also equity issues in terms of the costs of trucks and the need for charging infrastructure.

So definitely an area worthy of more attention.

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DR. CATHERINE GAROUPA: And we're rounding it out here with the last two components of our resolution prohibiting enhanced oil recovery as an eligible sequestration method and not issuing LCFS credits for carbon removal projects such as direct air capture.

If the theory of direct air capture and carbon removal is that we're trying to address legacy emissions, it makes no sense then to use them as credit generators, because then you're negating the fact that it's actually carbon removal and you're just making everything equal and equivalent, when clearly we need to reduce carbon emissions more and faster. And as we've discussed, we can't just solely focus on carbon.

So overall, the Low Carbon Fuel Standard Program must be realigned to achieve its original intent and to ensure environmental justice dairy digesters are a bad investment and Band-Aid that obscures the numerous other impacts of confined animal feeding operations. Regulating methane from dairies is possible in other ways and we would encourage CARB to do a better job of collecting data and calibrating your models.

Fuels derived from food are not just -- were

sustainable. Issuing credits for carbon removal, like direct air capture, would neutralize a project's ability to result in negative carbon emissions, which again is the espoused goal. And we particularly also want to pay attention to the cost to low-income households via the gas tax to make sure that it's not disproportionately following on -- falling on low-income folks who have to rely on an old dirty gas-guzzling car, because it's the only way that they can get to services in a transit-starved region like the San Joaquin Valley.

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DR. CATHERINE GAROUPA: And this is the entire resolution altogether again. Board members and Committee members, you should have this in your packet to be able to look at. In a few minutes, we will hear from Michael Wara with Stanford about his analysis of the EJ scenario. At this point, we did want to pause for additions from EJAC members and any quick comments, questions, or responses from the Board.

Maybe if I can ping just one last time if we can try Juan with CRPE. Juan, if your are Zoom is working now, if you want to speak.

BOARD CLERK MOORE: Excuse me. This is John Moore, the Board Clerk. It looks like Juan Flores is no

longer on the call.

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DR. CATHERINE GAROUPA: Okay. Well, let's open it up to EJAC and Board members then.

FACILITATOR WATKINS: Thank you. And I want to acknowledge, we have Sharifa Taylor with a question.

SHARIFA TAYLOR: It was a question for Matt, but it's not related to what they were just talking about, so I could wait till we do questions or is this that time?

FACILITATOR WATKINS: This is the time. We're just going to briefly pause for some questions, comments, or reflections knowing that we'll have the joint discussion after Michael Wara's presentation, which is coming up next.

SHARIFA TAYLOR: So this is actually time for questions is what you're saying.

FACILITATOR WATKINS: Yes.

SHARIFA TAYLOR: Okay. Got it.

FACILITATOR WATKINS: Thank you.

SHARIFA TAYLOR: Sorry. I just wasn't sure.

Okay. So, yeah -- so thanks for presenting. It was just more of could you repeat your -- the notes that you were saying at the beginning of slide 7, because you ran through them a smidge fast and I just wanted to make sure I caught everything you were saying, especially because you said something about either OAL or AOL, I

don't know. And I don't exactly know what that was, so I wanted to capture all of what you were saying. I don't know.

Yeah. Sorry. Yeah, that slide, but I didn't know what you were saying for that slide, so I wanted to hear it again. Thanks.

ISD CHIEF BOTILL: Sure. So OAL is the Office of Administrative Law.

SHARIFA TAYLOR: Got it.

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ISD CHIEF BOTILL: And after the Board votes on a rulemaking proposal, if there are no more conforming changes to the proposal, we compile the final regulatory package and we send it to the Office of Administrative Law. They review it and we hope approve it for entrance into the Code of Regulations. And that becomes effective with an approval date of an effective date. So they're a final step in the rulemaking process. And I'm sure I've got a band of lawyers over here that are willing to correct me. That sums it up.

SHARIFA TAYLOR: Okay. So that's helpful too, but I also wanted the rest of your notes from the -- when you started that slide, because I didn't know what you said.

ISD CHIEF BOTILL: Are you interested in like timing and next steps or the general concepts that we're

now putting forward for the rulemaking proposal or both.

You want me to just read the whole slide notes again?

SHARIFA TAYLOR: I want you to start from the beginning --

ISD CHIEF BOTILL: Sure.

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SHARIFA TAYLOR: -- and then I guess you could stop before the end. Sorry.

ISD CHIEF BOTILL: All right. So I'll start with the process about the SRIA, or the standardized regulatory impact assessment. That is what we released on Friday, September 8th. And to reiterate, the SRIA, it's a preliminary evaluation of the economic impacts of updating the LCFS. And it's one of the required pre-rulemaking documents. So it's something that we have to do early in the process to look at economic impacts in a potential regulatory update. It is not the actual regulatory It's an evaluation. And that's the point that proposal. I was making with respect to the rulemaking proposal. It's coming out later this year and then we bring that forward for a comment period. We have to do at least 45-day comment period, and then to the Board for a vote, and then ultimately submittal to OAL. Those are some of the major steps in the process.

And then the bullets that we have here on the slide, these are the ones that I read. And these are some

of the key concepts that we are pursuing as part of the rulemaking process, the updates.

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SHARIFA TAYLOR: So I have a follow-up question about what you said about the SRIA. So when you were saying that it's an evaluation type document, who is evaluating it? You guys are internally evaluating your -- the Low Carbon Fuel Standard yourself?

ISD CHIEF BOTILL: Good questions. No, we have to submit it to the Department of Finance. By statute, it's a document that we develop, we do this economic analysis, and then we submit it to the Department of Finance and they review it. And it is required when you have a regulation that has a major economic impact, and that's defined as over \$50 million or more in terms of economic impact. And the LCFS, it is over that limit.

SHARIFA TAYLOR: And that's just for the State. That's not like within CARB.

ISD CHIEF BOTILL: Any regulation, yeah, that has that size of an economic impact.

SHARIFA TAYLOR: Okay. And then what did you say after you explained what a SRIA was?

ISD CHIEF BOTILL: That it's not a formal rulemaking proposal.

SHARIFA TAYLOR: I remember that --

ISD CHIEF BOTILL: Okay.

SHARIFA TAYLOR: -- because, yeah, that's why you explained why. It was in evaluation and it was pre-rulemaking. Yeah. So then you said you're like, oh, here are the bullets and I'm not going to read that again, and then what did you say?

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ISD CHIEF BOTILL: So these bullets on the slide are the concepts that we're pursuing as part of the rulemaking efforts. So these are the broad themes of the regulatory updates that we're pursuing

SHARIFA TAYLOR: Okay. Cool. Thanks.

FACILITATOR WATKINS: Thank you. We have a question here from Kevin. Thank you.

KEVIN HAMILTON: Good afternoon. Kevin Hamilton from Central California Asthma Collaborative. Thank you for the presentation both Matt and EJAC co-chairs. A couple of questions for Matt. You had talked about kicking on the 45-day rule. What -- when were you calling for that to start?

ISD CHIEF BOTILL: So that would be the proposed regulatory text and the staff report that support the proposed regulatory text. We have to release it for at least a 45-day comment period.

KEVIN HAMILTON: Right. Like I said, when you -- I understand that.

ISD CHIEF BOTILL: I just wanted -- I just wanted

to clarify the title there.

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KEVIN HAMILTON: Yeah, got it. A date for that to --

ISD CHIEF BOTILL: Later this year. (Laughter).

ISD CHIEF BOTILL: So we have -- again by

Department of Finance rules, they have 60 days with the

SRIA before we can release a Notice of Proposed Action and
a rulemaking proposal. So it can't come any sooner than

60 days from September 8th, if that makes sense?

KEVIN HAMILTON: No, it does and I'm familiar with that timeline as well, but I'm more interested in the date that you are proposing for the Board to take it for regulatory action in January and the time that folks like me and others who are at this table or not at this table will have to review both the SRIA, 175 pages of highly technical document. Great document for those us who love this kind of stuff, but still taking it apart, you know, is good for a month or so worth of action.

And then the staff report is doubtless going to be more robust and, you know, we're going to need some time for that. So I think January is pretty ambitious at this point would be my opinion on that. I'm not asking you to answer that. I'm just making a statement.

I do have a question regarding, you know, this

idea of cost or benefits coming up at \$2 billion across this period, according to your table. And that has been verified. You're -- so you feed DOF the information and then they evaluate. Do you actually give them numbers? You know, I never knew that. Do they come up with the numbers or do you do and then they check the numbers based on your work?

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ISD CHIEF BOTILL: So the economic evaluations that we put in the SRIA are done by CARB staff and we compile that information and provide it to Department of Finance.

KEVIN HAMILTON: And so the last thing, and I'll drop this - well, kind of - is, you know, the anchor for this whole thing is your carbon intensity, right? I mean, that really is the basis for getting access to the program, continuing to be part of the program. Would that be a correct statement?

ISD CHIEF BOTILL: In terms of if you're a fuel producer? I'm sorry, I missed the --

KEVIN HAMILTON: Yeah. If you want to participate in this program, you have to produce a product that meets the standard you've set, which is a negative -- I mean, a rapidly decreasing carbon intensity, which hopefully drops into the negative, but at this point it's still a little bit in the positive.

mandated by regulation to be in and those are the fossil fuel providers, gasoline, diesel, predominantly. They produce deficits, so they are in the program by regulation. The fuel producers that provide alternative fuels that have lower carbon intensities than the benchmark voluntarily participate. And in order to participate, they subject themselves to the regulatory requirements, which include a thorough evaluation of CARB -- by CARB staff of the carbon intensity of their particular fuels.

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KEVIN HAMILTON: So again, without that, you aren't in program, right?

ISD CHIEF BOTILL: Right. Yeah, you can't do credits under the LCFS unless you go through our evaluation.

KEVIN HAMILTON: We kind of walked around that, but we're in the same place here, I believe.

So given that, the last time again my reading of the current work and maybe the -- that will be updated in the CARB staff report, will be an updating of the underlying formulas that you use called GREET, which is kind of an entertaining name acronym, right? I don't know who came up with that, but that was pretty good. And that is based on a lot of assumptions that came out of, some in

the nineties, most in the aughts, and hasn't really been updated over time to account for an add-in actual data that we have to replace those assumptions. Would you agree with that statement or would you say that's incorrect?

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ISD CHIEF BOTILL: No, we work really closely with Argonne National Lab who develops the GREET model. It's on its fourth iteration now and it gets routinely updated as part of the program and we incorporate the updated versions into the program.

KEVIN HAMILTON: Was the last update I believe 2016-17.

ISD CHIEF BOTILL: I'd have to check the dates, but it has been updated since then to --

KEVIN HAMILTON: It's within your literature,
right, so I'm assuming that's correct, so --

ISD CHIEF BOTILL: Yeah.

KEVIN HAMILTON: -- working on close to, anyway, seven or eight years out of date at this point.

ISD CHIEF BOTILL: And --

KEVIN HAMILTON: -- and do you update the entire form base -- and use, you know, existing actual literature on sort of what goes into it -- not sort of, but what goes into it?

ISD CHIEF BOTILL: So we do plan to update -- and

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I'm just getting a message from the staff. 2018 I think 1 is the most recent version of GREET 3 -- or the version 2 GREET 3.0 that is currently in the regulation and we do 3 intend to update it to GREET 4.0, which is more recent. And my understanding of that process includes looking at 5 revised emission factors and information from the 6 scientific literature to be able to have updated 7 8 life-cycle analyses associated the greenhouse gases coming from the transport, production, and use of fuel. 9 10

KEVIN HAMILTON: Yeah, I think --

CHAIR RANDOLPH: Can I interrupt. Sorry, Kevin. Can I interrupt for two seconds. I was just wondering if maybe we could -- for the benefit of the Board members who haven't been to as many EJAC meetings --

> KEVIN HAMILTON: Oh, sorry.

CHAIR RANDOLPH: -- and the carbon intensity score and then back to you.

KEVIN HAMILTON: That would be great.

CHAIR RANDOLPH: All right. Go ahead, Matt.

KEVIN HAMILTON: So sorry. Been living in this too long now.

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(Laughter).

ISD CHIEF BOTILL: Yeah. Sure. So I touched on this briefly in my presentation, but the carbon intensity values that we assign to fuels that are being credited

under the program are developed using a life-cycle analysis approach, which means CARB staff worked with the fuel producers to understand the greenhouse gas emissions that come from every stage of the fuel production process, from initial feedstock generation, feedstock transport, fuel production, and tailpipe emissions from use of that particular fuel.

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The GREET model is a model developed by one of our national labs. It's been in use for, I think, over a decade now. It's been updated multiple times. And that model gives us information about the emissions for each one of these stages of the fuel production process for various different fuel types, so that we can estimate the emissions impact of an individual fuel. There are other ways to also have updated emissions and carbon intensity values associated with each fuel as we have what's called a Tier 2 evaluation process that gets really deep into A specific fuel production process and it's individual carbon intensities, and that sometimes requires documentation from the fuel producers about energy consumption, specific trip distances, specific feedstock types. You know, it gets very bespoke and sometimes that means adjustments to then what was done as part of the GREET process.

So we have both of those options to be able to

get a very refined estimate of the carbon intensity of any individual fuel that's coming into California.

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MEVIN HAMILTON: It's very cool actually, but let me just briefly ask one more thing, John, before you slip in there. Oh, it's an interesting piece of calculus that if I hadn't taken the class in college, I couldn't even read, and I don't -- I couldn't do it, but I at least can kind of get through it, but I -- and it relies on a -- quite a number of assumptions. So the example that I was working through was a source of gas from lamb production in New York and New Jersey that's transported to Ontario, California via diesel truck and then harvested for hydrogen.

And I was trying to figure out how that could be -- have a negative carbon intensity. And I brought this up in the public meeting and staff are going to get into it, but I hadn't had a chance to get back with them yet. But if that model actually suggested that has a negative carbon intensity somehow -- and I couldn't figure out what happened to the hydrogen at the other end by the way or what they did with the carbon, but that they pulled off it. So -- and that's just my lack of education at that point, right? So I do need to meet with you guys.

But I -- when I look at that kind of thing, you really have to wonder does this make sense, right? How

does it account for the fuel stops along the way in different states with different regs about how oil is actually harvested and then diesel fuel is created and was transported to wherever they loaded it onto their trucks and how can this model actually account for all of those things in detail without making a lot of general assumptions and, you know, where are those based on.

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And so the idea of updating it and then being really transparent about how it was built to me is critical, because without that, you're not in this program. So it really is -- and then when you see one of the outliers, if you're doing studies - and John I think can attest to this and others - where you have an outlier like the dairy biogas that is so huge, hugely different than anybody else, it makes you kind of question.

So what I note with the others is everybody is in. Everybody that feeds that in the -- in the landfill group from the -- where those trucks pick up garbage on your curb and before that, that's all brought into their formula. But as far as I can tell for livestock especially, it's only the digester that's counted, not what happens before the digester, in other words, what happens on the lamb farm, what happens on the dairy farm, whatever you're farming, goats, I don't give a damn what it is, but it's producing this gas that's actually ending

up in these digesters.

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So that's kind of problematic to me. And I haven't had anybody actually adequately explain that.

ISD CHIEF BOTILL: Sure. So --

KEVIN HAMILTON: This meeting may not be the place for it, but that's my concern.

ISD CHIEF BOTILL: There -- I think you did bring it up --

KEVIN HAMILTON: Sorry to take so long.

ISD CHIEF BOTILL: -- at the August or the July meeting. And I do want to say one thing that to our knowledge, there isn't a fuel producer that is trucking CNG from the east coast to California.

KEVIN HAMILTON: I pulled it from you --

ISD CHIEF BOTILL: Well --

KEVIN HAMILTON: -- from your permit records and your records -- I shared it with you guys at that -- at that public meeting.

with that would make it very uneconomical and the carbon intensity would be high, because we do look at transport mode and distance as part of the carbon intensity evaluation. What may be happening is an injection of biomethane into the pipeline in different a state. And if that's the case, then what we look at is the energy needed

to compress and inject that biomethane into the pipeline.

And then the GREET model picks up the energy needed to transport it to the pipeline.

KEVIN HAMILTON: But you don't look at how it was
created to begin with --

ISD CHIEF BOTILL: We do --

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KEVIN HAMILTON: -- and the process for that --

ISD CHIEF BOTILL: So for --

KEVIN HAMILTON: -- and the emissions associated
with that.

ISD CHIEF BOTILL: For biomethane, we -- if it's come from a waste-based resource, we look at what energy is needed to capture that biomethane, process it, potentially clean it up, pressurize it, and inject it into a pipeline or use it in a transportation fuel. So hopefully that --

KEVIN HAMILTON: So no, because --

briefly. We a couple more clarifying questions. We're running a little bit behind here at this point, but we will have time for the joint discussion to have further discussion. So if we have additional questions before our presentation and joint discussion, we'll go ahead and look to Diane at this time, please.

CHAIR RANDOLPH: Matt, could you just walk him

through the acronym really quick. What does it stand for?

ISD CHIEF BOTILL: GREET -- and actually, I don't know what it stands for.

(Laughter).

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ISD CHIEF BOTILL: G-R-E-E-T, yeah. It's been a long time since I've actually looked at what is -- what it stands for, yeah.

FACILITATOR WATKINS: Diane, please.

BOARD MEMBER TAKVORIAN: Are we read? Okay.

So I think that the conversation that Kevin has started, that's not -- I have a lot of substantive questions, but I kind of wanted to, one, acknowledge an express gratitude for the EJAC and all of the work that you all have done to get us here. And it's clear that the LCFS has huge environmental justice implications. And that it's something that the EJAC should be and is looking at very seriously and deeply. So I really look forward to that conversation as we look at what the impacts are.

I want to ensure -- so maybe this is more of a comment than a question, that each of these nine recommendations will be specifically responded to and that we will have, as a Board, the opportunity to see those responses, discuss those responses with staff and with the EJAC again. I am a survivor of multiple Scoping Plans and I feel like oftentimes all of this work and the

recommendations don't get the serious consideration that they need. And it's clear that the EJAC has done a ton of work to get these nine recommendations to be quite specific. And I think, as a Board, my view is that they deserve -- they the EJAC and they the recommendations deserve very specific responses.

So I'm looking for not having a series of conversations like the one that Kevin just had, not -- I want to have those conversations, but I want them within the context of how we're responding to each of those requests. So it's more of a process question. And if that's happening today, that would be lovely. I don't think that's true. But when will that happen? Because I really am not open to having a multiple hour conversation where we talk all around this stuff and then there isn't a specific set of responses that the Board can arrive at in terms of a conclusion about these -- about these recommendations. So I just feel like I want to know where we're going when we start the trip. So that's where I am.

(Laughter).

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FACILITATOR WATKINS: Thank you.

In the interests of time what we'll do is we'll move forward with the presentation and note that we have a hand raised here in the room and then also we'll check with any individuals on Zoom after the presentation as we

enter into the joint discussion.

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So we'll go ahead at this time transition now to our presentation from Michael Wara.

BOARD MEMBER TAKVORIAN: And then will we get the answer to that question?

FACILITATOR WATKINS: Possibly.

CHAIR RANDOLPH: Yes. Yeah, We can have --

BOARD MEMBER TAKVORIAN: All right.

CHAIR RANDOLPH: After the presentation and as part of the joint discussion, I imagine there will probably be a few process questions that come up, and so at some point, we'll kick it to our Executive Officer who can kind of share the conversation.

FACILITATOR WATKINS: Thank you. All right. (Thereupon a slide presentation).

FACILITATOR WATKINS: So we'll now hear from Michael Wara.

DR. MICHAEL WARA: All right. Can everyone hear me? I hope so. My name is Michael Wara and I work at Stanford University's Woods Institute for the Environment, where I direct the Climate and Energy Policy Program. We teach a class called Energy Justice in the Energy Transition, and were asked by members of the environmental justice community to simulate what we'll call the EJ scenario for this presentation -- for the presentation.

I'll describe it more in detail later, but I just want to acknowledge the team that worked on this. This is very much a team effort and I'm so proud of all the work that everyone contributed, post-docs, grad students, undergraduates to the effort.

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DR. MICHAEL WARA: Actually, just say in addition that these are -- what I'm going to say tonight are -- reflect my personal views not those of Stanford University or the Woods Institute for the Environment.

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DR. MICHAEL WARA: So a little bit of context setting. The CATS model, which we utilized is a model that's been developed by ARB actually by Dr. Botill, I believe. And it evaluates likely future transportation fuel mix incentivized under the LCFS and basically by finding the least cost solution to meet fuel demand in any given year given a greenhouse gas constraint.

That can lead to incentives for alternate -- alternative fuels that potentially have local impacts to EJ communities and also if the input data for the -- in particular -- especially for assumptions regarding carbon intensities are inaccurate can have potentially

problematic greenhouse gas implications as well. We modeled -- but it's -- but it's the model we have. It's the model ARB uses to Simulate Scenarios. And so we really made an effort to work with ARB's tool and to try to simulate a scenario that reflected two of the key asks that are reflected in the set of principles that Dr. Catherine articulated.

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For our modeling work, we assumed a tightening of the cap to 30 percent from 20 percent in 2030, which is something that ARB has said that they're interested in pursuing. That's part of their -- the work that -- also that they modeled and we made two additional changes. We ended avoided methane crediting immediately. And I should just be clear, we don't end avoided methane crediting at confined animal feeding operations, but we basically raise the CI, the carbon intensity, to a level that is equivalent -- roughly equivalent to what landfills get, about 40 as opposed to minus 400 or so.

We also imposed a cap on biofuel crop feedstocks. And in addition, we -- as many of folks may know, there's a very large accumulated bank of credits. And in the ARB modeling, at least the modeling that we had at the time we did this work, the credits were never used. Those credits result when reductions exceed, you know, supply credits to the market exceed the demand for credits due to the

target. And we spend those banked credits in our modeling. ARB maintains the bank throughout.

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DR. MICHAEL WARA: So we have focused on model outputs through 2030, rather than looking out to 2045. The reason for that is that partly -- and I should -- I should say substantially as a result of all of the efforts that the Air Resources Board has put into via other rulemakings, like the ones that Dr. Botill mentioned. You know, the energy -- the transportation sector is in a rapid -- place of rapid change, and looking out much further than a decade, we think - and I'll emphasize that, this is our view - starts to get pretty speculative. And so we focused on kind of the nearer term and tried to understand what the impact of changes would be over the next decade or so. And with a focus on the SB 32 target rather than the 2045 target.

We also took a careful look at ARB's assumptions used in the model, right? Models are only as good -- this kind of model is only as good as the assumptions. And we found that in the early modeling work that ARB had done, the assumptions were out of date in important ways. Most significantly that the model assumptions did not really incorporate all the hard work that ARB has been doing to

drive transformation in the electricity sector, as was mentioned, especially Advanced Clean Cars II, Advanced Clean Trucks, and Advanced Clean Fleets. ARB subsequently has updated their own assumptions. And we've taken a quick look at this. We haven't updated our modeling work, but their updated assumptions largely match our -- what I'd call our preliminary update. But we -- like I said, we haven't updated our modeling work.

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DR. MICHAEL WARA: So just a quick discussion of the policy adjustments we made. As I mentioned, we modified the avoided methane crediting from somewhere between minus 300 and minus 450, depending on the end use, to 40 in the model. This, you know, subsidizes -- this is an important subsidy to confined animal feeding operations. And many of the applications of the methane that is produced from CAFOs are in hydrogen. And it subsidizes the use of existing refinery steam methane reformer capacity, rather than creating an incentive for green hydrogen, which would be a zero on this chart.

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DR. MICHAEL WARA: We also limited biofuel feedstocks by imposing a cap at roughly the current level

of usage, 1.2 million diesel gallon equivalents. CARB hs previous suggested that virgin oils as a source of biofuels is a real -- real and growing concern and we agree. Additional -- you know, we think that an additional 500,000 acres of land would be needed under the baseline relative to our EJ scenario. And that land is likely to come from places like the Amazon where there's available land, where forests can be cut or burned and then soy can be planted.

It's our view that this sort of a cap is appropriate, especially given that indoor land use change is not being -- is not being reconsidered as a part of this rulemaking.

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DR. MICHAEL WARA: What do we find? With updated assumptions, what we find broadly is that the EJ scenario essentially, essentially a scenario that incorporates these two ideas from -- that are -- that are -- that the EJAC has proposed create reasonable credit prices and consistency with CARB priorities, in particular, the baseline credit prices are below \$200 in our modeling and the EJ subsidies are modestly -- maybe substantially increased.

And I think that's consistent with the broad

direction that CARB is taking in its other policymaking with respect to transportation.

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DR. MICHAEL WARA: In addition, the EJ scenario has some positive impacts on local impact -- local environmental impacts, in particular less biofuel production, reduced -- which would imply reduced refinery air pollution at refineries in California that are producing biofuels, and lower volumes of dairy gas that would imply, you know, less -- you know, potentially reduced incentives for concentration within the dairy industry.

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DR. MICHAEL WARA: So another -- a key finding, you know, we think is that this scenario may avoid unintended impacts. It's going to reduce land conversion emissions, forests to farms, for crop-based biofuels.

It's going to reduce the use of liquid biofuels that emit local air pollutants in EJ communities. It's going to reduce the use of hydrogen produced existing steam methane reformers that emit local air pollutants. And I think this is important to keep in mind, it's going to focus the LCFS subsidy in areas that are likely to produce long-run

transportation of the transportation sector, including electrification and electrolytic hydrogen as opposed to, you know, gray hydrogen that's paired with methane credit from a CAFO.

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DR. MICHAEL WARA: Another finding of our work that I want to mention, and it's in the SRIA as well pretty clearly - I think it's at page -- in the 50s, about page 55 - is just the impacts on consumer costs. By 2030, if the target is strengthened. By 2030, about a quarter of light-duty vehicles are likely to be EVs under CARB planning scenarios, but that means 75 percent are still internal combustion engines. Most of EVs will be new cars sold to more affluent customers. And the LCFS is passed through to gas purchases.

Currently, the cost of the LCFS in gas prices is about \$0.10 per gallon. It might be 12 -- between 10 and 12. If the credit price was \$200 today, the cost would be \$0.26 a gallon. By 2030, especially if ARB increases stringency, the credit price impacts and thus the impact on gas purchases is going to be very large.

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DR. MICHAEL WARA: Our estimate is that it could

be between \$0.46 and -- sorry \$0.46 and \$0.69 per gallon. ARB's own estimate is that in 2025, if these -- if the -- if the sort of changes that are envisioned are, in fact, enacted, there could be a \$0.35 per gallon impact on gasoline prices. And I just raise this issue, because I think it really raises a broader equity concern about the LCFS. The LCFS in practice is a way to tax, you know, conventional fuels and push that money toward what should be very innovative fuels. We should be concerned if the fuels being subsidized are not, in fact, innovative, and we should be concerned about the potential impacts as the stringency of the LCFS is increased on low and moderate income Californians.

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DR. MICHAEL WARA: The other thing that really emerged for us from our work is that ARB needs to dramatically improve the measurement of methane emissions from agriculture. SB 1383 sets a goal of reducing methane emissions by 40 percent by 2030. Fifty-five percent of the methane emissions today in California come from agriculture, so you can't get to that 40 percent target without targeting ag especially dairy and livestock operations.

The current approach for estimating these

emissions is a two step process improving -- involving a once in five year survey of herds in California and a 2005 personal communication with U.S. EPA regarding manure management at CAFOs and consequent methane emissions per head. We believe that something substantially more accurate is required to know whether we are in compliance with 1383, and -- or even on target to compliance with 1383.

And we would argue that before we think about, you know, what -- you know, what ways to subsidize, what the best way to subsidize, you know, better performance in the ag sector should be that we actually teed to measure what's going on, because we're not going to know where we are, whether we're on track, and whether we have achieved the target given the current methodology.

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DR. MICHAEL WARA: Well, I pretty much said this. We have some thoughts about how this might be achieved at relatively low cost and with relatively low costs for dairy operations. It's very doable, but it's -- and it's important. Just as we have other major emitters report under the mandatory reporting regulation, we need to do something to better understand methane emissions in the ag sector, if we really want to reduce them.

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DR. MICHAEL WARA: So in conclusion, we updated assumptions to reflect a rapidly changing -- regulatory picture, and just note that EV adoption is critical to LCFS planning. We have to get that right in our assumptions or we will get the planning wrong. ARB has updated their assumptions and the update is pretty Similar to what we did. It's probably based on better data than we had at the time. Stanford modeling suggests the EJ scenario could achieve the ARB goals while lowering impacts to EJ communities, potentially improving the climate outcomes as well.

The LCFS is a Subsidy paid for by California gas purchasers and we need to think hard as we update it, especially in the context of dramatically strengthening the target about the impacts on low- and moderate-income households. And we can't improve what we don't measure. There's an urgent need in the context of methane emissions in California to better measure methane emissions in the ag sector in order to achieve the 1383 goals.

Thank you very much.

FACILITATOR WATKINS: Great. Thank you. So at this time, we are at our joint discussion portion of the agenda. I will do a quick process comment and update.

We're anticipating the joint discussion for this particular item to go until approximately 6:15. And just to remind folks, if possible, to allow for as much input from your colleagues, to keep your comments and questions as succinct as possible. If we hear from as many folks as we want and who wanted to speak, then we can always return to you if we have additional time to do so, but knowing that we also have to continue moving forward on the agenda and getting to the next presentation, and we're already about 15 minutes behind.

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That said, I would like to now turn it to the Chair before handing it over to Matt.

CHAIR RANDOLPH: Okay. I just wanted to note as that last discussion indicated, you know, this is a very complex, very detailed topic. This is the Board's first opportunity to talk about it, so, you know, our EJAC members are a little ahead of us in terms of detail. So I think we are very much kind of in listening mode and looking forward to the opportunity to ask questions both of staff and Board members, or -- yeah, sorry, EJAC members. And I will also note that the Board will also be hearing this item on September 28th, so that will be another opportunity to do a deep dive into this work, as we move through this rulemaking process.

So I just sort of wanted to make a note of that

and turn it back to Martine to facilitate the discussion.

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FACILITATOR WATKINS: Great. Thank you, Chair. We'll go ahead and hand it now to Matt and then we'll check to see if we have any on Zoom with a hand raised.

MATT HOLMES: Thank you. I'll try to be quick.

Nice to be here with the Board. I think we learn so much in these sessions. I wish we did this more often. I find that the Board is really a reservoir of knowledge, and I feel like we could get a lot more traction if we spent a little more time together, because you all know stuff that we don't know. Some of us are coming from places that have actually experienced these policies.

Well -- and then -- how about that?

I can go Park Ranger and just holler at you all.

And then I also want to thank staff. You know, Matt's done like indefinite explanations of this stuff the multiple committees that I'm on. And so, you know, I know it's a tall order. It is a complex thing and I want us to acknowledge that people like Matt and Rajinder Sahota will save more California lives than I ever will with my anemic advocacy career. So I want to make that clear, so that when I take this out on LCSF -- LCFS, I'm not taking it out on Matt and Rajinder.

You know, this -- I want to thank Kevin for asking some really penetrating and earth-shattering

questions about how selective LCFS is and the masking of significant input that are the only way to make it pencil out. And, you know, Kevin has long hair, so maybe it's hard for you all to believe him, but Michael doesn't, and Michael sits in Stanford and he just -- he just reinforced everything that Kevin said. He also pointed out how a lack of rigor and a lack of monitoring can be used to ask less questions and still justify an incentive that's based on something called carbon intensity, modeling, and 2045 goals.

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Those are administrative rituals at administrative performance theater. And I'm of the opinion that they run -- they contradict California Government Code and the rule of law, which prohibits this organization from spending California dollars to increase burdens in overburdened communities.

And, you know, specifically Government Code

11135, it is illegal for CARB to increase burdens and we
see that happening routinely around dairy digesters. We
see that happening routinely around biogas and
cogeneration. I'm in Stockton where we're going to stack
up a million metric tons of Lassen County forests, where I
grew up, put them in a wood pellets pile to ship them to
Japan, because I guess they've got a different atmosphere
over there.

We are increasing burdens in overburdened communities. These communities already die early than the rest of the state. They have babies that weigh less from day one. And I think there are -- you know, I remember a conversation with Dean two years ago - I'll put you on the spot - where Dean, we're like we can hit these carbon goals just by reducing pollution, just by going back to CARB's original mission that we are a public health agency who protects people. But we heard earlier -- Martha Dina didn't say it the way I say it, but it's really -- it's really a shame that the California Air Resources Board that saves millions of lives with things like the catalytic converter has become sort of carbon tech bro innovation hub, just throwing stuff against a wall. a miscarriage of the mission. And I -- and I think there's other ways to get this done. Matt's smart. Не can figure out something else. Promise.

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FACILITATOR WATKINS: Thank you. I -- please pardon me, I don't have an understanding of who might have their hand raised on Zoom, so if there are any hands raised -- oh, thank you. No hands raised.

Okay. Thank you. I just wanted to make sure I was able to pause and acknowledge the folks participating on Zoom.

Any other comments at this time?

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BOARD MEMBER FLOREZ: Thank you. Okay. Well, first, thanks to the EJ community for bringing Michael Wara into the conversation. I think I've only read half his stuff on Twitter, so it was actually nice to see him live and in action.

I would only ask, Madam Chair, as we get together again for our discussion at CARB, that on the CAFO issue and on the dairy methane issue, that we do a little bit more -- hopefully more concentrated discussion about where that fits. I know that Kevin and I have talked more than enough times about the transition from Chino to the Central Valley. And then we've added this now to the LCFS, which means, you know, in some sense scale is important in order to kind of hit some of the goals in LCFS. And scale is exactly what we don't need in the Central Valley, because when you get scale, you get concentration, you get mega means. Even if you took a certain percentage of leakage of methane on something small but something very large, that has some huge implications for the communities living next door to some of these entities.

I was -- you know, I think I -- the example I always use is 300,000 residents in Bakersfield and 300,000 cows right next door. You know, those are the kinds of

things that I think sometimes we miss. And I was very happy to see the EJ community included as a prominent aspect. And I was super happy to hear Mike Wara talk about agriculture's, you know, push, and it's impact on the overall plan and what we need to do with agriculture. Sometimes, I think we lose that a bit due frankly to the LCFS and some of the things that that produces. And I was called them the promise fuels, you know. But then we, in some sense, to Matt's point, we chase carbon and we don't chase at the source pollution as much sometimes when we're -- when we're thinking about that. And sometimes those goals get mixed and intertwined.

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Carbon does not necessitate, you know, a clean air health environment at certain points in time. And then when we get to the LCFS Program, it becomes even more troublesome from an incentive point of view, because I'm not sure what we're chasing at this -- at that point with the program, other than carbon, as a program. Other programs we have here at CARB obviously do speak to health. This one may or may not, so I'm really interested. And as we explore that as a Board, to really open that conversation up of what are we chasing ultimately in this program, the LCFS, and ultimately what are we incentivizing or disincentivizing? And in this case, just listening to Kevin's conversation,

understanding that a little deeper and then trying to take out some things from the program.

FACILITATOR WATKINS: Thank you.

Please, Chair.

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CHAIR RANDOLPH: Thank you. And we can certainly ask staff to kind of do a bit of a deeper dive at the next meeting. You know, the dairy digester program is structured to capture methane. And there's a lot of discussion and debate about to what extent does the program incentivize dairy consolidation or how much of that is really just sort of the overall kind of market pressures of a commodity with a thin margin. So I think having a discussion about that at the next meeting would certainly be useful and I'm sure Matt will be prepared to do that.

Thanks.

FACILITATOR WATKINS: Great. Are there any comments from anyone who hasn't spoken quite yet, at this point? If not, we'll go ahead and return to Kevin.

KEVIN HAMILTON: On that end of it, just a quick -- just a quick comment. I want to be very clear here, that while I am concerned - and I don't think anybody doubts my concern. I'm probably the only person at this table that has hundreds of families that we take care of in those communities and I have people in their

homes helping them create safer places and safe places to breathe, which they absolutely need, because they all have kids that are high risk or adults with asthma in their households. So, make no mistake about that part of it.

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But this is not an attack on a specific industry by any stretch of the imagination. This is really my concern that we're setting those industries up to fail. We are providing a lot of funding and a lot of technology and building that in the ground on these places where people are operating an entity called a digester, who when that goes away will walk away very wealthy. But that dairy farmer, that lamb farmer, that goat farmer will still be sitting there on that piece of land. And I watched this happen in 2003, 2004 for those of us who were around for the first wave of diary digesters that went up. And we realized this is not sustainable. They shut down and they sat there sitting in fields around that property for years.

Now, some of them have been rehabbed and reoperating again, but some are still just junk metal sitting out there on the ground. And coming from a farming community and from a lineage of farmers who came over here to this country originally and farmed until 20 -- maybe 40 years ago, and in Kansas as well as Ohio, I don't have -- I love farmers and I love what they do, and

they innovate like crazy. And they are the -- they are survivors by nature. But I really object to setting them up, from what I see, as failure down the road as getting stuck with this stuff.

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Look at Matt's plan, by 2045, it cycles out renewable fuel, renewable gas almost entirely as a fuel, which means the money dries up as well. The idea of the extension for dairies. I was on the 1383 dairy committee and I was on the financing committee desperately looking for a way to make this thing work and we could not find it. It had to be underwritten at a really extreme cost by both the State of California and by some insurance company in Indiana or something. But they're the only one that would take it. It's so risky.

But I just object to that and I want to make sure that we've got all of our ducks in a row, so that that doesn't happen, because those people are critical to our economy. They're critical to feeding all of us. So I'm going to speak -- I'm going to use your words, Michael. I see you sitting there with that grin on your face, Mr. Boccadoro. So -- and it is all true. But again, 2045, look at the -- look at the graph. It's gone.

FACILITATOR WATKINS: Thank you. So we have a comment here in the room and then we have a hand raised on Zoom. So we'll acknowledge our comment here in the room,

then the hand raised on Zoom, and then we'll do a process time check to see if we have time for additional comments.

So, please.

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BOARD MEMBER SHAHEEN: Thank you. And I will be as brief as possible. So I want to thank everybody for your comments and all of the presentations. They're extremely helpful to me as a new Board member trying to digest a lot of information. No pun intended. I want to ditto Diane's comments about process. There's a lot of detail here in terms of resolutions that I would love to understand better what the response is. Also really concerned about timeline. There's a lot of information and science to consume here with the SRIA being released recently, as well as the upcoming regulatory proposal that we'll have before us. So concerned about timeline.

I was very delighted to hear from Michael Wara. I heard him present in a recent EJAC workshop. And I think his emphasis on unintended consequences and impacts is especially important that we take a lens towards looking at that. Implications on the dairies and the farmers I think is equally as important as looking at the impacts on the communities themselves.

The one thing that I've been really focusing on and a lot of the discussions I've been having this summer on LCFS is the role of data. And a lot of discrepancy in

data that is being presented to me on herd size, on emissions coming from the digesters. And so that's something that I wanted to just level up as something that concerns me, because models have a lot of black boxes. I work with a lot of models myself, so there's a lot of assumptions made.

But one of the things I tell my students is garbage in, garbage out. So let's take a look at the data and get a better understanding of herd size, because I'm seeing studies and data that are very contradictory.

So thank you.

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FACILITATOR WATKINS: Thank you. So we'll go to our two hands raised here on Zoom. We'll start with Hector and then we'll hear from Luis.

BOARD MEMBER KRACOV: Hi. Good evening. This is Board Member Kracov. I'm here with Board Member De La Torre who is a gracious host here at the Gateway Cities in Paramount, California. Sorry we couldn't be with you today, but it's a great discussion.

I had the opportunity -- the Chair has sort of asked me to work with the EJAC a little bit over these past months. We started with the charter and then working through over the summer on some of the LCFS issues. So I've had the opportunity, you know, to do a lot of listening over the course of the summer, and, you know,

wanted to just summarize a little bit about what I've heard from the EJAC during that time period on the topic that we have here.

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You know, first, I do want to acknowledge the great work of all of our staff on these issues, the ones I've been mostly directly working with, you know, Deldi, and Johnnie, and Radhika, and Matt and, Cheryl, you know, really a team effort along with the Chair's office and Jamie Callahan. You know, the EJAC is now permanent. And so making sure that we have a good working relationship between EJAC and the staff from all the different departments at our agency is really important. We're all in this together. So continuing to improve that working relationship and make it really healthy is a really important goal. And we've done good things like having folks from ISD come to the EJAC co-chairs meeting.

Little innovations like that I think have really made a difference. And, you know, the leadership for that has come from the top, from Chair Randolph, from Steve Cliff. And I think it's working. I think we're seeing that tonight with this presentation and it also has come from the leadership of EJAC, Dr. Catherine, Martha Argüello, Kevin Jefferson, in particular on the LCFS stuff from Dr. Catherine, working really hard with our staff over the summer in a productive, healthy, way which has

culminated, you know, with these, you know, eight recommendations.

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And I think this is exactly what EJAC should be going and we're going to have to continue this work together, not just on LCFS, but also on things like Cap-and-Trade and 905. So we've set a healthy process here. Dr. Wara, Mr. Cullenward and others have helped along the way. And I think we're just pleased with the process that has gotten us to here tonight.

I just want to summarize a little bit, if I can, Chair, some of the things that I heard about the LCFS topic from the participation in the EJAC. You know, one of the things that I definitely learned is the tremendous accomplishments of the program. You know, when I spoke to Richard Corey just coming on as a Board member and asked him, hey, what do you think the most important thing CARB has done, you know, the biggest thing to your legacy, he actually identified LCFS as the major policy effort that has really had the most success. And I think there is, you know, broad acknowledgment of that. So all those that have worked on it, take a bow.

And I, as a new Board member, looking at LCFS have a lot to learn. You know, I'm here with Hector. We've been chatting a little bit tonight. And there's Board members that have a lot more experience with that

and Board members that have been there a few years like me and even the new ones, you know, we have to catch up here, because we haven't had the issue come to us before. So it's going to be a learning process.

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But it seems that, you know, there is some good alignment between the EJAC priorities and what staff has put in the SRIA. Some things that I've heard that I just want to flag very quickly is the inclusion of jet fuel and deficits for at least airplanes flying within our state. Those planes get a lot of credits for using sustainable aviation fuel, but EJAC has indicated that it seems unfair that they don't also get deficits, and that that should really even out.

There's also been discussion about that with marine fuel. And for me, coming from the South Coast, I thought that was interesting and notable, because of course, aircraft and marine vessels have a lot of impacts both climate and other pollutants in our air basin. And I think there's proposals around some of that in the SI -- SRIA, and I think EJAC was excited about that.

Another thing is electric vehicles. I'm not sure to what degree LCFS has, you know, really moved the needle on EVs so far, but it certainly has the potential to really help meet our goals for medium- and heavy-duty, which I think is in proposal as well, and I think EJAC

supports that. LCFS must support our climate goals, particularly the Advanced Clean Fleets, maybe even off-road too, fast charging infrastructure, public depots. There's tremendous opportunity for LCFS to support our goals on electric vehicles, especially medium— and head heavy—duty, again coming from the South Coast. And that was a real priority for EJAC that does seem to be addressed in staff proposal.

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As for the dairies, you know, this got a lot of attention. There is I think a proposal in the SRIA to phase out the avoided methane credit by 2040. So staff is listening and we'll be discussing later on, you know, exactly what that means. I heard a lot in EJAC about sort of this exceptionalism with the dairies and the distortion that is created by the lack of regulation. I learned at EJAC that we pretty much regulate directly every other significant source of methane in our State, either directly or they have to pay expensive prices through Cap-and-Trade, but not the dairy emissions. And this exceptionalism, the EJAC spent a lot of time talking about the distortions that that creates, the lack of regulation.

I also learned that 1383 did say that the dairies could start to be regulated in 2024. And guess what, we're coming close to that time period, aren't we? Also, I learned during this process that, you know, CARB's own

report in 2022 on dairy livestock indicated that monitoring and record keeping needed to be improved, and that a regulatory approach may be necessary for that. And I think Michael Wara identified that in his recommendation number five tonight that CARB's own reporting and analysis said that more record keeping, more monitoring is needed to see how much this is working, not just for the methane in the ponds, but also perhaps for the enteric emissions as well. So there's going to be a lot more to learn on dairies, but that's what I sort of pulled out from the EJAC discussion.

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As to biofuels, there was a lot of discussion about lipids and this issue with the cap and a real analysis and data, as Dr. Shaheen noted, is going to be needed on things like land use impacts. And I know that our staff is also looking at that and taking that really seriously. So this has been a great process to learn from the EJAC. And I know we're going to have more discussions at the end of this month.

You know, the thing that you -- just to distill it down, there is concern in the EJAC that when we focus on a program that is looking just at carbon intensity, that we have to be sure that that aligns with our other priorities, our environmental justice priorities, our criteria and air toxic priorities. Someone the other day

related to EJAC came to me and said they're concerned that people may get LCFS credits for burning plastics as part of our organics programs. I don't know where that falls in, but we have to be sure that things like that align with our State policies and only looking at carbon intensity and not considering all these things that's what I've learned and I think that the EJAC is trying to teach us.

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So I wanted to just summarize a little bit of that, Chair, from the time that I spent over the summer, and just really grateful to our staff, and to all of our leadership, and to the EJAC leadership for a good healthy process over the summer. And we're taking it seriously and I know this is just going to get better and better as we continue to work together with our permanent EJAC. Thank you.

FACILITATOR WATKINS: Thank you. Thank you. So we have three more folks who would like to speak to this item. We're at about the time that we were going to get to when we were going to go ahead and stop. So if you can, just keep your comments very brief. And again, we have another presentation and then an opportunity for joint discussion on that presentation as well. So we'll go ahead and acknowledge Luis who's had their hand raised on Zoom.

LUIS OLMEDO: Thank you. I have a very brief comment. I just -- I really found the Stanford presentation -- I'm sorry if I didn't track names and all that. I actually have limited technology at the moment. But I thought he made some really great points and just want to uplift again, you know, electrification. I always find it surprising that -- it's almost like we're in this vicious cycle. You know, like there's -- you know there's a lot of mention of these black boxes, these design, these models. And, you know, we all can, you know -- some might know how they all come together, some might not you know. I've sometimes seen it as there's a limited amount of input into how these programs are being designed.

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And so I would just encourage that we break that cycle. It's not productive, you know, to end up in this type of meetings having to say, well, this didn't work, that didn't work. We should have thought about this, should have thought about that. I appreciate that it exists. I appreciate that it's being acknowledged and the opportunity that things can be adjusted. But I think a lot of this could more productively be avoided if there is more meaningful engagement.

Like one ask that I do have, aside from the asks that have already been made, is that this program, LCFS, it should be common knowledge for environmental justice

communities and disadvantaged communities. We need to be experts on how to implement them, not just read about them, but implement them and design them, not after the fact, but in the very beginning of it. And so I would encourage more consultation. It would be great if the Board would be -- you know, would help. You know, it's -- having metrics, having designs -- you know, I'm thinking about AB 617 and how community air monitoring is like you have to meet all these metrics including community. I've seen a lot of more funding at the federal level, including Department of Energy that are saying you have to have community benefits agreements signed before you can access these resources.

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And I happen to believe, and I've seen it, that communities can also build infrastructure in communities. Why is -- are we -- like who is it that we're bringing into these programs or selling these programs to, because it seems like some really know how to use them, and they become very complicated for others that could invest moneys in California, could invest monies if our own neighborhoods.

So I think there's a lot of opportunity to do adjustments there. And as another example, like electrification. The I dig into it, the more I research into it, I realize most of moneys have gone to Wall

Street. And I'm going to borrow my colleagues Ryan's -I'm sorry, Rey León's version of it. You know, as I said,
hey, it's all going to Wall Street and he says, yeah, we
need to make sure that some of that goes to our streets
too. So that's my -- that's my comment.

FACILITATOR WATKINS: Thank you very much.

So we'll have one more comment on this item.

We're going to switch it up a little bit and give folks a break before we have the next item. So after this comment, we'll identify the time, take a 15-minute break, and then return for the next presentation.

So, please.

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THOMAS HELME: Thank you. I'll try to make it very quick. It was going to be a response to something Dr. Shaheen had said, so I just wanted to get it in there.

First though, Gideon reminded me about plastic, as someone that was just appointed to the Plastic Pollution Reduction Committee. Can we get rid of all of these, please.

(Laughter).

THOMAS HELME: Yeah. There's going to be a picture of me with that in front of me too.

I read somewhere if you make a joke that people will listen to you better, so that was the joke, now listen.

(Laughter).

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THOMAS HELME: What Dr. Shaheen said about getting different information about herd size. We had a conversation about this recently. We had the exact same issue. Different workshops, depending on the interest I guess represented. I heard different things about herd sizes. I tend to look into Stanislaus County in the Northern San Joaquin Valley, not because I don't care about everybody else, but because that keeps me plenty busy.

So just real quick, Stanislaus County has been pretty steady number five in herd size in California. Guess where the other four are, Tulare, Merced, Kings, Kern County. Top 5 in the country, not the State obviously. From 2017 to 2019, herd size -- the herd number in Stanislaus County grew. So that's from dairyherd.com. 2017 to 2019, the dairy size grew in Stanislaus County. Guess what? There was a biodigester in Stanislaus County before 2017.

Now, the argument that I heard is that, you know, dairies with a dairy digester haven't applied for a larger herd size, but other dairies in Stanislaus County after one digester came into the county, were applying for increased herd sizes.

And I was going to mention that -- well, I'll

leave it at that, because I said I'd keep it short. And I'll get into the rest of the stuff when we talk about carbon capture.

FACILITATOR WATKINS: Thank you. Okay. Let's see, so we'll return around 6:35. Actually, we'll start promptly at 6:35. That gives us a full 15 minutes for a break and we'll return for the EJAC co-chair's presentation. So enjoy your break and thank you so much for your attention and your promptness in returning.

(Off record: 6:21 p.m.)

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(Thereupon a recess was taken.)

(On record: 6:35 p.m.)

CHAIR RANDOLPH: Okay. Can everyone take their seats, we're going to be starting in a moment. Yeah.

Okay. Can folks take their seats. We're going to start the feed again. Okay. Actually, we need our co-chairs, because they are next on the agenda.

Okay. I'll turn it over to your, Martine, and you can get started.

FACILITATOR WATKINS: Great. Well, I just want to say thank you all so much for coming back right at the amount of time. I know it's a long evening and we're now getting into the dinner hour and so we really appreciate your promptness.

At this time, it's my pleasure to now transition

to your next presentation from EJAC co-chairs on Cap-and-Trade, Senate Bill 905, and natural and working lands. And I would like to hand it over to Dr. Catherine.

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Oh, excuse me. Excuse me. It will be Martha

Dina, so if we can just hold for one moment while we wait

for her to return.

ISD CHIEF BOTILL: Chair, if I may, while we wait for Martha Dina to come back, I just -- I wanted to take an opportunity to really thank the EJAC and thank Dr. Wara for his work on developing the EJ scenario to support the EJAC's resolution. And I want to thank Board Member Kracov for chiming in there and talking about the areas of alignment that he sees between the work that we've done on the SRIA and the public process on the LCFS and what the EJAC has asked for in the past. So I just wanted to express my gratitude. Thanks.

CHAIR RANDOLPH: Thank you for brining that up, because I actually meant to ask if it is possible, I know the EJAC wanted the EJ scenario sort of, you know, to have CARB do some analysis around that. I kind of want to ask you and the Executive Officer, is that something that we could do. I know we couldn't do it as part of the SRIA process, but is that something that we can incorporate into this work?

ISD CHIEF BOTILL: Yeah. And, you know, as part

of the work that we did on the SRIA, we worked to update the modeling to make sure that we included the vehicle regs adopted by this Board in April. We updated the modeling. We held a workshop a little over a month ago, so working very hard to make sure that the model was ready to be able to rerun and do additional analysis as part of the staff proposal. And so we're more than happy to take the assumptions and the inputs that the team at Stanford developed that Dr. Wara developed, and that he worked on with the EJAC and run that scenario as part of a staff analysis for the upcoming proposal.

CHAIR RANDOLPH: Okay. That would be great. Thank you.

(Thereupon a slide presentation).

FACILITATOR WATKINS: Great. Okay. Thank you. We'll go ahead now and turn it over to Martha Dina.

MARTHA DINA ARGÜELLO: I think they're trying to keep it cool in here. So we -- I lost my train of thought. I'm like very protein starved, so bear with me. So we wanted to queue up some of the upcoming rulemaking that we will be engaging with.

Next slide.

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MARTHA DINA ARGÜELLO: So certainly the Cap-and-Trade Program. And I went back and was reading

all the EJAC recommendations from 2008, 2013, 2017. And all of them consistently we have been asking for some really basic things about all of the programs, but in particular the Cap-and-Trade Program --

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MARTHA DINA ARGÜELLO: -- was, you know, questions about data to be able to evaluate the program. And what we mean by data to evaluate the program, in terms the of the mission of the EJAC. And what -- certainly I see it as how do we advise you to make sure that we meet that promise of AB 32 not to make things worse in our community. So each team, we've asked for full cost accounting. You know, I'ming at 2013 when we asked for adaptive management that would give us the ability to -- in real-time to evaluate the program, and that was scuttled. We don't -- you know, I would imagine that industry didn't really want that. I was part of the working groups and that was certainly what we were hearing, that there was -- that we were saying we want to know when there's increases in air pollution.

And to us it didn't matter if there was an increase in air pollution in the Central Valley, because there was a trade that happened or not. We felt it was an important bit of data to have for us to be able to move and adapt, but we decided not to finish that. Well, not

we, not the EJAC, but CARB decided -- staff decided not to finish that and not to make that data available. And so we continue to ask for the kind of data we need to evaluate the program for full cost accounting, a life-cycle assessment, and health impacts assessment. And that has been a consistent demand throughout all of our recommendations.

We've also asked to, you know, assess the benefits and burdens of all of these programs, particularly the Cap-and-Trade Program, because we knew that it could actually concentrate pollution in low-income communities.

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MARTHA DINA ARGÜELLO: And so those have been -you know, the systemic issues that -- we have been
challenged. And it is not last on us that many of the
CARB staff that we worked closely with in 2008, 2013, and
'17 have -- some have moved on and they're actually now
working for the industries that we were trying to
regulate. And so that is a disturbing trend and I think
that CARB really needs to address that. When -- because
it does -- because I've seen it, the kinds of
relationships. You develop friends with co-workers and
they have access and influence that our communities simply

do not have. And it is -- it is unconscionable that that continues to happen in so many different regulatory processes. And we've certainly seen it on the Low Carbon Fuel Standard.

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DR. CATHERINE GAROUPA: Thank you, Martha Dina. This is Dr. Catherine again, and thank you, everyone, for sticking with us. This is definitely rich content and material to wade through.

So like the Low Carbon Fuel Standard,
Cap-and-Trade is a market-based mechanism and we are
consistently hit over the head with the fact that this
program was not meant to address equity. At the same
time, the program at the very least shouldn't make equity
issues worse either, just because it wasn't designed to
address equity.

I had the honor of recently being on a panel hosted by the Independent Emissions Market Advisory

Committee that advises CalEPA on the Cap-and-Trade Program with Dr. Manuel Pastor a researcher who's done a lot of different equity analyses, and he pointed out that from the inception of the program, the environmental justice stakeholders raised concerns with program design and that because those issues were never addressed in the original

program design, that trust was lost, and needs to be rebuilt when it comes to the Cap-and-Trade Program.

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The Carbon Markets Work Group takes on Cap-and-Trade as a topic and over the last couple of years, we've engaged in a productive dialogue with CalEPA's Independent Emissions Market Advisory Committee. We've put forth numerous recommendations and submitted comment letters, flagging concerns that there are too many allowances in the system and the quality and quantity of offsets are of great concern. We've also been pleased to see ongoing analysis from thinkers at places like the IEMAC into the concept of no trade zones, so that we can ensure that we're not continuing to increase emissions in some of our most overburdened neighborhoods.

We also regularly hear about these programs that they're huge revenue generators and that the investments go to disadvantaged communities, but we need more analysis about whether that funding is going to industry incentives in those communities or if it's actually directly benefiting our low-income households and our environmental justice communities.

So our work group is committed to continuing this dialogue and putting forward recommendations for program adjustments, such as reduced allowances, no trade zones, and continued dialogue holding the tension that we would

prefer not to have the Cap-and-Trade Program at all, but that if it -- we can say, no, we don't want this program and also if you are going to have this program, here is how it should function in order to be able to address equity issues.

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DR. CATHERINE GAROUPA: So similarly, this past legislative cycle we saw Senate Bill 905 create some of the enabling regulatory infrastructure to deploy carbon capture use and storage projects, or CCUS for short.

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DR. CATHERINE GAROUPA: The map on the right shows California Natural Resources Agency assessment of where there's carbon sequestration potential based on existing infrastructure. And when I look at this map, coming from a San Joaquin Valley perspective, I see lots of bulls-eyes on communities that are the most impacted in our region, places like McFarland, Delano, Bakersfield, Madera, and Stockton all have bulls-eyes proposing these types of projects, unleashing a multitude of hazards and impacts on front-line communities. There are risks from carbon capture at every step in the process from capture, use, transportation, and storage.

At the recent SB 905 kick-off workshop, staff acknowledged that the climate crisis is accelerating faster than projected, and recognizing that these issues are all interconnected, again if these projects get credits under LCFS, we're not addressing legacy emissions, which is a main argument driving investments in carbon capture projects.

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We're eager to see how CARB will take on through the rulemaking process its responsibility to ensure that there is no increase in co-pollutants from carbon capture projects. And we continue to promote further attention and investment in natural solutions such as ecosystem restoration, more aggressive policies, and realignment of the funding to ensure that it goes towards electrification.

As I said, these are all interconnected issues, so I look forward to hearing from EJAC colleagues Matt and Tom on this issue after we conclude our presentation. And with that, I'd like to pass it back to Martha Dina.

MARTHA DINA ARGÜELLO: So next to the map of where the bulls-eyes are is a letter that's in your Board package. And it's one of the first letters that was a group letter that was written at the end of 2021, when we began to see the modeling and to see this massive wave of wishful thinking, because we waited too long, you know, we

delayed action and it's the fossil fuel industry who's really been behind delaying that action on climate change, and now, because we've waited too long, this concept of that we have to pull carbon out of the air has become --well, yes, we do, but how we do it and who bears the burdens and the benefits of how we do that matter.

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And this letter does map out some of the key issues that we think are important in a regulatory process. But like I said earlier, our communities are the living embodiment of the externalities of the fossil fuel industry and a failure to actually develop effective regulations that protect people's health that say, you know what, drilling for oil next to where people live not a good idea for public health. Using carbon capture on existing fossil fuel indu -- infrastructure that extends the life of the thing that is causing the problem of climate change is not a good idea, right?

But I get that if -- unless we are critical about this concept of net zero versus real zero, then it's attractive to say there may be this machine that in the future is really going to suck up all this carbon, so you don't have to worry. You don't have to change your behavior and change the culture.

And so we are deeply concerned and we want the Board to listen when we say you should not be commodifying

carbon. None of our policies and practice should allow companies to commodify the thing that is actually destroying the planet. I get that that is attractive, because -- well, I understand why it's attractive, but it is not the thing that's going to solve the climate crisis.

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And so the letter does, you know, bring a lot of communities, including indigenous communities, who understand what it's like to have your land taken from you, who understand what it means when you don't have informed prior consent, and built -- it's also built on our experience of a lot of false promises from the very people who got us into the problem.

So we hope you read the letter. There's many other comments. But it also was very hard for the environmental justice community, whether it was 905 or this letter, when we're like we see that it's happening, whether we say it's bad or not, whether this many, many scientists say that it's not working, and actually very few of the carbon capture facilities are actually working at the rate that they claim.

And it's not carbon neutral to produce them. It takes a lot of energy. So what do you do when you see this train coming at you and no matter what you do upstream, it won't stop, right? Well, guardrails. But guardrails for a speaking train don't work. And we saw

that with 905. They asked us what would the Environmental Justice community like? We'd like for you not to do this, because it's on the backs of our communities. That didn't happen and we framed out some guardrails.

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The first meeting about 905 was not whether we should do this, right? Let's have a serious, intellectual, scientific conversation that values community knowledge about whether we should do this practice or not before you start telling me don't worry, we're going to mind the storage for a thousand years, right? My organization cut its teeth on working on nuclear issues. We do not do well with long-term monitoring and things leak.

And so, you know, when you start to explain this to -- you know, I explained this to my husband who is not an environmentalist by any means and he's like you're going to do what? So if he understands that there's no logic to it, I usually say, okay, I've explained it well. But we seem to not be able to get that point across with the staff, that the modeling you've used and all these other tools you've used privilege the incumbent economy, not the one that we need to create for the future that we know what fossil fuels do, right?

So I used to remember many regulatory processes at CARB and other places that we don't want to pick

winners and losers in the economy, but you are essentially picking winners and our communities are the losers by allowing the industry to continue to commodify carbon and tell us they're going to store it under the ground, and that somehow the rock is an inert environment that won't have any impact. We don't know that. And we certainly know about the seismicity issues.

So I don't know what else to say, because I feel like I'm already blue in the face, but we really hope we have a serious conversation about using methods that are tried and true, and actually build long-term sustainability like regenerative agriculture, like different ways of managing our cows, and using trees and other ways to naturally sequester, and that we upload those upfront before we start investing billions of dollars in false promises and creating a whole new market for that carbon, because we know what it's like when we created a whole new market methane from cows.

Thanks.

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Two more slides. I forget.

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MARTHA DINA ARGÜELLO: This is my -- well, I've already talked about this three times. We need to start being serious about health impact assessment for the

regulations, full life-cycle assessment. And we're happy that we're actually going to start meeting with the health effects folks and others, so that we can understand how these processes are being made, but we knew through the Scoping Plan process that most of your modeling will still privilege this old economy. And until we get serious about figuring out what that next things is that isn't based on fossil fuels, like the hydrogen rainbow, that we're not going to get to real solutions.

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MARTHA DINA ARGÜELLO: Adaptive management. You know, the first time I saw the database of adaptive -- how many of you have seen it? It was created there for a little skinny minute, but it was never live. It actually mattered to be able to see what was happening with air pollution in real-time compared to the trading program. It would have given as a tool to say, wait, oh, it could have shut us up, because, oh, look, it's working or it could have proven our point. Either way, it would have been a good idea to finish it and make it public.

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MARTHA DINA ARGÜELLO: Matt.

MATT HOLMES: Yeah. Thanks for letting me update

everybody on this, you know, just on the carbon capture issue. There -- I understand the house is on fire and we also want to do something and be super proactive about forestalling this global climate instability. I'm sort of a pessimist. I don't know that we have it in us to make the cultural changes we need to care for each other and to not lose huge populations around this planet. So I am all in on magical engineered solutions. I can give you -- I can give you all my pinky toes for that.

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And I really -- I really like have met people in this process that I want to believe in, but, you know, this -- at the end of the day, this comes down to plumbers and pipefitters stabbing pipe that can hold on to saline injection fluid or gaseous methane, and you're going to give them this highly energetic super critical CO2. And, you know, it's funny. You look at the models for all the ruptures, they just happen to point straight up away from everything that they could possibly cause damage to.

I was really shaken when I was in a meeting in a webinar with a really scrupulous project developer, and I said what happens when it leaks into the estuary? You know, carbonic acid. I don't know anything about science, but I was a substitute teacher. And when you're not a smart teacher, they give you an easy project to implement with people. So it was the dumb one where you blow in the

cup and it's got a pH indicator.

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So I knew that and I asked that question. And they said, oh, yeah. It will never leak, because, you know, the rocks -- see the rocks are flat and it won't go through the rocks. It was like bro, you drew that. Like I've seen rocks. You know, they're not all the same. They're not all -- they're not all horizontal and perfect caps.

And by the way, we have 3,700 abandoned and unidentified oil and gas wells in the Sacramento, San Joaquin Delta. And when we're at our symposium in Stockton, you know, we have a carbon promoter saying none of those goes deep enough. Those are never — those are never below 3,000 feet. Most of them are below 5,700 feet. So this was a person gaslighting a very real concern in a very public forum and nobody called them on it. We sat in that same symposium when the Department of Energy Director said CCS makes zero sense on a refinery. The whole room clap, clap, clap. Still in the book, right?

So, you know, it's that kind of cognitive dissonance that start to creep up on me that we're actually going to do something that's even more dangerous than the problem we're trying to solve. When I say to the carbon utilization and storage partnership folks what

happens when this leaks into the estuary, they go, well, we studied those on brownfields and impaired landscapes. Well, this is the largest estuary on the west coast in both North and South America, Marine Mammal Act, Migratory Bird Act, Civil Rights Act implications. Golly, maybe we should do a study.

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We had to -- we had to strong arm DOE to pay for a study. They found 40 grand. They found 40 grand to look at a service transport model. They should have found \$400,000 to go find all those oil and gas wells and cap them and replace them. I'm sure some of that money is out there.

Mee. I'm spitting. When I saw the experts run out of knowledge and run out of runway, it was really unsettling And when we went to Mendota, some of you were there and we said to these folks, hey, guess what, there's tons of money to fund this biomass plant to resurrect it and bring it back to life. You shut it down as community advocates. The industry shut it down because it didn't pencil out, but we've got perfect welfare to just invent pollution to maybe catch it and the longest non-attainment Clean Air Act basin in the country. And these folks were like, you know what, I'd like -- I'd like an ambulance. I'd like a sidewalk. I'd like street lights. We were told we don't

deserve those things. We don't deserve schools. But there's hundreds of millions of dollars for something. What a trip.

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So it was really unsettling and I think CARB staff -- I remember some of the monitoring people being caught off guard by that. And so I don't -- I know I'm not alone in it having lots of unanswered questions. And if you're not answering my questions, you got a real problem.

So might point being, we don't have to do this. We can learn about this. You know, give me some assurance that there are additional protocols that you're not going to let some farmer's grandson be the monitoring protocol on this for a hundred years. You ever met a third generation rancher? I have, after dads. That's not who we want to count on. Sorry. Some of them are really bad asses. Maybe them. But the point being, we don't have to rush on this. And the justification was that investing in people and places doesn't do it fast enough. Well, that turns out that's not true.

So we spun out this natural and working lands scenario. We say guess what, this isn't your core competency, CARB. You don't know how to evaluate all the little live things. You kind of seem to forget that you're the ones that told us we had to calculate the

asthma suite of a -- of the shade of a tree and how that impacts heaters and air conditioners, and that there are co-benefits, just in the energy sector, let alone mental health, air pollution, community value. You know, all the co-benefits that come with investing in people and places.

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So we spun this out into a new expert advisory group in the Natural Resources Agency. These are 12 very serious academics and they -- in every scenario they are elevating the benefits, investing in people and places, natural and working land scenarios. The gap in our goals, which are just goals. They're not laws. So the gap in our goals is closed. We don't have to rush into this. We can wait on it. If we wait on it, I'll lean in. know, I want -- I'll help. But where we're at right now, nobody is answering serious public health and community risk questions. You know, nobody is monitoring these sites. You know, Lawrence-Berkeley National Lab had a proposal for how to use a mesh network to monitor an injection site to protect local communities. Can't seem to dig it up. Nobody know where that proposal is from. It was a proposal solicited by CARB. Sure would like to dig that out. I hear it was too robust.

So there's selective inputs in the decision that's keeping CCS in our scenario. And I would love to invest in people and places. These are the things that --

you know, this is the all hands on deck. This is the New Deal and the World War II homefront opportunity for our generation. We don't got to got everything perfect. I wish communities could be lent half the credence that an unproven engineering strategy has benefited from.

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FACILITATOR WATKINS: Matt, I apologize.

MATT HOLMES: Cut me off, for sure.

FACILITATOR WATKINS: I don't want to, but as you know, we have a lot to cover and we still have public comments. So pardon my interruption.

MATT HOLMES: So the point being that there are recommendations from an expert advisory group that this Board needs to -- needs to be literate on. You know, Liane helped kick off the group, so she knows all about it. And that's in all these things. Sorry. It was my hope that that advisory group would interact with the -- with the EJAC, and that there would be joint recommendations. They're technical. And ours are essentially social science. Kevin's are technical. Mine are social science recommendations. But there's a way to get a well-rounded scenario out of this. And this is our state and this is what we leave to our kids. Conservation is the real deal.

THOMAS HELME: So I'm going to give -- try to be brief, an illustration of how this plays out in a

community. Again, I'm Stanislaus-centric. So in Stanislaus, we have two towns, both disadvantaged communities. One is called Keyes. It's an unincorporated area of Stanislaus County, which comes with all the problems being an unincorporated area. The other one is Riverbank. Where I live, it is a city -- small city outside of Modesto. There's a company, Aemetis, that's been shipping corn from the midwest all the way over to California to make ethanol since 2010, 2011 or so. And obviously, we know we're -- you know, the money to do that comes from -- it's not -- it's not a profitable enterprise. It's mostly, you know, LCSF[SIC] and other incentives.

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There's a spot over in Riverbank that they took over an old ammunition site. It's been around since World War II. It's a Superfund site. It's giving kids leukemia, because it contaminated the groundwater. And clean up is still going on. And at the same time, they're developing that area at first saying we're going -- we're going to be making ethanol and jet fuel out of all this ag waste that you have, and that you're not going to be able to burn anymore. And so we're going to come in and save the day and we're going to do something with that ag waste for you, make jet fuel, and other fuels, you know, getting incentives from these programs that we're talking about.

Well, guess what, just recently I said, you know what, that's not going to work out. Now that we're already here, we're already taking over the building. We're not going to use your ag waste after all. We're going to ship animal fats and other oils from as far as India and all over the country adding close to 90 more diesel trucks a day to your small town, up to 50 train cars also.

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I live in between the railyard and this facility and so do my asthmatic wife and five-year old son. We live right in the middle of where the trains come through and where this facility is going to be, and where the -- all of those increased diesel emissions are going to be coming from. I see the train diesel emissions while they idle just right over the wall of my backyard. And so this place is going to be increasing this, because they couldn't come through on the promise to use the ag waste, so they've got to use something else.

The next thing that's on their list is a \$250 million carbon capture and storage project that they want to do in both Keyes and in Riverbank. And if it's going to cost them 250 million to build it, I wonder how much money they're planning on making. Because like I said, this is a business model based on these incentives. You know, usually they lose like \$20 million a year, but

they're making these investments with the hope that this all pays off, just like was mentioned earlier, you know, what's going to happen when these programs ramp down.

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Oh, did I mention that in Keyes, they also are installing pipelines for methane to go to 60 different dairy digesters in Stanislaus and Merced Counties, bringing that in and selling it to PG&E. So that's another project that they have going on.

The place in Riverbank where they're planning on putting the carbon, they just built a nice new neighborhood with a nice park just a couple blocks away. The elementary school where my five year old goes to kindergarten is about a mile away. The high school is about a mile away in that town. The folks that just all bought houses in that area, because they just built this new development, and now we're hearing about these, the biofuels, the carbon capture, they're getting petty upset.

There is a geologist in Stanislaus County, very wide respected, his name is Vance Kennedy. He wrote an op-ed to the Modesto Bee giving his opinion on this process. And what he says is that after pumping this carbon down into the ground in a liquid form and it expands into gas, that there is salt water deep down there from, you know -- ancient salt water that will be displaced. It will be pushed up. It will reach the fresh

water aquifers and will contaminate the groundwater in Stanislaus County that both people drink, but also that the farmers use. So I wonder how that's going to turn out.

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Not to mention -- I meant to say this about the dairy digester project. You know, we -- we're focusing a lot on obviously the methane emissions and the things that come with that. In Stanislaus county alone - again, I just -- I only know about Stanislaus County. I'll learn about all the rest of the places when I have time - there is about 20,000 maybe even more domestic wells in those unincorporated areas that aren't hooked up to the cities that are contaminated with nitrates mostly due to the dairy farming that's gone on. And I literally grew up in the middle of an almond orchard right next to a dairy. You know, Stanislaus County all the way. Friends, neighbors, you know, kids that I played with, their parents were farmers. But these are just -- this is just the facts.

A hundred years of dairy farming, fertilizers, and pesticides have contaminated over 10,000 drinking wells for people in unincorporated areas in Stanislaus County and now they're having to fix all that up. They're having to ship people bottles of water, so got off on that tangent about the dairies.

But back to --

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FACILITATOR WATKINS: Pardon the interruption. I apologize. We need to move on, so if you want to --

THOMAS HELME: I have on last sentence on --

FACILITATOR WATKINS: Please.

THOMAS HELME: -- back -- going back to the carbon capture to wrap that up. This geologist has said that that is what will happen to that carbon. And then when I wrote that question down at the symposium in Stockton, the only answer that I got from the expert said, well, that would just take a really long time, 50, 100 years. I think my kids, maybe my grandkids are going to be living there 50, 100 years. So that didn't exactly make me feel good about the whole project.

So this is just one example, because that's all I can give you is what's going on in Stanislaus County about how these things actually play out on the ground, who they affect, and what they affect. And I'll leave it at that.

Thank you.

FACILITATOR WATKINS: Thank you so much.

MATT HOLMES: Martine, please, one sentence on this. How this plays out with local land use authority is really where things get ugly. You can have the best idea in the world here and send it down to my county board of supervisors and you'll end up with something really

brutal. So these same planners the Riverbank planners, they -- they didn't bother to point out that the Hetch Hetchy water supply for San Francisco is within earshot of this injection site. So nobody is managing that risk. The cost-benefit analysis that you guys have to do for Department of Finance, they're not doing that at the local governance level.

FACILITATOR WATKINS: Thank you, Matt.

I'd like to acknowledge the Chair at this time.

CHAIR RANDOLPH: Okay. Thank you for kind of highlighting some of the key other issues that are going to need to be focused on over the course of the next year.

I know --

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THOMAS HELME: I'm sorry. I have to make one last point.

CHAIR RANDOLPH: Okay.

THOMAS HELME: This carbon is going to be coming in by truck and train as well.

CHAIR RANDOLPH: Okay. So I think what makes sense is we -- I think we should probably hear public comment, because, you know, we were sort of thinking we would have some joint discussion on this topic, but these are all really big topics that are going to, you know, take some -- a little more of a deep dive. But I think maybe what we can do is do public comment and then maybe

we can do a wrap up at the end and folks can kind of share their sort of thoughts at the end to the extent that they want to about how they're thinking about next steps.

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Are the co-chairs okay with that or would you like to do something different? I just want to make sure we have time for public engagement.

Okay. All right. Thank you so much.

FACILITATOR WATKINS: Great. Thank you, Chair. Certainly we want to hear from the public. And I believe at this time, the clerk takes over in terms of the public comment process, so thank you.

BOARD CLERK GARCIA: Yes. Thank you. We're going to start with the in-person commenters. We currently have 15 commenters in person signed up to speak. We're going to be putting up the witness list soon, but the first few commenters are Sam Wade -- we'll start with Sam Wade.

SAM WADE: Hello and thanks for the opportunity to be with you today. Sam Wade with the Coalition for Renewable Natural Gas. We're the national trade association for the RNG industry and we're headquartered here in California. We have over 350 member companies across the RNG supply chain. RNG development under LCFS is not about a choice between ZEVs and natural gas trucks. RNG can be used in both. It's also not about a trade-off

between greenhouse gases and local pollutants. In the SRIA, the scenario that achieves the most health benefits is the one where no changes are made to the framework for RNG. At the end of the day, it's about methane.

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To remind us of how important methane reductions are, I'd like to say a few quotes from the IPCC's 2023 synthesis report. The first is that strong, rapid, and sustained reductions in methane emissions can limit near-term warming and improve air quality by reducing global surface ozone. Secondly, transitioning toward net zero CO2 emissions faster and reducing non-CO2 emissions such as methane more rapidly would limit peak warming levels.

The LCFS, as currently constructed, is a great program, because it helps contribute to both strategies. Capturing methane and using it to replace fossil fuels is sound science and does work. We didn't get here to our current methane strategy easily in California. Developing a framework for dairy digesters specifically took more than 10 years of input from academic experts, extensive public process at CARB, CDFA, and smart legislation in the form of SB 1383, all of this was necessary to convince clean tech investors, dairy owners, and project developers to commit private capital to these long-lived assets.

The U.S. EPA has supported dairy digester for

more than 20 years and EPA's AgSTAR program highlights the California LCFS as a success story on their website. The RNG industry has promoted the LCFS nationwide and we're very disappointed to see it under attack here at home. This year we were able to get LCFS legislation introduced in states that produce 40 percent U.S. milk product. Following California's successful example and other large dairy states is the fastest way to deal with these ambitions nationwide.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Cassandra Farrant.

CASSANDRA FARRANT: Thank you for having me. Hi.

I'm Cassandra Farrant and I live and work in California.

I'm here on Behalf of Amp Americas. Amp is a carbon abatement company. We partner with dairy farmers and build facilities that reduce methane emissions by converting them to renewable natural gas and fertilizers. Dairy farmers deliver tremendous benefits to their communities, including employment, environmental stewardship, and affordable nutrition. Our projects improve air quality by reducing methane emissions and odor. And we cannot afford to build or operate them without the LCFS program.

CARB's LCFS program has been successful, because

it incentivizes innovation and convinces private capital to invest in effective projects across a wide variety of fuel pathways. We have done exactly what the State has asked of us to do in an industry. RNG has prevented more than 14 million metric tons of carbon dioxide as methane emissions so far. Private capital can only continue to invest in and operate methane abatement projects if we have a stable regulatory environment that includes methane crediting and book and claim delivery. Without methane crediting, there is no way to pay for our projects. Without book and claim, we cannot deliver our product to customers to invest and replace fossil fuel use.

Discussion of change to these features of the program has already halted new investment. Actual change will strand investments in the program, force shutdowns, and increase methane emissions. We respectfully urge CARB to avoid disrupting what has become the most effective carbon abatement program in the world. We encourage CARB to adopt a 2030 target of at least 35 to 40 percent to ensure continued progress towards low carbon fuels and to retain a stable framework for renewable natural gas digester projects.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Phoebe Seaton.

PHOEBE SEATON: Thank you, EJAC. Thank you CARB Board members. I just first want to appreciate EJAC for their recommendations to address the real and substantial environmental justice implications for the Low Carbon Fuel Standard.

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In our many years of advocacy on the LCFS, we often hear of the role of the LCFS in protecting assets, protecting investments, protecting business and protecting investors. We seldom see a call for the LCFS to prioritize human health and the environment and we appreciate EJAC for ensuring that human health and environmental justice will be front and center throughout this rulemaking.

I want to elevate a few issues that have been discussed a bit tonight and that we've raised over the last several years. Livestock biogas is not a clean transportation fuel. Its does not burn clean and its production intensifies, incentivizes, and turns a blind eye to air and water pollution harming lower income communities of color in the San Joaquin Valley. It's misleading qualification as a carbon negative fuel has absurd and perverse results that undermine transportation, clean air, clean water, climate and environmental justice goals.

It's misleading qualification as a

carbon-negative fuel is built on an accounting gimmick and business and policy choices. Managing manure in a liquefied manure choice -- in a liquefied manner is a choice. Liquefied manure is what creates methane in the first place. Thus, we now have to fix a problem that livestock operations have chosen to create.

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CARB has chosen not to regulate methane from livestock operations. CARB has had the authority and responsibility to develop and adopt regulations and can implement them in three and a half months. CARB has chosen not to initiate rulemaking and thus the livestock industry has a free pass that allows them to keep polluting and avails them of massive subsidies. Other methane-producing industries don't enjoy this free pass.

Another issue that several Board members and EJAC members have raised regards the dearth of data regarding emissions from livestock operations including the lack of data as actual methane emissions reductions associated with digesters. In fact, a recent study found that no substantial difference exists between dairy operation with digesters and without.

BOARD CLERK GARCIA: Thank you. That concludes your time.

Michael Boccadoro.

MICHAEL BOCCADORO: Thank you. And I believe

staff has handed out some slides that I'd hope to get up on the screen, but at least they're handed out.

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So the first slide is just a rehash of the slide that staff provided. And it shows that dairy biomethane is a tiny, tiny, tiny slice of the supply mix in California. This discussion tonight is not about dairy biomethane in the LCFS. As Matt pointed out and as Sam Wade pointed out, it's about methane reduction. And while dairy biomethane and RNG is small, it's huge in terms of the state's methane efforts. Forty-five percent of the methane in California comes from the dairy sector. If the State is going to achieve its short-lived climate pollutant goals, we have to reduce dairy methane, but that can't happen without digesters. They're accounting for 90 percent, 9-0 percent of the reductions we've achieved to date. And by 2030, it's likely there going to account, based on analysis done by UC Davis, for 50 percent of the emissions from the dairy sector. There is no way to achieve them without digesters.

Dr. Wara's presentation glosses over the implications for the Short-Lived Climate Pollutant Plan. And if the State can't achieve the Short-Lived Climate Pollutant Plan, which it cannot without dairy families in California, achieving their goal. There's no way to achieve the overall 2030 goals. It's really that simple.

Dr. Wara was quoted in the media recently about how difficult it is for the State to achieve its ambitious 40 to 48 percent goals. Difficult becomes impossible if you take away our tools. It's really that simple.

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The Legislature created a structure. The dairy families have been doing exactly what the Legislature asked them to do. They're investing in these projects. They're committing their families to these efforts. And EJAC wants to pull the rug out and abandon not the least cost effective solution, it is the most cost effective solution, and it is achieving more reductions than any other program in the state period. Most cost effective, most reductions of any other offer program period. You can do it without digesters. It's really that simple and we've got to have an honest discussion. A lot of what got presented tonight was not factual —

BOARD CLERK GARCIA: Thank you.

MICHAEL BOCCADORO: -- and we need to have an honest discussion gong forward.

BOARD CLERK GARCIA: That concludes your time.

MICHAEL BOCCADORO: Thank you.

BOARD CLERK GARCIA: Sean Trambley.

SEAN TRAMBLEY: Good evening. My name is Sean Trambley. I represent the American Biogas Council. Thank you for the opportunity to speak tonight.

The ABC is the voice of the U.S. biogas industry dedicated to maximizing carbon reduction and economic growth using biogas systems. We represent more than 400 companies in all parts of the biogas supply chain that are maximizing all positive environmental and economic biogas systems what they offer when they are used to recycle organic material into renewable energy and soil products.

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The LCFS is one of the most impactful climate programs in California's efforts to address climate change. It is decarbonizing the transportation sector and reducing methane emissions. It's helping California achieve aggressive climate, carbon neutrality, methane and clean air goals. Now, as California continues to look forward, we must not abandon the air quality benefits in the interim as we pursue a 100 percent ZEV goal. These efforts can be pursued simultaneously while maximizing climate benefits.

We encourage CARB to continue incentivizing the beneficial use of captured methane both from farming operations and from organic waste diversion. Efforts to eliminate avoided methane crediting are contrary to long-standing carbon accounting methodologies and contrary to the intent and requirements of SB 1383.

The ABC strongly opposes any proposal that ignores avoided methane emission, recognizing avoided

emissions and their role as short-lived climate pollutants. And incentivizing their removal from the atmosphere utilize has proven highly successful and we encourage CARB to continue a science-driven framework that utilizes proven science like Argonne National Laboratories GREET Model.

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Further, numerous RNG projects are currently in development that rely on robust, mature, and predictable market LCFS has created. Undermining these projects now will create uncertainty in capital deployment decisions by investors who have made decisions based on LCFS credit values. The State of California is seeing the benefits of CARB's efforts and the deliberate prioritization of short-lived climate pollutants like methane, biogas, and RNG systems, especially those partnering with dairies are big reason why.

We've continued support of biomethane and avoided emissions in the LCFS. California can accelerate the carbon reductions. We work with peers in the industry and experts at ICFS -- ICF to develop research in support of more aggressive CI reduction targets with a 42 percent target by 2030, possible with existing policies.

Now, is the time to accelerate -BOARD CLERK GARCIA: Thank you.

SEAN TRAMBLEY: -- these efforts to reach

California's aggressive climate goals.

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BOARD CLERK GARCIA: Thank you. That concludes your time.

SEAN TRAMBLEY: Yeah, thank you very much.

BOARD CLERK GARCIA: I'm sorry, our timer is -- yes.

Next is Ryan Kenny. Ryan, we're going to pull up your slides. And then just a reminder for folks, we're going to close the public comment queue at 7:42. So for those on Zoom, please raise your hand, and those in person, you can submit a request to speak card, if you would like to comment. Thank you.

(Thereupon a slide presentation).

RYAN KENNY: Thank you. Good evening. My name is Ryan Kenny with Clean Energy. Our company is a national provider of low carbon fuels. I have four slides I want to present on, one of which is focused here on what was in the EJAC presentation earlier tonight. You'll see the claim that was made, also a quote by one of our vice presidents.

With respect to the environmental justice claim that LCFS program perversely incentivizes combustion vehicles over zero-emission strategies, our industry respectfully disagrees. This claim is not supported by the facts.

Slide two, please.

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RYAN KENNY: It's a little hard to see, but this is a chart of the carbon intensity of the various fuels within the LCFS. And you can see the ones on the left are all zero carbon certified pathways. The two at the bottom are for RNG. The two at top are one for hydrogen and one for electric vehicles. The diamonds on this carbon -- CARB carbon intensity chart represent certified pathways for each fuel type. Those four fuels in the green shaded area possess carbon negative fuel pathways using a dairy biogas feedstock. Dairy biogas is an end use for low NOx, hydrogen, and EV trucks. In fact, there are 145 RNG pathways that have EV and hydrogen end uses.

As California transitions to ZEVs, RNG facilities will recertify their pathways to support zero-emission trucks and fueling infrastructure throughout California.

Slide three, please.

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RYAN KENNY: This -- thank you. Again, this is a little hard to see, but on the right is what I want to focus on. This slide found in the EJAC -- this slide found in the EJAC presentation attempts to create a perception that one natural gas truck and three diesel trucks receive more LCFS credits than four electric trucks

and the -- with the imagery of a scale.

Is that my time?

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BOARD CLERK GARCIA: Okay.

RYAN KENNY: Thank you.

BOARD CLERK GARCIA: Yes. Thank you. That concludes your time.

Mikayla Elder.

MIKAYLA ELDER: Good evening. Mikayla Elder on behalf of the Electric Vehicle Charging Association. We would like to express our gratitude to the Board for their leadership and the EJAC Committee for facilitating these crucial conversations and allowing us the opportunity to provide our input.

As California begins implementing landmark ZEV regulations like ACC II, ACT, and ACF, it becomes imperative for CARB to fortify the LCFS to continue aligning with the State's decarbonization goals. To achieve this, EVCA respectfully offers the following recommendation. EVCA recommends that CARB extend the availability of fast charging infrastructure or FCI credits for light-duty EVSE until 2035 and maintain the 2.5 percent credit cap based on prior quarter deficits.

But the CEC's recent estimation of 83,000 public DC fast chargers needed to support ACC II and 15 million EVs in 2035, there's an existing need to support the

installation and deployment of fast charging stations throughout our communities. Additionally, FCI credits offer funding for operation and maintenance, which plays a pivotal role in enhancing the overall customer charging experience.

For these reasons FCI crediting is a critical component to programs administered by the CEC that accelerate charging station deployments. Thank you so much.

BOARD CLERK GARCIA: Thank you.

Jeanne Merrill.

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JEANNE MERRILL: Hello. Thank you. Jeanne Merrill representing the Center for Food Safety. Appreciate the discussion today.

I want to just speak just briefly to the relationship between the LCFS and SB 1383, which, of course, requires methane emission reductions in the dairy and livestock sector. The vast majority of dairies in California cannot do a digester, but many of them can convert to dry manure handling and storage and pasture based systems. And this was part of a 1383 work group. And I wanted to just speak to that work, because there's more to be done on this front.

The work group found, that looked at alternative manure management practices, dry manure handling in

pasture, that non-digester practices are critical tools to help achieve a 40 percent reduction in dairy and livestock methane emissions by 2030, because they can reduce methane and achieve co-benefits, and also because they're feasible to implement on a wide range of dairies in California.

The establishment of this subgroup emphasized the importance of pursuing and expanding non-digester digester practices. Unfortunately, a lot of that work is not -- is yet to be done. And one of the things that we would like to see, as part of this larger conversation around methane emissions in the dairy and livestock sector, is a real analysis of the opportunities to achieve methane emission reductions through alternative manure management.

The CDFA, when they looked at these issues found that dry manure and pasture-based systems can reduce emissions up to 90 percent. Of course, it all depends on how much of your manure is actually dry. And so there's a great diversity of practices. The wetter the manure, the more the emissions. And we really haven't had a comprehensive discussion about this. There's a recent study from UC Merced, for example, that found if you compost manure and you add biochar to it, you can get almost 90 percent methane emission reductions. So this is an important component to this larger conversation.

Thank you.

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BOARD CLERK GARCIA: Thank you. That concludes your time.

Evan Edgar.

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EVAN EDGAR: Good afternoon. My name is Evan Edgar for the California Compost Coalition. I represent most of the organic compost in California and we stand with environmental justice with regards to having a life cycle analysis for pesticides. We do a lot of regenerative ag. And we stand with all the different life cycle analyses you heard today about land use and, you know, corn in the midwest, or injecar do with Canola oil, or even cobalt mining in Congo when you mine for ZEV minerals. So the life cycle analysis is very important.

So I stand with environmental justice when during the scoping plan with NF number 5 where environmental justice said they want a life cycle analysis for ZEV batteries. It's right there in the Scoping plan. My firm did an analysis of that over a year and a half ago. I shared it with staff. And the life cycle analysis is based upon European studies of 60 to 90 grams of CO2 per megajoule. That's what it is. Zero-emission vehicles aren't zero.

If we talk about life cycle, let's talk about all life cycles, not just for dairy, not just for corn, but rare minerals in the Congo. Those are blood batteries and

we have to put environmental justice for all, not just environmental justice for some communities.

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There was a bill this year, AB 1220 by Quirk.

And it was a life cycle for ZEVs. And I did the ZEVs for like \$10,000 using the European studies. CARB staff said it would take \$7.1 million and 17 people to do life cycle analysis for ZEVs. And it killed the bill in Senate appropriations. The Union of Concerned Scientists, they were concerned about science. They don't -- they oppose this bill because nobody wants to talk truth about ZEV batteries. It's in Apple news. It's in the Wall Street Journal. Every week, you guys see it pop up that ZEV batteries are not zero emissions, and nobody wants to tell the truth about that.

So I support the EJAC with life cycle assessment for ZEVs, implementing the Scoping Plan. And it's time to tell the truth about these blood batteries. We need Environmental justice for all and we can't mine our way out of climate change. It just doesn't work.

We stand with EJAC. Thank you.

BOARD CLERK GARCIA: Thank you.

Adam Browning.

ADAM BROWNING: Good evening. I'm Adam Browning with Forum Mobility. We are a start-up working to electrify drayage. We're building a series of network of

charging depots in and around California's ports, and then all the way out to -- on freight routes out to where the distribution centers are.

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And I would like to just speak to how LCFS can be reformed to help achieve California's zero-emission goals. And I would say that even stronger without reform of LCFS, we are in danger of not achieving California's zero-emission goals, specifically with Advanced Clean Fleets. Drayage in California is about 33,000 Class 8 trucks, 80 percent of which are independent owner/operators. In order to transition this as required to zero emission, that's going to take about \$25 billion in investment, chiefly building about 2.5 gigawatts worth of charging infrastructure, and then getting people that are used to driving \$40,000 trucks into \$400,000 trucks.

This is a generational change that will take a lot more investment. LCFS could be reformed to help make that transition in two ways, one of which is to increase the credit value. When CARB did the analysis of the TCO for ACF, that is the total cost of ownership, it assumed a credit value of \$200 through 2030. It's currently about 70. That delta between where it is right now and where CARB modeled it means about \$1,000 a month in fuel costs for the typical drayage driver. That's real -- that's real money.

Secondly, establishing a medium- and heavy-duty fast charging infrastructure program, similar as to what exists for the light-duty, would be transformational in helping to deploy charging ahead of the truck availability. We've submitted comments to that effect. But I thank you for your time as it's run out.

BOARD CLERK GARCIA: Thank you.

Suncheth Bhat.

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EV Realty. EV Realty is an EV charging infrastructure developer based here in California. We focus on developing, owning, and operating multi-fleet EV charging hubs for medium- and heavy-duty fleet. Our hubs serve multiple fleets through a subscription model that allows for fleets to save money and enables speed to deployment while optimizing infrastructure to the -- around -- for the grid.

I'd like to thank CARB and the State of
California for your leadership in establishing a LCFS in
2009 and ACF earlier this year, as we look to
implementation to meet the State's policy objectives.
There are two areas I'd like to highlight. First, we need
to ensure alignment between ACF and LCFS. LCFS is the
single largest set of funds in the state to support this
transition and it's at no taxpayer or utility ratepayer

cost.

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The State has made a decision that its future is electric. LCFS should be modernized to focus the state to meet its ZEV goals across all vehicle classes and support an equitable transition for small and medium businesses.

Second, we recommend a robust and inclusive medium— and heavy—duty fast charging infrastructure capacity credit program. Our hub model is important from an equity perspective as it allows small and medium business fleet owners access to charging where they may not otherwise be able to do so on—site due to grid, space, or lease constraints. In order to accelerate this market, infrastructure needs to be built before the vehicles arrived.

One of the most powerful tools to make this happen is the medium- and heavy-duty FCI. We recommend CARB not have geographic limitations or unnecessarily high minimum charger sizes for FCI eligibility that can have negative cons -- that can have negative consequences on the affordability of charging and the impacts to the grid. We appreciate the collaboration to date with CARB staff and further encourage LCF to foster market innovation to meet policy objectives at the lowest societal cost possible.

Thank you.

BOARD CLERK GARCIA: Thank you.

Floyd Vergara.

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FLOYD VERGARA: Good evening. Floyd Vergara,
Clean Fuels Alliance America. We're the U.S. trade
association representing the biodiesel, renewable diesel,
and sustainable aviation fuel industries. I want to first
start off support of the concepts that were assessed in
the SRIA that was recently released. Really good work
that went into that.

Under the LCFS -- and this is a program that has been extremely successful. So from our standpoint, CARB should be looking at doubling down on the LCFS rather than retracting from it. So under the LCFS, biodiesel and renewable diesel have replaced and de-fossilized the heavy-duty sector by 46 percent in 2022 and 57 percent of the diesel market in first quarter of this year was biodiesel and renewable diesel. So these fuels are providing significant GHG and diesel PM reductions and those are benefiting the environmental justice communities.

I want to focus the rest of my time on the science question. And this is a recurring theme that you heard tonight. With all due respect to Michael Wara's presentation, I think it asks the wrong question. The question is not what are the benefits of a cap on plant

base lipids? The real question should be is a cap even warranted by the science that's built in and hard wired into the LCFS regulation? I'm talking, of course, about the GTAP model. For those who don't know, it's the Global Trade Analysis Project. And this is the only model for assessing the indirect land use change impacts for -- from a biofuel that's in the regulations.

So rather than putting the cart before the horse, I suggest we take a step back, take a look at what the science says, update the data sets in the GTAP. Right now, the data in the GTAP is well over a decade old, so it behooves us to make sure that we're all on the same page in terms of what the current science is and then we can have a robust, scientifically based discussion.

So thank you very much.

BOARD CLERK GARCIA: Thank you.

Mauro Libre.

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MAURO LIBRE: Poverty pimps are individuals or agencies that make money off the plight of those who they claim to serve, the poor, the underserved, the marginalized, and the unseen. Consultants can fall into this category too.

I'm dressed like this to go in line with the experiences I've had in this room and the room next door.

Now, this is an Environmental Justice Advisory Committee.

And my understanding of environmental justice is that everybody's voice is heard. Dr. King said that if people have decisions made about them and their voices are not heard, that is an unjustice.

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And this is not going to go how a lot of you expect, but my name is gold in the community and I go pretty deep in engaging with people. And if I ask 100 Mexican vatos how they feel about electric vehicles, 95 of them are against them. They don't like the term Latinx, so I deal with la raza not with Latinx. And I don't know who's speaking for them here, because despite whether I agree or not with their position on electric vehicles, their voices are not present here. All we hear is one agenda, which is more electrification. And again, I'm not against it or for it. I'm just giving you guys the truth.

In South Sacramento, AB 617, you have non-profits believing that they're responsible for the deployment of electric vehicles in the community. That's poverty pimping. UC Davis Institute of Transportation Studies is responsible for pushing those cars in the community, not the people.

And that's it. I just felt it was important for you to know that there is a large segment of raza out there who voice is never heard here, because it's not in line with what's being promoted. And I'll be back next

month to really push on AB 617 and paint the poverty pimping that goes on in here around my community and AB 617. And I'll say they came here before and complained and the Board punted to Phil Serna. Now, the Sacramento Business Journal is predicting 800 more --

BOARD CLERK GARCIA: Thank you.

MAURO LIBRE: -- heavy-duty trucks into my community. Please don't punt to Eric next month.

BOARD CLERK GARCIA: Thank you. That concludes your time.

Tom Knox.

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Okay. Tom?

I believe that concludes our in-person commenters. And we'll now hear from Zoom commenters.

BOARD CLERK MOORE: Thank you, Lindsay. We currently have 19 commenters with their hands raised in Zoom. I apologize in advance if I mispronounce your name. I would like to remind all commenters to speak slowly and clearly for our interpreters and court reporter. Also, just a friendly reminder that speaker sign-ups close at 7:42.

The first five speakers are Jamie Katz, a number ending in 111, Patricia Ramos Anderson, Chris Bliley, and Brent Newell.

Jamie Katz, I have activated your microphone.

Please unmute yourself and you may begin.

ZARAY RAMIREZ: Yeah, can you hear me?

BOARD CLERK MOORE: Yes.

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ZARAY RAMIREZ: Okay. So hi. My name Zaray
Ramirez, Policy Advocate with Leadership Counsel, but I'll
reading a comment for a Planada resident.

My name is Beatrice Avila[phonetic]. have lived in Planada for more than 30 yeas. The dairies have a heavy impact on our day to day lives. Our air is severely polluted and a lot of our children have asthma. My granddaughter is seven years old and every time she goes outside, she has trouble breathing. This is because of the air quality. We are not close to a hospital. closest hospital is almost an hour away from us. Planada is a predominantly Latinx Community. We are a disadvantaged rural town. We face a lot of health issues, because of how close the dairies are to us. The odor from the manure comes to us strong. For this reason, we can't enjoy the time outside, especially since the dairies in Merced County keep expanding. I believe that CARB should reframe the LCFS program to prioritize the health and well-being of residents. Our health is in your hands. need more regulations imposed onto dairies not incentives such as credits for biogas production."

JAMIE KATZ: And there are three of us more in

the room who -- in Planada who need to give comments.

ZARAY RAMIREZ: So that's the first comment.

BOARD CLERK MOORE: Okay. One second.

There's -- if there's three more, then those three people will -- it is now CARB's policy to go at the end of -- after all other commenters. So the -- after the two minutes, your time will be up and then we can add those to the end.

JAMIE KATZ: Okay. Well, then we can have one more person who can go now.

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RATHY MORENO: I'm Kathy Moreno and I live in Planada, California, Merced County. I live less than two miles from a dairy. And I would like to see regulations given on the dairy size, because of the smell, flies, and possible contamination of our water and less incentives given to the dairies that help pollute our air and cause us to become sick.

BOARD CLERK MOORE: Thank you for your comment.

The next commenter is a number ending in 111.

You will hear a prompt when I activate your microphone indicating that you may begin your comment. Please state your name for the record and you may begin

JAMES DUFFY: Good evening. My name is James

Duffy. I recently retired after 13 years working for CARB

on the Low Carbon Fuel Standard, including over a year as Branch Chief overseeing the program. I helped develop and enthusiastically support the LCFS. A strong LCFS is critical to helping California achieve its zero-emission goals. That being said, I strongly urge you to follow the EJAC's recommendation to cap and eventually phase out crediting of crop based biofuels.

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Just last month, CARB issued a news release celebrating the replacement of over 50 percent of diesel via renewable diesel and biodiesel. CARB often prides itself on providing an example for the world to follow. So I ask you to consider what would happen if the rest of the world follows California's lead and replaces over 50 percent of its diesel fuel with renewable diesel and biodiesel.

Currently, the world annually produces 200 million metric tons of vegetable oil, a majority from the tropical countries of Indonesia, Malaysia, Brazil, and Argentina. Replacing 50 percent of diesel worldwide would require an additional 600 million metric tons of vegetable oil, necessitating a four-fold increase in worldwide production. It doesn't take an expert to know --

BOARD CLERK MOORE: You have 30 seconds.

JAMES DUFFY: -- that impact of -- it doesn't take an expert to know that the impact of such an increase

on agricultural commodity prices, global hunger, tropical deforestation, and biodiversity would be devastating, which leads me to ask are you really being a leader if the world would be much better off not following?

Thank you for this opportunity to comment. I have also submitted written comments that I hope you will review and consider.

BOARD CLERK MOORE: Thank you.

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The next commenter is Patricia Ramos Anderson. I have activated your microphone. Please unmute yourself and you may begin.

PATRICIA RAMOS ANDERSON: Hello. My name is
Patricia Ramos Anderson. I am with the (inaudible) from
Merced County. Also the President of LULAC, League of
United Latin American Citizens.

What is important is that since CARB was established in -- 23 years ago and the CFS, from that onset, there was no meaningful community engagement not even translations for the Commission, or at meetings, or information, just something in the newspaper. Bad.

Two, no one in the communities were even informed what was being proposed in their busi -- in the business model and land use designations in their communities.

Nobody from the government were involved in that process locally.

Three, the most important part, is that monitoring and reporting of the data from the business model, there has been no accountability. You have not been even to get accurate data from the visitors that are having this business in tact, and that is bad, let alone to try the State for the reports and they can't get that information. Something is awfully wrong.

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Also, there is no regulatory guidance and oversight on air, health, and the reporting systems. Public health versus profit, the credits versus the public health. When you new stop the credits, we have to establish regulatory guidelines. It's for this process. The community needs to be involved and they need to have the right to that, they have safe drinking water, because no one knows and there's no monitoring, and we have to have regulations. All other businesses are mandated with regulatory guidelines.

And this of all things that happens with air and water, you're contaminating -- and I'm a Water Board member. You're contaminating the aquifer, the water. Central Valley, Merced County and the areas that you're in. Those ponds -- from all those, one of your big ones that you're having in small little town, thousands of cows, they even had problems with their own drinking water.

So local cities, municipalities are having problems and now you're establishing a double, triple sized grant in this field. No. There has to be regulatory guidelines. There has to be accountability and there has to be fines. There is nothing there protecting the consumer --

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BOARD CLERK MOORE: Thank you for your comments.

The next commenter is Chris Bliley. I have activated your microphone. Please unmute and you may begin.

CHRIS BLILEY: Thank you. I'm Chris Bliley. I'm with Growth Energy. We are the nation's largest association of bioethanol producers producing nine billion gallons of clean, renewable bioethanol. Biofuels continue to be a primary solution to clean up our liquid fuel supply, even as electrification is deployed in California.

Today, we're lowering greenhouse gas emissions by an average of nearly 50 percent compared to gasoline and we're responsible for reducing millions of tons of greenhouse gas emissions in California as well. We continue to drive towards net zero. We're also lowering other harmful pollutants, such as carbon monoxide, particulate emissions, and others, as well as lowering consumer costs across the spectrum.

I want to associate myself with Floyd Vergara's

earlier comments on looking at the science of biofuels. I think it's very, very important. We have also provided a wealth of comments on production of bioethanol and the improvements made across the spectrum at the farm and the innovations taking place at the plan and continuing to drive our greenhouse gas emission and carbon intensity downward towards net zero.

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Also, I want to expand on the use of higher ethanol blends, such as E15. We did a study showing that moving to E15 in California would reduce greenhouse gas emissions by nearly two million tons, the equivalent of taking 411,000 cars off California roads each year.

Appreciate the work that's been done and we'll continue to weigh in on the Low Carbon Fuel Standard.

Thanks for your time.

BOARD CLERK MOORE: Thank you for you comment.

Our next comment will be Brent Newell. Then we will have Jan Warren, Woody Hastings, Daniel Chandler, Casey Coward, and Maria Romero.

Brent Newell, I have activated your microphone. Please unmute yourself and you may begin.

BRENT NEWELL: Good evening. My name is Brent
Newell and I represent Leadership Counsel for Justice and
Accountability.

I would like to share three reasons why the EJAC

resolution should be incorporated into the LCFS amendments. First, the SRIA shows that CARB staff want to double down on the grossly excessive generation of factory farm gas LCFS credits with avoided methane crediting for another 16 years. This policy ridiculously creates huge negative carbon intensities and thus lavishly rewards the most polluting form of dairy production in California. Avoided methane crediting should end in 2024.

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Second, the SRIA has acknowledged that CARB staff's preferred approach would require Californians to ultimately pay at the pump for fuels favored by the dairy industry and the oil industry. The SRIA states that the gas tax would average \$0.37 a gallon through 2030 and then increase to a \$1.15 per gallon from 2031 to 2045 without adjusting for inflation. This cost will be increasingly borne by low-income and rural Californians who cannot afford to buy Teslas.

Third, Senate Bill 1383 requires CARB to adopt regulations to limit methane from manure management by 40 percent by 2030 and only says that CARB cannot implement those regulations before January 1st of 2024. The questions about how and who should pay for the dairy industry to reduce its massive methane emissions should occur in that rulemaking. Senate bill 1383 further protects investors by guaranteeing a 10-year credit period

after regulations are adopted.

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In conclusion, CARB should reform the LCFS as recommended by the EJAC and should address dairy manure methane in an SB 1383 rulemaking as the legislature has already required. CARB should regular dairies just like any other major polluter and stop this agricultural exceptionalism.

BOARD CLERK MOORE: Thank you for your comments.

The next commenter is Jan Warren. I have activated your microphone. Please unmute and your -- please unmute yourself and you may begin.

JAN WARREN: Thank you. I was the number one commenter that -- before the break, so i'm happy to be able to give comments a little bit on the -- the clock is not moving. Can you hear me?

Hello.

BOARD CLERK MOORE: Yes, we can hear you.

JAN WARREN: Okay. Well, the clock wasn't starting. Anyway. So I want to give a little bit of comment on the first part that I wanted to comment on. The presenter showed all these comparisons about the different ways that we're, you know, using different, you know, oils, or electricity, or biomethane, or biogas to reduce our standards. But it got me to thinking about -- I kept hearing about the San Joaquin Basin. I hear it all

the time, they're the worst air in the whole country. And it seems to me if we could clear up the air, if we could focus on clearing up the air in the San Joaquin Basin, everybody else would do -- be doing much better. And I realize you have to give these stats across the state, but it would be great to know how we're doing in San Joaquin.

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EJAC community and the comments from CARB, Diane Takvorian on the process suggestion. I particularly like the aviation and marine fuels inclusion. And I think it's critical that we keep going back to CARB's original mission of to protect health. It seems to me the last time I heard, natural gas is methane and it's a fossil fuel product. And so we need to be moving to electrifying more things in natural and working lands. Just listening to Thomas from Stanislaus, these small communities that are being impacted negatively by this biomethane digester, they don't have the resources — the financial resources to make sure that their people even have clean water and the people who are — have been enticed by these —

BOARD CLERK MOORE: Thanks for your comment.

The next Commenter is Woody Hastings. I have activated your microphone. Please unmute and you may begin.

WOODY HASTINGS: Thank you. Can you hear me?

BOARD CLERK MOORE: Yes.

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Woody Hastings Phaseout Polluting Fuels Program Manager for The Climate Center. Thank you for the opportunity to comment. First, I want to state our support for the eight EJAC resolutions outlined by Catherine Garoupa White earlier.

Also, ditto to the comments of Phoebe Seaton,

Jeanne Merrill, and Brent Newell, and just -- and Jan

Warren just now. The main point we'd like to make is that

to meet its climate goals, California must transition from

incentives and subsidies to strict regulation of large

dairies. The LCFS mineral methane program has already

financed the construction of digesters at most of the

suitable facilities in California. These facilities

should not be generously subsidized indefinitely, but

should be regulated as authorized by SB 1383. The ARB

should initiate this rulemaking immediately and phase out

negative carbon intensity scores from the LCFS as quickly

as possible.

Current subsidization of liquid manure practices exacerbates environmental justice -- environmental injustices and creates air and water pollution, which is so bad that people cannot leave their homes and enjoy the outdoor environment as we heard earlier. This is an

environmental, economic, and climate disaster. A system where CO2-producing fuel, biomethane, receive more LCFS credit than non-CO2 resources is deeply flawed. The ARB acknowledges that avoided methane crediting is flawed and yet continues to -- is planning to continue till 2040.

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The Climate Center supports the EJAC community proposal to phase out avoided methane crediting by 2024 and place caps on biogenic feedstocks. The findings and recommendations presented by Dr. Wara can help achieve ARB's goals, while lowering the impacts to EJ communities, potentially improving climate outcomes. This scenario is not --

BOARD CLERK MOORE: Thank you for your comments. The next commenter is Daniel Chandler. I have activated your microphone. Please unmute and you may begin.

DANIEL CHANDLER: I'm Daniel Chandler representing 350 Humboldt, a climate action group. We support in particular the EJAC resolution points 3 and 4 concerning agricultural methane. We've come to the same conclusions coming from the standpoint of how best to reduce methane. The simplest and most effective way to fix the LCFS and to reduce agricultural methane is to measure and regulate dairy methane.

The only reason LCFS can credit digester with avoided emissions is because dairy methane emissions are

not regulated, that is because incentives cannot be given for emission reductions that are mandated. To my knowledge, the dairies are the only large source of methane that is not regulated at all, yet the Air Resources Board has legislative authority to regulate it in 2024. Please use it. Thank you very much.

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BOARD CLERK MOORE: Thank you for your comment.

The next commenter is Casey Coward. I have activated your microphone. Please unmute yourself and you may begin.

CASEY COWARD: Hey. I'm Casey Coward. I'm with SEIU USWW, labor union representing service workers and low wage industries statewide, including subcontracted airport workers. There's a lot of critical issues EJAC has been working on and highlighting here. I regret that I have two minutes, which is -- I just -- so I get to talk about just one of them tonight, which we appreciate their interest in so far, which is the question of conventional jet fuel.

It's been mentioned already, but fossil jet fuel have been exempt from the standards of the LCFS. They don't create deficits. That has to change. Aviation has too large a carbon footprint, is growing too fast, and plays too big a role in local and regional air quality to not take this on. It's not something we're going to

subsidize our way out of, especially when the fossil fuels continue to receive enormous tax breaks here in California. We know that brining intrastate jet fuel into the program is something CARB has been exploring and now recommending. We're encouraged by that. Great first step. But for perspective, intrastate is about six percent of the state's aviation fuel.

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There also needs to be a path towards addressing California's share of the fuel used in interstate and international flights. Yeah, there are technological and legal Challenges. We're decades away from true zero emission in commercial scale for aviation. And the short-term, solutions sustainable aviation fuel has its own host of sustainability risks and unintended consequences. We strongly suspect that at a admin some kind of cap on lipid based feedstock or SAF will be called for as you Bring the conventional fuels into the program.

I've been working on this stuff for years. I know the degree of difficult. I know that the industry has always lobbied, and fought, and made threats whenever anyone snips any real policy in this area, but I also know they've lost some of the preemption cases that they've brought.

So there's a path here, but it's going to require sound policy, real leadership. Most importantly though,

it calls for hearing the voices of the front-line communities and the workers. Flight path communities are majority black and brown, quite often immigrants, renters, just like our membership and the low wage workers in the industry. So sustainable transition in aviation is an equity issue. It's a justice issue. It's high time it be treated like it. We look forward to seeing what kind of progress can be made in the coming years and being part of alongside our allies, members, and their communities.

Thanks.

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BOARD CLERK MOORE: Thank you for your comment. The next commenter is Maria Romero.

After Maria, we will hear from Nicole Rice, Tom Conlon, Colin Murphy, Neil Black Mirai, and Jovan Houston.

Maria, I have activated your microphone. Please unmute and your may begin.

MARIA ROMERO: Hello. Good evening. My name is Maria Romero and I am USWW member and I have been working at the LAX for 17 years. As an airport worker, I am here to share how I am exposed every day to the airplanes' emissions. I am concerned about the environment and the health impact it is having on me and the way my family who works and lives near the airport, LAX.

Working at the terminal, I am always breathing airplanes' emissions, which has affected my respiratory --

my breathing system. I use an inhaler to help me breathe, even though I don't smoke. I often feel lightheaded and my eyes burn, because I am working in the terminals where the airplanes are kept.

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I also have lived under the flight path for over 13 years, and so not only I am exposed to this toxic at work, but at home where I live. We have to do something about this. I ask that the jet fuel be included in the Low Carbon Fuel Standard. Airplanes needs to be -- also be regulated as well. Thank you for your time.

BOARD CLERK MOORE: Thank you for your comment.

The next commenter is Nicole rice. I have activated your microphone. Please unmute and you may begin.

NICOLE RICE: Thank you. Good evening. My name is Nicole Rice and I'm president of the California Renewable Transportation Alliance. In the interest of brevity, I will condense my comments to these few points.

First of all, I wanted to remind everyone that LCFS is a nationally acclaimed and successful program, and that's largely due to how effectively it reduces methane in the most cost effective way. We agree with comments that the LCFS is a multi-faceted and complicated program, and therefore, we should take a measured approach as to how we modify it.

Therefore, CRTA recommends that staff focuses on increasing the stringency of the CI scores under the program, because this action alone can keep us moving forward towards greater GHG reductions as lower carbon fuel increase in availability.

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Renewable natural gas will continue to play a role and be an effective tool in California's decarbonization strategy. This fact is acknowledged in the recent Scoping Plan update, where staff points out the need for further methane reductions in order to achieve the State's 2030 goals under SB 1383. If we don't find another end use for methane, it would just be released into the atmosphere making the problem worse. We also agree with comments made related to the upstream impact from electrification.

There are serious questions that need to be answered, however they are rarely discussed. But as the sponsors of AB 1012 that will require CARB to conduct a GHG life cycle analysis on the vehicle side, we encourage that conversation. And finally, we cannot dismiss the versatility of RNG as acknowledged again in the Scoping Plan. It is a feedstock for other emerging fuels like electricity and hydrogen and a tool that can a positive or create a positive effect in other --

BOARD CLERK MOORE: Thank you for your comment.

Our next commenter is Tom Conlon. I have activated your microphone. Please unmute and you may begin.

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TOM CONLON: Thank you, Board members, EJAC members, staff, and members of the public. I really appreciate the opportunity to follow on tonight's outstanding conversation. I'm Tom Conlon here in Sonoma County. Hi, Liane. I'm an old demand-side management energy efficiency management consultant.

And you all have your hands full. I'm not surprised that you have a lot of representatives of industry out tonight in support of this obvious subsidy program, but I think you all should be very proud of yourselves and the solid critical analyses and emerging consensus I believe I hear in the presentation tonight. This -- you know, EJAC has really come a long way in the last several years. I see this, Liane, as something -- your leadership has helped inspire.

I'm going to say -- I want to say I strongly support the EJAC recommendations. We need to end this exceptional status for the state's dairies. We need to stop tilting the playing field against our smaller dairies, those dairies who are using dry manure techniques for example. I want to ditto Jeanne Merrill and Woody Hastings comments earlier in public comment.

You know, subsidizing the CAFOs is a bad look for the State and for CARB in particular. As to the consequences for investors, well they should have done better due diligence. We can't fool the atmosphere with selective, dare I say, disingenuous modeling. I have confidence that staff has heard this tonight and that CARB can do better. And I look forward to you doing so in the -- in the weeks and month ahead. Thank you for your consideration of my comments tonight.

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BOARD CLERK MOORE: Thank you for your comment.

Our next commenter is Colin Murphy. I have activated your microphone. Please unmute and you may begin.

COLIN MURPHY: Hi. Thank you. This is Colin Murphy. I'm the Deputy Director for the UC Davis Policy Institute for Energy, Environment, and the Economy. And I co-lead the low carbon fuel policy modeling group there. I want to thank the staff and the Board members of the EJAC for providing this opportunity to have a really deep and useful discussion on a lot of the key issues there. We have been engaged in doing LCFS modeling for a number of years. Most recently, we've spent a lot of time looking at the proposed 2030 targets.

For members of the community who might be interested, you can go to your website at

lowcarbonfuel.ucdavis.edu. Under presentations, there was a webinar we presented last month -- actually, sorry, two months ago now - it's September - looking at the 2030 target and discussing some of the consideration that we have when trying to decide how to set this inside other parts of the program.

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I also wanted to echo many of the comments that Michael Wara from Stanford made about the -- some of the elements of the program design. Also, particularly, the need for better data about methane emissions from livestock operations in California, as well as the -- one of the things he didn't mention, but something we've noticed is there's just not transparency around the economics of dairy digesters and understanding exactly what levels of incentive are necessary and trying to really get to the bottom of what's required in order to meet California's methane goals.

I would also say that in the modeling that we've done, while we haven't modeled specifically the EJ scenario Dr. Wara discussed, we've modeled very similar scenarios. And we found that things like the feedstock -- crop-based feedstock cap or earlier phaseout of avoided methane credits from RNG are totally compatible with attaining a 30 percent target in the -- 2030. For the LCFS, we're going to reach out to Dr. Wara - I'm not if

your still listening, check you email - to get some specifics on the scenarios that they're talking about and confirm that. But everything that we've done says that making those changes would not compromise our ability to make those program targets.

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BOARD CLERK MOORE: Thank you for your comment.

Our next commenter is Neil Black. I have
activated your microphone. Please unmute and you may
begin.

NEIL BLACK: Thank you for the opportunity to speak. My name is Neil Black and I'm representing California Bioenergy. Founded in 2006, our four goals are to reduce methane emissions, improve the local environment, partner with dairies to become more sustainable and invest in the communities. We are doing all four. We are proud that we work with family farms and have built a company with the majority living here in the San Joaquin Valley. I'm in Visalia and Tulare County.

EJAC states that CARB should cease LCFS crediting for digesters, because digesters cause environmental harm. This is not the case. We look forward to being part of the process discussed today to answer questions about the impacts our projects. For instance, CalBio's digesters to date are responsible for reducing 1.8 million metric tons of CO2e annually. In addition, biomethane displaces

fossil fuel using polluting diesel trucks today.

We nearly eliminate hydrogen sulfide emissions, which substantially reduces particulate matter locally and prevents odors. CalBio, other developers, and our farmer partners have responded to the State's call to action and a result of the LCFS program, we are on track to meet the State's 40 percent methane reduction goals by 2030. The EJAC proposal with regard to dairies will reverse this progress. In the face of the climate emergency, we urgently need to reduce methane emissions today. Preserving a strong LCFS program for digesters will improve local air quality and ensure continued significant methane reductions.

Thank you.

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BOARD CLERK MOORE: Thank you.

The next commenter is Jovan Houston. After Jovan, we will hear from Todd Campbell, Steve Compton, LaDonnaa Williams, Sara Gersen, and Jamie Katz's extra additional speakers.

Jovan Houston, I have activated your microphone. Please unmute and you may begin.

JOVAN HOUSTON: Hello. Can you hear me?

BOARD CLERK MOORE: Yes.

JOVAN HOUSTON: Hi. My name is Jovan Houston.

25 | I'm a member of SEIU USWW. I worked at LAX for about six

years. Environmental racism is a disappointment. This -sorry, disappropriate impact of environmental hazard of
people of color. Communities of color most likely live in
polluted neighborhoods, as a result, suffers from the
highest rate of asthma, heart disease, and many more.

Residents who live near toxic sites live less than 12 years and influence surrounded cities. Working at LAX is 10 times worse. We deserve to know what's more in the air that we breathe. Long-term exposure to pollutants leads to asthma and other respiratory problems. LAX is one of the largest sources of carbon dioxide, which is a daily high concentrated problem.

Jet fuel emissions contain significant levels of particulate matter in organic gases and ultrafine particles, which links so to respiratory problems. I'm a living example. I live with COPD. No, I am not a smoker. I breathe jet fuel on a daily. It's bad enough that I struggle with low pay wages. I shouldn't have to struggle to live and breathe clean air.

Thank you.

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BOARD CLERK MOORE: Thank you for your comment.

The next commenter is Todd Campbell. Please wait one moment as we pull up Todd Campbell's slides.

Okay. I have activated your microphone. Please unmute and you may begin.

(Thereupon a slide presentation).

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TODD CAMPBELL: Thank you, Madam Chair and members of the EJAC committee and Board members. My name is Todd Campbell, Vice President of Public Policy and Regulatory Affairs for Clean Energy.

I guess, you know, what really confuses me is is that we are working on behalf of communities to reduce carbon and air pollution and we don't care where the fuel goes to. And what we're worried about is on this slide there seems to be a deception in terms of the reality of how this LCFS program works. In no way, shape, or form does Mr. Roche in his statement claim that three diesel trucks and one natural gas truck receives more credit than four electric trucks. In fact, you could replace RNG and demonstrate by submitting an EV truck or a hydrogen truck and actually they would get better carbon reduction under the LCFS program. So I just want to make that very clear that this graphic is deceptive.

The next slide, I want to say looking at CARB's own graph, demonstrates that the pathways are shifting.

We're working to support a zero-emission future. We want to support California moving in the right direction. And there are increasing pathways that are growing for hydrogen and electric.

And moving to the next slide --

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TODD CAMPBELL: -- you'll see that the LCFS properly incentivizes a pathway to zero, and that's where we're headed. You know biomethane supports and is actually demonstrating greater credit gains through fueling EV trucks, not natural gas vehicles, but EV trucks, because they're more efficient and we've proven that.

So we are here as an agnostic fuel ready to support California moving forward in a zero-emission future.

BOARD CLERK MOORE: Thank you for your comment.

The next commenter is Steve Compton. I have activated your mic. Please unmute and you may begin.

STEVE COMPTON: Hello. My name is Steve Compton. I'm with Sevana Bioenergy here in California. We are a renewable natural gas producer that utilizes organic waste to produce fertilizers and fuels through regenerative agricultural practices, which directly eliminate the use of petroleum fuel. By capturing the methane, which is a far more potent pollutant going into the atmosphere and other forms of carbon before it's emitted, our RNG projects are a sensible way to reduce the impacts of climate change, which is causing forest fires and extreme weather events here that impact California communities.

The current LCFS framework with its 10-year crediting periods and flexibility provides the right framework and balance to keep carbon an pollution reduced -- reduction projects moving toward. LCFS has been a strong success recognized worldwide. Similar programs have been adopted in Oregon, Washington, Canada, and are under consideration in many other jurisdictions.

mistake. To put it simply, every gallon of renewable fuel or electricity that's produced eliminates a gallon of far more polluting fossil fuel. RNG can be used in many ways. And using it first and the hardest to clean up, the transportation sector is the most effective way to improve California's air quality. And my company has been producing RNG for use in both electric vehicles and natural gas vehicles. We believe a higher LCFS target of at least 35 percent, which is supported by independent studies, and the use of RNG across multiple sectors is achievable and should be supported.

Thank you.

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BOARD CLERK MOORE: Thank you for your comment.

The next commenter is LaDonnaa Williams. I have activated your microphone. Please unmute and you may begin.

LaDONNA WILLIAMS: Good evening. LaDonna

Williams.

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I would like to say to the EJAC Advisory Committee, I want to see you guys have some more backbone and push against CARB. Listening to the August 25th meeting on the 7th -- on the 7/17 meeting around racial issues that happened with one of the Committee members, Mr. Hamilton, and how he was attempting to address his incident, and to try and effect change within the agency, to hear CARB's leadership give excuse after excuse about the Bagley-Keene was the reason why they couldn't do it for investigating or setting up additional committees to look into the inner workings when it comes to racial issues, discrimination, racial equity, it was so many excuses as to why they could not accomplish it, as opposed to really being about being inclusive and addressing the real issues of racial inequities and discrimination that has been targeted specifically against black folks.

You all talk about it, but you soft pedal. You are either going to stop putting in all these resolutions to come to a solution and be about what you say you're about. If it's about environmental justice for all and equity for all, then treat us all fairly. But as we see, even a Committee member cannot get fair and equal treatment. And then you go on to tell them, well, we also don't want to talk about internal practices and

investigations, when that's exactly what you need. Any time you get 80 Black employees that have to send a note to you all anonymously afraid to come forward and address these issues. It is time to openly address them.

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And so I will continue to make these comments until we see some effective change.

BOARD CLERK MOORE: Thank for your comment.

The next commenter is Sara Gersen. I have activated your microphone. Please unmute and you may begin.

SARA GERSEN: Good afternoon. This is Sara Gersen with Earthjustice.

This evening, I'd urge the Board to think about what kind of program they would design, if they were starting from scratch, instead of updating a program from the Schwarzenegger era. Specifically, would CARB create a multi-billion dollar program that funnels nearly 80 percent of its money to combustion fuels? I believe that to these leaders would be laser focused on transforming the market to support attainment of health-based air quality standards.

Similarly, if you were starting a program from scratch, would you allow an unlimited amount of money to flow to biofuels that contribute to deforestation in the Amazon, another recent study from the National Academy of

Sciences found, are even more carbon than intensive petroleum? If the answer is no, then this aspect of the program must not continue on autopilot.

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For these reasons and for the reasons in the testimony you've heard for the past hour from environmental justice front-line communities, CARB should modernize the LCFS by adopting the recommendations in the EJAC resolution.

Thank you for your consideration.

BOARD CLERK MOORE: Thank you for your comment.

Our next commenter is Leslie M. You'll hear a prompt when I activate your microphone indicating that you may begin your comment. Please state your name for the record and you may begin.

Dial star six to unmute.

LESLIE M: Hi. We're going to give this comment in Spanish.

BOARD CLERK MOORE: Okay. We have an interpreter. Your time will be doubled.

(Translator spoke to the witness in Spanish).

MARIA AREVALOS: Hello. My name is Maria

Arevalos. I'm living in Pixley. I've been here since

1967. I've been here for over 40 years. I'm part of a

group or coalition that was formed because of the problems
that we're facing with contamination, our air and our

water. We are in Pixley. And we are defensoras. We're the defenders for clean air and clean water. That's why I'm here today and I just want to express that we feel that we've been ignored. Our petitions for clean air and clean water in Pixley have gone unanswered. What we've seen instead of progress is we've seen an increase in cows and cattle in our dairies, which of course is increasing the methane that we're seeing. This is because of the problems that are being caused by the dairy digesters in our area. It's continuing to impact the increase of methane in our area.

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Because of it, of course, there is what comes from the manure because of it. It smells horrible.

There's a smell of ammonia. It's strong. It burns our noses. It burns our eyes. That can't be healthy. Any type of odor that comes from methane gas is absolutely not healthy and it's affecting our community here in Pixley.

We see this is many investments being made. In fact, the State has made over 40 million investments for CALGreen.

It's a company that's trying to push this methane gas through pipelines that go underneath the areas in which we live. Those pipelines should not be placed under populated areas. Pixley has over 5,000 people and they're directly affected by these investments -- so-called investment that are being made for improvements.

And of course that's impacting our families.

It's affecting our families. Those who should be benefiting from these finances that's being invested in so-called betterments, but it's impacting our community, money that could be spent in day cares, in cooling centers, because it gets so hot where we live, finances or funds that can help our families lease to improve. Those who are in low-income areas or perhaps low-income families are the ones who are mostly affected.

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BOARD CLERK MOORE: Thank you. That concludes your time.

BOARD CLERK MOORE: The next commenter -- oh, okay. The next commenter is Jamie Katz, the additional speakers from Jamie Katz original speaker. I have activated your microphone. Please unmute yourself and you may begin. Each additional speaker is allotted two minutes.

JAMIE KATZ: Thank you. There's just one more. I'm speaking on behalf of David Rodriguez.

"I live in Planada, California. We are located in the Central Valley in Merced County. Population a little over 4,000. It's been designated as a severely disadvantaged community. I have lived here since 1960.

"Hillcrest Dairy arrived in 2002 with over 3,000 cows. In 2012, they were out of compliance with Merced

County with over 8,000 cows. The residents in this town have endured horrendous odors from time to time, which come from the dairy. The dairy is three-quarters, not even a mile from our town with odors filtering through Planada, methane affecting the air, and nitrates filtering into our groundwater. What chances do we have for clean air and water?

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"Global warming is no longer a theory and our subbasin in Merced County is severely overdrafted. One cow uses over 30 gallons of water. That does not include the water in the lagoon or the water used for the misters to cool down the heard. CAFOs create severely -- severe environmental impact in communities that have been designated as severely disadvantaged communities. The original program of the LCFS was to reduce carbon intensity by 10 percent in California by 2020.

"California is the most polluted State in the U.S.A. Manure management practices at California dairies account for 25 percent of the state methane emissions. California is allocated \$350 million to build digesters. If you have a program that creates incentives for dairies to generate more pollution, you will never have clean air or water that everyone in California deserves. CARB has the opportunity to implement strict regulations for all in California to prevent pollution and climate change.

"Senate Bill 1383, the 2016 legislation that solidified the methane reductions targets into State law, require CARB to perform the analysis of the incentive-based program, but it also blocked the agency from implementing any new regulations for reducing the emissions until 2024.

Thank you.

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BOARD CLERK MOORE: Thank you for your comment. That concludes all the Zoom commenters.

FACILITATOR WATKINS: Thank you very much. It's been my privilege and pleasure to facilitate your joint meeting this evening and I will now hand it over to our Chair for closing comments and adjournment.

CHAIR RANDOLPH: Okay. So first of all, I really want to thank the work of the EJAC co-chairs and the entire EJAC, because you gave us a really important list of issues and questions that we need to understand and discuss at our next Board meeting on September 82th. So I really appreciate that work. I appreciate all the commenters, all the -- both the industry folks and others. Shout-out to some of the folks from Pixley that I had a chance to meet with last month who I heard commenting as well.

And so I guess I just want to give a moment for any -- our group has kind of gotten a little small as it's

gotten really late. But any final very brief questions or comments before we adjourn?

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I will turn it over to the co-chairs first.

DR. CATHERINE GAROUPA: This is Dr. Catherine. I would just reiterate the gratitude and look forward to being able to have further conversations recognizing that we've touched on a lot of really important details today and this will be an ongoing dialogue. It definitely doesn't conclude today.

CHAIR RANDOLPH: Excellent. All right. I think we're all -- oh, sorry, Luis.

LUIS OLMEDO: Yeah. I just want to thank all the commenters and all the engagement. The -- I've made a note here that I just wanted to do a shout-out here, Jose Saldana, because I understand what he's talking about. So many programs get designed in Sacramento, but don't get calibrated to work for all our communities. I mean, after all, you know, whenever we hear, you know, equity, environmental justice, you know, climate, equity, all of this, we have expectations. And so I just want to say what -- kind of what I said earlier today is that CARB has to do a better job in getting these programs out and making sure that these financing -- financial mechanisms that are out there to address our climate crisis that turn out in opportunities for -- yeah, for our neighborhoods,

right, for our communities, so that it's not just the Wall Street model, right? But as I said early sir, you know, kind by Rey León, it's our street model too.

So with that, I'm eager to see how CARB and the Board can -- and the Executive Officer can help sort of calibrate and see how we can make it -- bring it closer to the neighborhoods to assure that there are opportunities at the local level and that they're being designed with all the -- addressing all the -- a lot of the concerns that we heard today, right? So that's all. Thank you.

CHAIR RANDOLPH: Thank you.

Jill.

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all the commenters and everybody who's stayed with us in this room, because it's really warm, which is why we've lost a few people. I just want to say that I think there does need to be a deep dive in the equity of all these programs. When they were talking about the farm and ag incentives that are given or open and available to farm and ag, I went and looked at the grant requirements real fast, and I found it fascinating that that's a program that allows for advanced payments and other programs do not. They a reimbursed based to the very people that are being harmed by these programs. Their non-profits have to come up with an advance -- a reimbursement, when the farm

and ag appears to be given an advance.

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So somehow these programs are tilted and are not equitable, and are not achieving equity. And so we have to ask ourselves what -- and I hate to say that there's some sort of insidious mechanism, but when you have CARB staff that leaves to go to industry and that they're here working with the intent that they might be doing that, you have to be cautious how these programs are built.

So I just ask that we do take a closer look at those programs that are intended to provide equity to these communities.

Thank you.

CHAIR RANDOLPH: All right. Thank you. And real quick, Matt.

MATT HOLMES: To Jill's point, and what Matt broke us down on earlier, there's a requirement for them to do a fiduciary cost-benefit analysis, but there's no requirement to do a cumulative burdens analysis on communities. There's no such thing as competitive equity. Equity means helping those who need it the most first.

CHAIR RANDOLPH: All right. Very succinct and clear. Thank you.

All right. I think that's it and we will adjourn our meeting. And I appreciate everyone's participation and hard work to prepare for this.

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## CERTIFICATE OF REPORTER

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1.3

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 30th day of September, 2023.

James & Little

JAMES F. PETERS, CSR

Certified Shorthand Reporter

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