

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA AIR RESOURCES BOARD
MARY D. NICHOLS CAMPUS
SOUTHERN CALIFORNIA HEADQUARTERS
HAAGEN-SMIT AUDITORIUM
4001 IOWA AVENUE
RIVERSIDE, CALIFORNIA

FRIDAY, NOVEMBER 8, 2024
9:04 A.M.

JAMES F. PETERS, CSR
CERTIFIED SHORTHAND REPORTER
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APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

John Balmes, MD (Remote)

Hector De La Torre

John Eisenhut

Dean Florez (Remote)

Assemblymember Eduardo Garcia (Remote)

Eric Guerra

Davina Hurt

Gideon Kracov

Tania Pacheco-Werner, PhD

V. Manuel Perez (Remote)

Cliff Rechtschaffen

Susan Shaheen, PhD

Senator Henry Stern

Diane Takvorian

Nora Vargas (Remote)

STAFF:

Steve Cliff, PhD, Executive Officer

Courtney Smith, Principal Deputy Executive Officer

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

APPEARANCES CONTINUED

STAFF:

Chanell Fletcher, Deputy Executive Officer, Environmental Justice

Annette Hébert, Deputy Executive Officer, Southern California Headquarters & 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 & Incentives

Ellen Peter, Chief Counsel

Matthew Botill, Division Chief, Industrial Strategies Division (ISD)

Rebecca Fancher, Staff Air Pollution Specialist, California Environmental Quality Act Unit

Natalie Lee, Assistant Division Chief, ISD

Rebecca Maddox, Senior Attorney, Legal Office

Greg Mayeur, Branch Chief, Program Planning and Management Branch, ISD

Dillon Miner, Staff Air Pollution Specialist, Alternative Fuels Section, ISD

Gabriel Monroe, Senior Attorney, Legal Office

Jordan Ramalingam, Manager, Alternative Fuels Section, ISD

ALSO PRESENT:

Lucia Aguilar

Whitney Amaya, East Yard Communities for Environmental Justice

APPEARANCES CONTINUED

ALSO PRESENT:

Patricia Anderson, Defensores

Ashley Arax, Clean Air Task Force

Maria Arevalo, For Contaminations En Pixley

Molly Armus, Friends of the Earth

Alfredo Arredondo, Green Hydrogen Coalition

Thomas Ashley, Voltera

Jose Avalos, Comunidad

Christine Ball-Blakely, Animal Legal Defense Fund

William Barrett, American Lung Association

Jackie Birdsall, Toyota

Melodee Black, Southern California Edison

Roy Bleckert

Michael Boccadoro, Dairy Cares

Margaret Boelter, Zeem Solutions

Dan Bowerson, Alliance for Automotive Innovation

Shannon Broome, Highly Innovative Fuels

Adam Browning, Forum Mobility

Tony Brunello, US Energy

Teresa Bui, Pacific Environment

Todd Campbell, Clean Energy

Michael Caprio, Republic Services

Jennifer Cardenas, Sierra Club

APPEARANCES CONTINUED

ALSO PRESENT:

Daniel Chandler, Climate Action California

Dan Chia, Port of Long Beach

Steve Compton, Sevana

Andrew Craig, California Bioenergy

Jesse Delacruz, Urbano Strategies

Dr. James Duffy, Former LCFS Branch Chief

Amanda Parsons DeRosier, Global Clean Energy

Fernando Marquez Duarte, People's Collective for
Environmental Justice

Steven Fenaroli, California Farm Bureau

Chad Frahm, Brightmark

Brandon Friend, GOpac

Quentin Foster, H Cycle, LLC

Laura Gallagher, Communities for a Better Environment

Noah Garcia, EVgo

Fernando Gaytan, Earthjustice

Don Gilstrap, Chevron

Asher Goldman, Generate Capital

Ambar Gomez

Macarmen Gonzalez, People's Collective for Environmental
Justice

Carlos Gutierrez, California Advanced Biofuels Alliance

Laura Rosenberger Haider, Fresnans Against Fracking

APPEARANCES CONTINUED

ALSO PRESENT:

Jamie Hall, EV Realty

Kevin Hamilton, Central California Asthma Collaborative

Jonathan Harding, American Biogas Council

Frank Harris, California Municipal Utilities Association

Faizal Hassan, Anew Climate

Scott Hedderich, Nuseed America

Jack Hedge, The Pasha Group

Miles Heller, Air Products

Ethan Hendricks, AMP Americas

Paul Hernandez

Elisia Hoffman, Electrify America

Jovan Houston, Service Employees International Union,
United Service Workers West

Gary Hughes, BioFuelWatch

Chris Hunt, Socially Responsible Agriculture Project

Vanessa Hyslop

Maya Inigo-Anderson, Communities for a Better Environment

Joe Jawad, United Steelworkers, Local 326

Benjamin Juna

Erick Karlen, Pacific Gas and Electric

James Kast, Iwatani

Jamie Katz, Leadership Counsel for Justice and
Accountability

APPEARANCES CONTINUED

ALSO PRESENT:

Yassi Kavezade, Sierra Club

Ryan Kenny, Clean Energy

Greg Kester, California Association of Sanitation Agencies

Kasey Knoell, California Bioenergy

Neil Koehler, Renewable Fuels Association

Munni Krishna, Gage Zero

Dan Lashof, World Resources Institute

Alexandra Lavy, Agricultural Energy Consumers Association

Melanie Law, National Corn Growers Association

Emily Lemei, NorCal Power Agency

Alberto Leon, Comunidad

Steve Leshner, Shell

Julia Levin, Bioenergy Association of California

Tyler Lobdell, Food and Water Watch

Jose Lopez, CalBIO

Bill Magavern, Coalition for Clean Air

Alessandra Magnasco, California Fuels and Convenience Alliance

Dr. David J. Marrett, Sierra Club

Jeremy Martin, Union of Concerned Scientists

Adrian Martinez, Earthjustice

Alondra Mateo, People's Collective for Environmental Justice

APPEARANCES CONTINUED

ALSO PRESENT:

Brian McDonald, Marathon Petroleum Corporation

Tim McRae, California Hydrogen Business Council

Lisa McGhee, Tom's Truck Center

Dr. Matt Miyasato, First Element Fuel

Adam Mohabbat, Los Angeles Clean Tech Incubator

Gracyna Mohabir, California Environmental Voters

Pete Montgomery Kern Energy

Jacqueline Moore, Pacific Merchant Shipping Association

Jodie Muller, Western States Petroleum Association

Armando Munoz, Service Employees International Union,
United Service Workers West

Colin Murphy, University of California, Davis, Institute
of Transportation Studies

Rita Nagle, Louis Dreyfus Company

Nikhil Narkar, California Bioenergy

Brent Newell, Leadership Counsel for Justice and
Accountability

Sean Newsum, Airlines for America

Chris Nevers, Rivian

Graham Noyes, Noyes Law Corporation

Yasmin Ochoa, California Bioenergy

Abigail Odoul

Erick Orellana, Community Water Center

Grecia Orozco, Center on Race, Poverty and the Environment

APPEARANCES CONTINUED

ALSO PRESENT:

Robert Parkhurst, Sierra View Solutions

Roman Partida-Lopez, The Greenlining Institute

Kathy (Catalina) Pelayo

Michael Pimentel, California Transit Association

Cynthia Pinto-Cabrera

Audry Platt

Esther Portillo, Natural Resources Defense Council

Nicole Rice, California Renewable Transportation Alliance

Spencer Reeder, Audi

Laura Renger, California Electric Transportation Coalition

Faraz Rizvi, Asian Pacific Environmental Network

Nina Robertson, Earthjustice

David Rodriguez

Gordon Russell, Louis Dreyfus Company

Phoebe Seaton, Defensoras

Ravi Sekhon, Centerline Logistics

Bonney Shehadey, California Bioenergy

Chris Shimoda, California Trucking Association

Mikhael Skvarla, California Hydrogen Coalition

Mary Solekci, World Energy

Sarah Somorai, Hyundai

Jim Stewart

APPEARANCES CONTINUED

ALSO PRESENT:

Josh Stoops, Sacramento Municipal Utility District

Elizabeth Szulc, CALSTART

Sarah Taheri, San Diego Gas and Electric, SoCalGas

Tim Taylor, National Federation of Independent Businesses

Bobby Thomas, Phillips66

Paul Townsend, POET

Ada Trujullo

Stefan Unnasch, Lifecycle Associates

James VandePutte, Raizen

Kathleen Van Osten, United Airline

Christina Velazquez

Robin Vercruse, Low Carbon Fuels Coalition

Matt Vespa, Earthjustice

Andrea Vidaurre, People's Collective for Environmental
Justice

Andrea Villarin, Los Angeles Department of Water and Power

Sam Wade, Coalition for Renewable Natural Gas

Krysta Wanner, Western Propane Gas Association

Charles Watson, Mainspring Energy

John Wenger, National Oilseed Processors Association

Allison Willis, Ag Processing, Incorporated(AGP)

Dan Willis, San Francisco Public Utilities Department

Amanda Myers Wisser, Weave Grid

APPEARANCES CONTINUED

ALSO PRESENT:

Christine Wolfe, Waste Management

Brandon Wong, Electrical Vehicle Charging Association

Peter Zonneveld, Neste

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PROCEEDINGS

CHAIR RANDOLPH: Good morning. The November 8, 2024, public meeting of the California Air Resources Board will come to order.

Board Clerk would you please call the roll.

BOARD CLERK LEVRINI: Dr. Balmes.

Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Here.

BOARD CLERK LEVRINI: Mr. Eisenhut.

BOARD MEMBER EISENHUT: Here.

BOARD CLERK LEVRINI: Senator Florez.

Assemblymember Garcia.

Mr. Guerra.

BOARD MEMBER GUERRA: Guerra present.

BOARD CLERK LEVRINI: Ms. Hurt.

BOARD MEMBER HURT: Hurt present.

BOARD CLERK LEVRINI: Mr. Kracov.

BOARD MEMBER KRACOV: Here.

BOARD MEMBER FLOREZ: Florez here.

BOARD CLERK LEVRINI: Noted thank you.

BOARD MEMBER BALMES: And Balmes is here as well.

BOARD CLERK LEVRINI: Perfect.

Dr. Pacheco-Werner.

BOARD MEMBER PACHECO-WERNER: Here.

BOARD CLERK LEVRINI: Supervisor Perez.

1 Dr. Shaheen.

2 BOARD MEMBER SHAHEEN: Here.

3 BOARD CLERK LEVRINI: Senator Stern.

4 Ms. Takvorian.

5 BOARD MEMBER TAKVORIAN: Here.

6 BOARD CLERK LEVRINI: Supervisor Vargas.

7 BOARD MEMBER VARGAS: Vargas here.

8 BOARD CLERK LEVRINI: Chair Randolph.

9 CHAIR RANDOLPH: Here.

10 BOARD CLERK LEVRINI: Madam Chair, we have a
11 quorum.

12 CHAIR RANDOLPH: I don't think you called Board
13 Member Rechtschaffen?

14 BOARD CLERK LEVRINI: My apologies. Mr.
15 Rechtschaffen.

16 BOARD MEMBER RECHTSCHAFFEN: How could you forget
17 me?

18 (Laughter).

19 BOARD CLERK LEVRINI: I know. Oh, my gosh.
20 That's crazy. I'm so sorry about that.

21 You're here.

22 CHAIR RANDOLPH: All right. Thank you. Okay.
23 We will begin with our housekeeping items, before we get
24 started.

25 We are conducting today's meeting in person as

1 well as offering remote options for public participation
2 both by phone and in Zoom. Anyone who wishes to testify
3 in person should fill out a request-to-speak card
4 available in the foyer outside the Board room. Please
5 turn it into a Board assistant prior to the commencement
6 of the item. If you are participating remotely, you will
7 raise your hand in Zoom, or dial star nine, if calling in
8 by phone. The Clerk will provide further details
9 regarding how public participation will work in just a
10 moment.

11 For safety reasons, please note the emergency
12 exit to the rear of the room through the lobby. In the
13 event of a fire alarm, we are required to evacuate this
14 room and immediately exit the building through the front
15 entrance. When the "All Clear" signal is given, we will
16 return to the auditorium and resume the hearing.

17 A closed captioning feature is available for
18 those of you joining us in the Zoom environment. In order
19 to turn on subtitles, please look for a button labeled
20 "CC" at the bottom of the Zoom window, as shown in the
21 example on the screen now. I would like to take this
22 opportunity to remind everyone to speak clearly and from a
23 quiet location, whether you are joining us in Zoom or
24 calling in by phone.

25 Interpretation services will be provided today in

1 Spanish. If you are joining us using Zoom, there is a
2 button labeled "Interpretation" on the Zoom screen. Click
3 on that interpretation button and select Spanish to hear
4 the meeting in Spanish. If you are joining us here in
5 person and would like to listen to the meeting in Spanish,
6 please notify a Board assistant and they will provide you
7 with further instructions. I want to remind all of our
8 commenters to speak slowly and pause intermittently to
9 allow the interpreters the opportunity to accurately
10 interpret your comments.

11 THE INTERPRETER: Thank you. That message will
12 now repeat in Spanish.

13 (Interpreter translated in Spanish)

14 THE INTERPRETER: And thank you.

15 CHAIR RANDOLPH: Thank you.

16 I will now ask the Board Clerk to provide more
17 details on today's procedures.

18 BOARD CLERK LEVRINI: Thank you, Chair Randolph.

19 Good morning, everyone. I will be providing
20 additional information on how public participation will be
21 organized for today's meeting.

22 We will first be calling on any in-person
23 commenters who have turned in a request-to-speak card and
24 then we will be calling on commenters who are joining us
25 remotely. If you are joining us remotely and wish to make

1 a verbal comment on one of today's Board items or during
2 the open comment period at the end of today's meeting, you
3 must be using Zoom webinar or calling in by telephone. If
4 you are currently watching the webcast on CAL-SPAN, but
5 you wish to comment remotely, please register for the Zoom
6 webinar or call in. Information for both can be found on
7 the public agenda for today's meeting.

8 To make a verbal comment, we will be using the
9 "Raise Hand" feature in Zoom. If you wish to speak on a
10 Board item, please virtually raise your hand as soon as
11 the item has begun to let us know you wish to speak. To
12 do this, if you are using a computer or tablet, there is a
13 raise-hand button. And if you are calling in on the
14 telephone, dial star nine to raise your hand. Even if you
15 previously indicated which item you will be -- you wish to
16 speak on when you registered, you must raise your hand at
17 the beginning of the item, so that you can be added to the
18 queue.

19 And for anyone giving verbal comments today in
20 Spanish and requiring an interpreter's assistance, please
21 indicate so at the beginning of your testimony and our
22 translator will assist you. During your comment, please
23 pause after each sentence to allow for the interpreter to
24 translate your comment into English.

25 When the comment period starts, the order of

1 commenters will be determined by who raises their hand
2 first. We will call each commenter by name and will
3 activate each commenter's audio when it is their turn to
4 speak. For those calling in, we will identify you by the
5 last three digits of your phone number. We will not show
6 a list of remote commenters, however, we will be
7 announcing the next three or so commenters in the queue,
8 so you are ready to testify and know who is coming up
9 next. Please note, you will not appear by video during
10 your testimony. I would also like to remind everyone to
11 please state your name for the record before you speak.
12 This is especially important for those calling in by phone
13 to testify on an item.

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

23 If you wish to submit written comments today,
24 please visit CARB's "Send Your Comments" page or look at
25 the public agenda on our webpage for links to send these

1 documents electronically. Written comments will be
2 accepted on each item until the Chair closes the record
3 for that Board item.

4 If you experience any technical difficulties,
5 please call (805)772-2715, so an IT person can assist you.

6 Thank you and I'll turn the microphone back to
7 Chair Randolph now.

8 CHAIR RANDOLPH: Thank you.

9 We have only one item on the agenda today, which
10 is Item number 24-6-2, proposed Low Carbon Fuel Standard
11 amendments.

12 If you are here with us in the room and wish to
13 comment on this item, please fill out a request to speak
14 card as soon as possible and submit it the Board
15 assistant. If you are joining us remotely and wish to
16 comment on the item, please click the raise hand button or
17 dial star nine now. We call on in-person commenters first
18 and then followed by any remote commenters when we get to
19 the public comment portion of the item.

20 Today, we are going to hear staff's regulatory
21 proposal for amendments to the Low Carbon Fuel Standard
22 Program, or LCFS. LCFS was created in response to an
23 Executive Order by Governor Schwarzenegger as an early
24 action measure to support California's foundational
25 climate legislation, AB 32. The Program was developed to

1 diversify the transportation fuel supply, decarbonize our
2 transportation sector, and improve air quality. LCFS has
3 proved extremely effective in increasing the availability
4 of low carbon transportation fuel, including electricity
5 and hydrogen for zero-emission vehicles.

6 Since the Board originally approved the Program
7 in 2009, California has tripled the quantity of low-carbon
8 fuels used in transportation and have reduced dependence
9 on fossil fuel by -- I'm sorry, on fossil diesel, by over
10 70 percent of the current demand. We know that in order
11 to be successful in addressing climate change, we must
12 continue to reduce our fossil fuel consumption and invest
13 in low carbon energy sources.

14 And let's be realistic, the tools in our toolbox
15 may become much more limited going forward. While we will
16 do everything we can to protect our authority in
17 California and our existing programs that we have to clean
18 the air, we know that we must do all we can to use our
19 existing State authority to bring clean fuels to
20 California.

21 The latest Scoping Plan update, which this Board
22 approved in December 2022, lays out a plan to achieve
23 carbon neutrality by 2045 that would also result in a 94
24 percent reduction in petroleum demand by 2045. That
25 Scoping Plan is our most ambitious climate plan ever. And

1 strengthening the LCFS's compliance targets is a key
2 action that is critical to achieving these goals.

3 This Board has taken several actions that are
4 expected to accelerate zero-emission vehicle deployment
5 and dramatically cut combustion emissions in California
6 over the coming decades, including Advanced Clean Cars II,
7 Advanced Clean Trucks, and Advanced Clean Fleets.

8 In taking action to reduce emissions through
9 increase deployment of zero-emission cars and trucks, this
10 Board recognized that successfully transitioning to
11 zero-emission vehicles will require rapid sustained
12 build-out of electricity, hydrogen, and other alternative
13 energy infrastructure necessary to support these vehicles.

14 As we move towards a clean transportation sector,
15 we know we will also need low-carbon fuel options to
16 bridge that transition. Internal combustion engines
17 vehicles will remain on our roads for some time, so we
18 need to have low-carbon fuels available for both
19 zero-emission and combustion vehicles in order to
20 successfully deplace fossil fuels -- displace fossil
21 fuels. And we must work to ensure that alternative
22 low-carbon fuels are affordable and accessible to all
23 Californians.

24 Through the past two years, and in particular
25 over the most recent special session, the Legislature and

1 the Governor have been discussing the importance of
2 ensuring affordable, equitable, and reliable fueling
3 options for Californians, as we transition away from
4 fossil fuels. What has been clear through these
5 conversations is that Californians are experiencing the
6 negative impact of our reliance on fossil fuels, whether
7 from unpredictable gas prices controlled by a small number
8 of companies, or from the climate and air quality damage
9 caused by the combustion of fossil fuels.

10 There is a path forward to a future of clean and
11 affordable energy. We've been on this path for over a
12 decade and we are seeing the benefits of our work. We are
13 diversifying our energy system, bringing online more
14 renewables and carbon -- more renewables and low-carbon
15 fuels options, providing transit, alternative modes of
16 transportation, and supporting more vehicle technologies.
17 This is giving consumers more choices and lower cost
18 fueling options, creating more competition in the
19 transportation system, and providing air and climate
20 benefits.

21 The climate policies California has developed,
22 including our clean vehicle regulations, the LCFS Program,
23 and many others, supported by partnerships across
24 government, the private sector, advocacy groups, and the
25 public are moving us toward a cleaner and healthier

1 future. And we need to continue this work. In
2 California, we are all too familiar with the impacts of
3 climate -- the climate crisis and the threat it poses to
4 our state's economic well-being, public health, natural
5 resources and environment. And so recognizing this, our
6 State leaders and representatives have set these ambitious
7 goals for cutting California's greenhouse gas emissions.

8 The amendments we are considering today will
9 strengthen LCFS program, so it will continue to help us
10 achieve these goals. It will -- the amendments will both
11 accelerate the deployment of low-carbon fuel options, and
12 establish long-term policy and market signals to support
13 the large scale energy transition called for in the 2022
14 Scoping Plan.

15 Over the past two years, we've met jointly with
16 the Environmental Justice Advisory Committee twice on
17 LCFS, we have held an informational Board hearing, and we
18 have engaged with numerous stakeholders on this important
19 program. The Board members and staff have been thoughtful
20 and diligent in considering all of this feedback.

21 Before I turn this over to Executive Officer Dr.
22 Cliff, I want to touch on the topic of affordability. We
23 cannot afford to continue with the status quo. As I
24 mentioned before, the climate crisis is accelerating
25 extremely events, such as wildfires, hurricanes, droughts,

1 and flooding. The health and economic impacts of these
2 events are vastly underestimated by metrics such as the
3 social cost of carbon, but we know that they are
4 significant. We must continue to chart a path away from
5 fossil fuels, while designing policies that protect for
6 and mitigate against and avoid other harms.

7 Any action today by the Board is not a
8 conclusion, but an important milestone in the evolution of
9 this innovative and critical climate policy.

10 Dr. Cliff, would you please introduce this item.

11 EXECUTIVE OFFICER CLIFF: Thank you, Chair
12 Randolph. Staff is presenting a proposed update to the
13 Low Carbon Fuel Standard, or LCFS. Staff presenting and
14 informational item to the Board last September that
15 provided and overview of the Program and initial concepts
16 staff were considering for the upcoming rulemaking.

17 Today staff is presenting staff's recommendations
18 for amendments to the regulation following an extensive
19 multi-year public process that included a dozen public
20 workshops and community meetings, participation in several
21 Environmental Justice Advisory Committee, or EJAC,
22 meetings, dozens of stakeholder meetings, and review of
23 thousands of public comments.

24 The LCFS is one of the State's most important and
25 influential climate programs. Low carbon alternative

1 fuels supported by the LCFS Program, displaced nearly five
2 billion gallons of petroleum fuel in 2023 alone. Staff
3 developed the proposed amendments to the LCFS in response
4 to updates to our statewide carbon neutrality and
5 associated emission reduction goals from AB 1279 and the
6 2022 Scoping Plan update. There is no path to achieving
7 our climate or air quality goals without reducing
8 emissions from the transportation sector.

9 These amendments are intended to strengthen the
10 Program by increasing the stringency of the annual
11 required carbon intensity reductions and sending clear,
12 long-term market signals to support investment in
13 low-carbon fuel production and technologies that are
14 needed to achieve deep emission reductions in the
15 transportation sector. The amendments also align with the
16 role of the Low Carbon Fuel Standard Program envisioned in
17 the rulemaking analyses for our light-, medium-, and
18 heavy-duty vehicle regulations.

19 California is not alone in its effort to
20 decarbonize the transportation sector. Other states and
21 regions have zero-emission vehicle policies and LCFS-like
22 programs that are being implemented across other states
23 and nations.

24 Before staff begins the presentation, I want to
25 thank the staff sitting behind me and on the LCFS team for

1 their sustained and diligent efforts to meet with all
2 stakeholders and consider all the feedback in developing
3 the proposed amendments. Science shows climate change is
4 accelerating and the staff proposal builds on robust
5 science to find cost effective and technologically
6 feasible solutions to meet the statutory targets to reduce
7 greenhouse gas emissions.

8 I will now ask Dillon Miner of the Industrial
9 Strategies Division to begin the staff presentation.

10 Dillon.

11 (Slide presentation).

12 ISD STAFF AIR POLLUTION SPECIALIST MINER: Thank
13 you, Dr. Cliff, and good morning, Chair Randolph and
14 members of the Board.

15 [SLIDE CHANGE]

16 ISD STAFF AIR POLLUTION SPECIALIST MINER: For my
17 presentation today, I'll provide a background on how the
18 Low Carbon Fuel Standard, or LCFS, supports the State's
19 decarbonization and air quality goals. I will provide an
20 overview of the LCFS's current status with highlights of
21 some of our achievements to date. We'll then move into
22 the regulatory proposal, including the public process,
23 proposed amendments, next steps, and staff recommendation.

24 [SLIDE CHANGE]

25 ISD STAFF AIR POLLUTION SPECIALIST MINER: As we

1 consider the future of California's transportation
2 policies, we need to keep our air quality challenges in
3 the forefront. About half of Californians breathe
4 unhealthy air, despite all the progress we've made over
5 the past 50 years. Transportation accounts for roughly 50
6 percent of greenhouse gas emissions, 40 percent of
7 particulate area, and 60 percent of oxides of nitrogen in
8 California. While the focus of the LCFS is to decarbonize
9 transportation, it also provides meaningful air pollution
10 reductions from the sector by incentivizing use of
11 low-carbon fuels.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST MINER:

14 Statutory direction in the AB 1279 calls for
15 California to achieve carbon neutrality and reduce
16 emissions by 85 percent below 1990 levels by 2045, and
17 reduce emissions by at least 40 percent below 1990 levels
18 by 2030. The LCFS supports these statutory targets by
19 providing financial support to our zero-emission vehicle
20 regulations and deployment of cleaner alternative fuels.
21 Many of the strategies that we are using to address
22 climate change are the same strategies that will also
23 drastically improve air quality. Fossil fuel use in
24 vehicles is the single biggest source of greenhouse gas
25 and criteria pollutant emissions in the state.

The LCFS is a key part of that strategy. The LCFS provides the economic incentives for the private sector to produce and lower the cost of cleaner fuels like electricity, hydrogen, and biofuels, and to build charging and hydrogen fueling infrastructure, all of which is needed to displace fossil fuels and reduce transportation sector emissions.

ISD STAFF AIR POLLUTION SPECIALIST MINER: The amendment staff is proposing today align with the long-term planning documents approved by the Board, including the State Implementation Plan to achieve federal and State air quality goals and the AB 32 Scoping Plan. LCFS is included in the analyses for ZEV regulations to support ZEV deployment and operation through the cost reductions and infrastructure deployment. The proposed amendments align with how the Program is envisioned in the ZEV regulations already adopted by CARB.

1 [SLIDE CHANGE]

2 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
3 LCFS supports successful implementation of California's
4 existing ZEV regulations by reducing the cost of
5 electricity and hydrogen fueling, making it more
6 financially viable to deploy and fuel ZEV technology, and
7 expanding the availability of ZEV charging and fueling
8 infrastructure. And this extends beyond the on-road fleet
9 as well. The LCFS is also providing significant support
10 to electrified shore power, as well as zero-emission
11 forklifts, cargo handling equipment, and transport
12 refrigeration units.

13 [SLIDE CHANGE]

14 ISD STAFF AIR POLLUTION SPECIALIST MINER: We
15 know we want a zero-emission future, but the transition
16 must be managed. As a follow-up to the 2022 Scoping Plan
17 update, CARB and the California Energy Commission are
18 developing a transportation fuels assessment and a
19 transportation fuels transition plan per direction of
20 SBX1-2, to discuss and plan for this transition. As
21 directed by the -- by statute, this effort is focused on
22 ensuring that the supply of transportation fuels is
23 affordable, reliable, equitable, and adequate during this
24 period of declining demand for fossil fuels. As leaders
25 in sustainable transportation and strategies for emission

1 reductions, California has pushed hard to support the
2 zero-emission vehicles market. The proposed LCFS
3 amendments are designed to support this transition away
4 from fossil fuels by ensuring investment in both electric
5 charging and hydrogen fueling infrastructure, and the
6 zero-emission vehicles that will replace combustion
7 transportation, while providing alternative liquid fuels
8 for legacy vehicles. The proposed amendments look to the
9 future of the program over the next several decades and
10 take into account California's unique policy landscape and
11 ambitious statutory decarbonization targets.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST MINER: Great.
14 Thanks.

15 California's LCFS has been very successful so
16 far. And other countries and states are adopting or
17 considering LCFS programs of their own modeled after
18 California. There are currently three other states that
19 established low-carbon fuel markets following CARB's
20 example, and eight more states have proposed legislation
21 to create markets. This speaks to both successes of LCFS
22 and the importance of creating robust policies that create
23 a clear and replicable path for transitioning away from
24 fossil fuels and towards alternatives with lower
25 emissions.

1 The LCFS -- next slide.

2 [SLIDE CHANGE]

3 ISD STAFF AIR POLLUTION SPECIALIST MINER:

4 Thanks.

5 The LCFS was created to diversify California's
6 transportation fuel supply, decarbonize our transportation
7 sector, and improve air quality. It does this by setting
8 a declining carbon intensity target for California's
9 transportation fuels. This encourages the development of
10 clean fuel production and use by providing these producers
11 with marketable credits that they can sell to other fuel
12 producers who are required to lower the life cycle
13 greenhouse gas missions, or carbon intensity, of their
14 produced fuels.

15 LCFS credits and deficits are denominated in
16 metric tons of greenhouse gas emissions. The Program
17 works by:

18 Including an annual declining carbon intensity
19 target in the regulation for transportation fuels used in
20 California. If you look at the chart on the slide, you'll
21 see the current targets are represented by the black line
22 and the dots on the chart.

23 The lower carbon -- the lower carbon a fuel is,
24 the more credits can be generated in the Program per
25 volume of that fuel. In this way, the Program is designed

1 to reward the lowest carbon fuels.

2 High-carbon fuels, such as fossil gasoline and
3 fossil diesel, have carbon intensities that are higher
4 than the annual carbon intensity target. These
5 high-carbon fuels generate deficits, and
6 deficit-generators must acquire and retire credits to
7 comply with the annual target.

8 As the CI targets get lower each year,
9 credit-generating fuels generate fewer credits by volume.
10 Some fuels, depending on their CI scores, may eventually
11 flip from being a credit generator to a deficit generator.
12 In this way, the LCFS structure creates a strong incentive
13 to deploy only the lowest carbon-intensity fuels to
14 California and to continually innovate to reduce the
15 carbon intensity of existing fuels.

16 The Program has outperformed our existing CI
17 targets and exceeded our 2026 target three years early,
18 meaning even more reductions are happening than
19 anticipated. The private sector has responded to the
20 signals in the existing Program faster than we anticipated
21 and we have an opportunity to strengthen the ambition of
22 the Program and align with the 2022 Scoping Plan.

23 [SLIDE CHANGE]

24 ISD STAFF AIR POLLUTION SPECIALIST MINER: It's
25 important to remember where we started. In 2006, when AB

1 32 became law, the State used almost exclusively fossil
2 fuels. Since that time, and thanks in large part to the
3 LCFS, California has increased alternative fuel volumes
4 from five percent of the total fuel -- transportation fuel
5 pool in 2006 to 23 percent in 2023, and have significantly
6 diversified the fuel sources and types used in the state.

7 [SLIDE CHANGE]

8 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
9 LCFS has been one of California's most effective policy
10 tools for speeding up the transition away from fossil
11 fuels without relying on any public sector funding. The
12 Program has generated approximately \$4 billion annually in
13 private sector investment in cleaner transportation fuels
14 and options.

15 The private sector investment ultimately keeps
16 money in Californian's pockets through: increasing
17 consumer choices, which drives transportation fuel price
18 competition; growing new industries and attracting
19 investments that support jobs and strengthen communities;
20 reducing dependence on petroleum, the oil industry, and
21 thereby reducing -- thereby protecting customers from its
22 associated supply and cost volatility; making electric
23 vehicles more affordable; expanding access to electric
24 vehicle charging and hydrogen refueling infrastructure;
25 reducing health care costs -- and reducing health care

1 costs associated with the air pollution from fossil fuel.

2 And underneath these stats on this slide are
3 stories of how the LCFS has helped spur investment in
4 clean energy here in California. We're seeing refineries
5 transition from fossil fuel production to renewable fuel
6 production, publicly owned utilities using LCFS revenue to
7 invest in EV infrastructure and supporting communities
8 with rebates and other incentives to reduce transportation
9 electrification costs, dairies using the Program
10 incentives to capture methane and even produce hydrogen
11 and electricity for use in transit buses, EV charging
12 companies utilizing the LCFS to build more fast chargers,
13 transit agencies using LCFS to support on going operations
14 of zero-emission buses and electrified rail, and trucking
15 companies receiving upwards of a thousand dollars per
16 month in LCFS revenue per battery electric truck to help
17 close the gap between diesel and BEV truck costs.

18 [SLIDE CHANGE]

19 ISD STAFF AIR POLLUTION SPECIALIST MINER: And
20 it's because of the reporting and data collection
21 provisions of the LCFS Regulation and other State-led
22 climate programs that we're able to see this transition
23 happen and learn about these investments. The regulation
24 in the proposed amendments in front of the Board today
25 have detailed reporting and verification requirements,

1 which provide unprecedented transparency in the
2 transportation fuels market, and allows CARB to provide
3 detailed information about how low-carbon fuel production
4 processes, feedstocks, and emissions to the public.

5 CARB staff posts LCFS information quarterly,
6 including fuel volumes and credits, credit prices and
7 transactions, fuel and feedstock volumes, and carbon
8 intensity values for approved fuel pathway production.
9 This data gives the public and market participants clear
10 line-of-sight on the investment landscape and progress
11 towards meeting California's climate goals.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST MINER: Staff
14 publishes a substantial amount of Program data on the LCFS
15 data dashboard with frequent updates on of the Program's
16 progress, each of these with the underlying data posted
17 publicly on our website. As a quick sampling, this
18 dashboard displays information including:

19 [SLIDE CHANGE]

20 ISD STAFF AIR POLLUTION SPECIALIST MINER:
21 Progress decarbonizing transportation and
22 achieving future compliance targets;

23 [SLIDE CHANGE]

24 ISD STAFF AIR POLLUTION SPECIALIST MINER:
25 Monthly credit prices reported by CARB and third

1 parties, as well as credit and deficit generation;

2 [SLIDE CHANGE]

3 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
4 share of alternative fuels produced in state versus out of
5 state;

6 [SLIDE CHANGE]

7 ISD STAFF AIR POLLUTION SPECIALIST MINER:
8 Detailed historical data on fuels and feedstocks
9 for all fuels reported in our Program from the quarterly
10 data summary spreadsheet;

11 [SLIDE CHANGE]

12 ISD STAFF AIR POLLUTION SPECIALIST MINER: And
13 other CARB publications, such as progress toward replacing
14 fossil fuels with alternatives to achieve sector-wide
15 emission reductions. There's a lot more on the webpage
16 that I didn't touch on, including a running list of all
17 the fuel pathways certified by the Program, a list of
18 accredited verifiers, and more.

19 The main points is that we work very hard to
20 maintain transparency with regard to Program operations,
21 so that the public can evaluate the Program for
22 themselves. And with this rulemaking proposal and the
23 resolution in front of the Board today, we are proposing
24 even greater increases in transparency on Program data.

25 [SLIDE CHANGE]

1 ISD STAFF AIR POLLUTION SPECIALIST MINER: We
2 have also heard feedback about the cost of implementing
3 the LCFS program and wanted to address this directly. The
4 LCFS credit prices are not a major driver of retail fuel
5 prices in California. As you can see from this chart,
6 LCFS credit prices and the retail price of gasoline in
7 California do not track together in any meaningful way.
8 Climate action will have some costs, and statutory
9 mandates direct CARB to develop cost-effective programs.
10 The LCFS does this. Instead of direct regulations on fuel
11 providers, the LCFS provides compliance flexibility that
12 companies can adapt to their own needs and keep compliance
13 costs low.

14 We've previously presented this graph on the left
15 and received questions about the source of the analysis.
16 I wanted to clarify that the data for the graph comes from
17 two public government data sources. The red line, which
18 represents LCFS credit -- monthly credit prices comes from
19 CARB's own data on reported LCFS credit prices, and the
20 blue line, which represents the average monthly California
21 gasoline prices, comes from EIA published data. Our goal
22 here is simple and it's to show that any claims that LCFS
23 is somehow responsible for high gas prices is misleading
24 at best and not supported by the historical data.

25 [SLIDE CHANGE]

1 ISD STAFF AIR POLLUTION SPECIALIST MINER: Fuels
2 pricing that consumers pay at the pump is affected by many
3 different variables. State agencies have examined data on
4 retail gasoline prices between 2019 and 2023. The LCFS
5 and other environmental programs contributed to roughly
6 six percent of the increase in retail gas prices during
7 this time period. Federal, State, and local taxes
8 accounted for 12 percent. These costs are largely stable
9 and far lower than the other variables that impact the
10 volatility of retail gasoline prices, including the cost
11 of crude oil and the market behavior of petroleum
12 refiners, which influences over 80 percent of the retail
13 gasoline prices paid by consumers.

14 It is also worth noting that the environmental
15 fees and taxes paid by gasoline consumers yield direct
16 benefits to Californians in the form of, for example,
17 improved air quality and safer roads and highways. This
18 cannot be said for the other costs embedded in retail
19 gasoline prices that consumers pay per gallon of gasoline.

20 While higher carbon intensity fuel producing
21 entities can shift the cost of compliance with LCFS to
22 consumers, they do not have to. Fuel producers have
23 different strategies for complying. Some might produce
24 cleaner, lower carbon intensity fuels themselves
25 potentially benefiting the incentives. Others may buy

1 credits at current credit market prices or forward
2 contracts. These dynamics and choices from entities
3 participating in the Program make it exceedingly difficult
4 to predict with any confidence whether high CI
5 fuel-producing entities will pass these costs onto
6 consumers or absorb them, making it challenging to
7 accurately determine the exact impact on retail gasoline
8 prices paid by consumers.

9 [SLIDE CHANGE]

10 ISD STAFF AIR POLLUTION SPECIALIST MINER:

11 Nonetheless, CARB is responsible for finding
12 cost-effective solutions to achieve statutorily mandated
13 climate and air quality targets. Affordability continues
14 to be a guiding consideration in all of our regulatory
15 activities, including the administration of the LCFS
16 Program, which is designed to create of flexible market,
17 where participating entities have many compliance options
18 and can find the most cost-effective way to advance clean
19 lower carbon intensity transportation fuels. This is the
20 whole point of the LCFS Program, to create an economically
21 efficient, least cost pathway for diversifying the state's
22 transportation fuels with lower carbon intensity fuels,
23 rather than pursuing more direct and potentially more
24 costly measures.

25 One way the LCFS reduces energy costs is by

1 diversifying and expanding the fuel supply. For example,
2 electricity, renewable diesel, and ethanol currently
3 provide affordable alternatives to petroleum diesel and
4 gasoline. Just as importantly, the LCFS provides a market
5 for greater -- for a significantly greater number of clean
6 fuel producers, allowing for greater competition and lower
7 fuel rates when compared to smaller and more concentrated
8 number of fuel -- of petroleum fuel producers today, thus
9 increasing competition and putting downward pressure on
10 prices.

11 [SLIDE CHANGE]

12 ISD STAFF AIR POLLUTION SPECIALIST MINER: We
13 have heard concerns about our preliminary economic
14 analysis in -- from September 2023, which provided an
15 initial analysis of the costs and benefits of the proposed
16 regulation. As staff noted in the SRIA, predicting how
17 LCFS credit prices change -- changes impact re --
18 predicting how LCFS credit prices change -- credit price
19 changes impact retail prices is beyond the scope of the
20 work. The cost estimates in the SRIA and any estimate of
21 cost incurred by the LCFS regulatory proposal are
22 inherently uncertain, because they involve conducting
23 estimates and speculative productions -- projections
24 around what may happen in the future.

25 CARB is not able to predict the future where it's

1 likely that we will see different and expected changes in
2 the demand for fossil fuels, in different levels of
3 competition that will drive down alternative fuel costs in
4 unknown ways, different rates of ZEV and alternative fuel
5 adoption, new and innovative fuels that we're not aware
6 of, new and unexpected climate policy changes at the
7 federal and State levels, and other unknown variables.
8 All of these unknowns make speculating on what future fuel
9 prices will be, not only inherently incorrect, but also
10 misleading.

11 There is a history of previous rulemaking SRIAs
12 for the LCFS overestimating the pass-through cost. And
13 CARB considers the \$0.47 estimate cited by many critics of
14 the Program to also be an overestimate.

15 Finally, I want to note that in response to the
16 questions about pass-through costs to consumers, and in
17 support of our ongoing transparency efforts, CARB staff
18 has published a number of documents recently on our LCFS
19 website on compliance costs and retail costs.

20 [SLIDE CHANGE]

21 ISD STAFF AIR POLLUTION SPECIALIST MINER: I want
22 to emphasize that counter to fossil fuel producer's
23 argument, continued reliance on fossil fuels will not save
24 Californians money. If we rely on fossil fuels instead of
25 pursuing low-carbon fuels and zero-emission vehicles,

1 Californians will continue to experience health impacts
2 and more extreme weather events due to increased
3 combustion emissions from fossil fuel use. The cost of
4 action to meet our climate goals is estimated to be
5 one-fourth the cost we currently pay from health impacts
6 of fossil fuel's air pollution alone.

7 The Fifth National Climate Assessment released in
8 2023 ranks California among the top five states suffering
9 economic effects from climate-related natural disasters.
10 Climate impacts are happening with more frequency and
11 intensity than expected and will continue to pose health
12 and economic risk to the state.

13 [SLIDE CHANGE]

14 ISD STAFF AIR POLLUTION SPECIALIST MINER: Rather
15 than accept the status quo of continuing to combust fossil
16 fuels that also fuel climate change, California has chosen
17 a different path. The Legislature passed AB 1279 which,
18 based on the latest science, directs California to achieve
19 carbon neutrality by 2045. Based on the Board-approved
20 2022 Scoping Plan update, we need to reduce greenhouse gas
21 emissions by 48 percent or more below 1990 levels by 2030
22 to be on a path to achieve the AB 1279 carbon neutrality
23 target.

24 As the largest contributing sector in the state,
25 transportation must decline quickly, but the current

1 regulation only requires 20 percent reduction and carbon
2 intensity of transportation fuels by 2030 with no further
3 improvement required. The necessary speed and scale of
4 technology deployment from hydrogen production to clean
5 fuel infrastructure to zero-emission vehicles sales will
6 not be achieved without more ambitious carbon intensity
7 targets and the financial incentives associated with those
8 targets. These investments will also result in an -- in
9 important air quality benefits by helping to reduce
10 pollution that will aid in meeting federal air quality
11 standards. All paths to achieve a sustainable planet and
12 protect public health require us to transition away from
13 fossil fuel combustion.

14 [SLIDE CHANGE]

15 ISD STAFF AIR POLLUTION SPECIALIST MINER: As
16 we've developed the rulemaking updates, we focused our
17 efforts on a number of key concepts. These objectives are
18 aligned to the 2020 Scoping Plan update, as well as
19 comments and input we've received from the Board and
20 others.

21 These concepts include: increasing the stringency
22 of the Program to displace fossil fuels; supporting
23 electric, and hydrogen production, and infrastructure to
24 aligned with the transition to ZEVs and pivot away from
25 low-carbon combustion fuels; strengthening equity

1 provisions to promote investment in disadvantaged,
2 low-income, and rural our communities; and leveraging
3 federal incentives and avoiding investment disruptions.

4 [SLIDE CHANGE]

5 ISD STAFF AIR POLLUTION SPECIALIST MINER: As
6 everyone here is aware, we've been working on this for a
7 while. Throughout the last three years, staff made
8 extensive efforts to share information publicly and
9 transparently. Staff held 10 public workshops beginning
10 in late 2021 on potential LCFS changes. For every
11 workshop, we posted the workshop slides, workshop
12 recordings and public comment dockets. We have had three
13 workshops specifically dedicated to modeling work that
14 support staff's regulatory analysis and we also posted
15 detailed technical documentation on the model, the
16 modeling input sheets used to run the model, and the
17 modeling tool that we used. We did this to provide
18 transparency in our modeling approach and to solicit
19 feedback that we used to update and improve model, and
20 publicly release updates over time.

21 We also held two community workshops on the LCFS
22 in the evening hours with multiple languages. This was a
23 first for the LCFS, but something we felt was important to
24 do, particularly given requests from this Committee about
25 enhancing community engagement on these programs. We've

1 already held two informational Board hearings on the LCFS
2 prior to today's Board meeting. We first held a joint
3 hearing with our Board members and the EJAC Committee and
4 then a second information hearing with the Board to gather
5 input and feedback from them on this Program.

6 At these workshops, meetings and Board hearings,
7 we've publicly posted our materials and opened comment
8 dockets to solicit feedback on those materials and these
9 meetings. We've received substantial comments. All of
10 this is available on CARB's website.

11 [SLIDE CHANGE]

12 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
13 comments and feedback we received from our stakeholders
14 have been diverse. It's impossible to capture every
15 comment on just one slide, but this snapshot is meant to
16 give you a sense of the feedback that has come to staff.

17 We've been asked to: strengthen carbon intensity
18 targets and provide long-term price signals; maximize
19 crediting opportunities; incentivize development of
20 innovative fuels; reduce use of combustion fuels;
21 eliminate biomethane from the Program; continue support
22 for biomethane and prevent stranding assets; limit or cap
23 crop-based biofuels; expand the use of crop-based biofuel
24 crediting; concentrate health and economic benefits in
25 communities burdened by the current transportation system;

1 and provide a mix of low-carbon transportation incentives
2 to communities.

3 In short, we've received feedback on both sides
4 of most topics in this rulemaking with topics ranging from
5 independent modeling analysis, to refinements to the CATS
6 Model, to community's lived experiences living with
7 pollution from combustion, to global feedstock economics
8 and supplies. We've been engaged with stakeholders to
9 adjust, refine, and improve the regulatory amendments to
10 create long-term signals for investment in low-carbon
11 fuels that will expedite the transition to zero-emission
12 transportation, reduce emissions from combustion in the
13 short term, and prevent potential externalities wherever
14 possible.

15 Now, we recognize that this is not a perfect --
16 that this is not a perfect proposal and that every
17 stakeholder has additional revisions they would like to
18 see reflected. We will continue to work with our
19 stakeholders to improve the Program, but feel that this
20 proposal strikes a balance that respects commitments to
21 provide clarity and stability to the market, integrates
22 policy changes that send clear signals to move rapidly
23 away from combustion, and provides finances to reach
24 carbon neutrality with zero-emission transportation.

25 [SLIDE CHANGE]

1 ISD STAFF AIR POLLUTION SPECIALIST MINER: Along
2 the way, we have posted a tremendous amount of
3 supplemental information for the sake of transparency, and
4 so our stakeholders could check our work. These are
5 snapshots of our supplemental modeling webpage. Each of
6 those links is in Excel workbook that contains detailed
7 modeling inputs and outputs for our scenario modeling,
8 including underlying assumptions. In addition, we also
9 posted the air quality analysis workbook for the EJAC
10 scenario, which closely tracked the scenario recommended
11 by the EJAC. We are held to a high standard on our
12 transparency and have taken great pains to put out the
13 relevant information to understand the scope and impacts
14 of the proposed amendments.

15 [SLIDE CHANGE]

16 ISD STAFF AIR POLLUTION SPECIALIST MINER: With
17 regard to the rulemaking concepts, the first and most
18 impactful proposed amendment is to increase the stringency
19 of the compliance targets through 2030 and to establish
20 more stringent post-2030 targets to match the greenhouse
21 gas reduction targets called for in the 2022 Scoping Plan
22 update and AB 1279. Over the last three years, renewable
23 diesel production and electricity crediting have grown
24 rapidly and have highlighted the market stability to
25 decarbonize faster. We currently have a credit bank

1 larger than the cumulative deficits from the entire last
2 year.

3 Therefore, we propose increasing the 2030 target
4 from 20 percent to 30 percent. Staff's analysis shows
5 that while it may be possible to exceed this target, it
6 will depend on both steady growth of zero-emission vehicle
7 populations in line with CARB regulations and consistent
8 production and sale of renewable diesel.

9 Given recent fluctuations and global trade
10 dynamics and uncertainties in vehicle miles traveled and
11 the state of the economy, staff is proposing a nine
12 percent stepdown in CI stringency in 2025 to balance the
13 market in the near term, while maintain the 2030 CI target
14 reduction of 30 percent.

15 Additionally, staff are proposing an automatic
16 acceleration mechanism -- automatic adjustment mechanism,
17 termed AAM, that could increase the stringency of the
18 Program starting in 2028, if key market factors align and
19 credit generation exceeds what is needed to comply. The
20 AAM is counterbalanced by a cost containment mechanism
21 that is already in the regulation, and which prevents
22 costs exceeding a maximum price.

23 With the increased stringency, AAM and CCM, staff
24 proposed that a 30 percent 2030 target provides a balanced
25 path forward that achieves substantial greenhouse gas

1 reductions, while acknowledging the potential for future
2 lags in ZEV adoption and renewable diesel consumption.

3 [SLIDE CHANGE]

4 ISD STAFF AIR POLLUTION SPECIALIST MINER: When
5 staff think about the LCFS and the future of the
6 transportation fuels market, we look at the whole
7 transportation fuel system. We're thinking about the
8 nearly 30 million vehicles driven in California, which
9 includes all the passenger cars and trucks driven up and
10 down California's roadways, and how we can move those
11 vehicles away from fossil fuels and support those fuels in
12 vehicles that emit less greenhouse gases and less harmful
13 air pollution.

14 One of the important questions we need to
15 consider is what will the vehicle population look like in
16 the future? This slide shows the total vehicle stocks,
17 not just new vehicles purchases that will result from
18 implementation of California's Advanced Clean Cars II
19 Regulation. California is making significant strides here
20 where approximately one in four new light-duty vehicle
21 purchases recently have been EVs. But even with those
22 significant accomplishments, ZEVs still represent a
23 fraction of the total vehicles driving on the road. If we
24 are successful in implementing our vehicle regs by 2030,
25 one in five of the vehicles on the road will be ZEVs. It

1 also means that there will still be over 20 million
2 internal combustion engine vehicles consuming gasoline on
3 the road in 2030.

4 [SLIDE CHANGE]

5 ISD STAFF AIR POLLUTION SPECIALIST MINER: For
6 heavy-duty vehicles, we'll see a longer turnover time than
7 the light-duty market. These trucks have long vehicle
8 lifetimes, and unlike the light-duty market, the ZEV
9 market for heavy-duty vehicles is still developing. If
10 we're successful in implementing our Advanced Clean Fleets
11 and Advanced Clean Trucks regulations, we expect that the
12 liquid fuel demand for these trucks will still be high
13 through the end of this decade and into the early 2030s.
14 This is why it's important that we do not remove crediting
15 for biofuels, which displace fossil fuel diesel in the
16 interim years until ZEVs have higher deployment levels.

17 As a quick side note here, we've received
18 feedback that we may not be able to accurately predict the
19 future of ZEV deployment and fuel demands. And I want to
20 say, yes, it's true that the future is uncertain and that
21 it is possible that ZEV deployment in both the light-duty
22 and heavy-duty could exceed the regulatory requirements.
23 If that happens, that would be a great outcome for the
24 State. When we do regulatory analysis like we're doing
25 here for the LCFS however, we must rely on conservative

1 assumptions that regulations are implemented as they are
2 written, which means relying on the ZEV deployment and
3 adoption rates for the rulemakings.

4 If, for example, we update the LCFS and then find
5 in a few years time that we had underestimated future ZEV
6 employment, we always have the option to open an LCFS
7 rulemaking to reflect this new future.

8 [SLIDE CHANGE]

9 ISD STAFF AIR POLLUTION SPECIALIST MINER: We've
10 received some comments and concerns on the rulemaking that
11 LCFS is supporting biofuels at the expense of ZEV
12 deployment, so we wanted to provide some data on the
13 Program and the proposed amendments to show how the LCFS
14 has helped ZEV deployment historically. We also wanted to
15 share some data from staff's analysis about how the
16 proposed regulation would continue to support ZEV
17 deployment, even with liquid biofuels remaining part of
18 the Program.

19 This slide quantifies the historic -- historical
20 support from ZEV -- for ZEV operations and infrastructure.
21 Through the third quarter of 2023, dispensed electricity
22 for EV charging has generated credits worth \$1 billion,
23 and dispense the electricity -- sorry, and dispense
24 hydrogen about \$32 million. That's just the fuel side of
25 things.

1 Electric vehicle chargers and hydrogen refueling
2 stations have also received a lot of support from the
3 LCFS. Since becoming eligible in the first quarter of
4 2019, public fast chargers have generated credits worth
5 approximately \$40 million, which has supported over 4,100
6 chargers in California. Hydrogen stations have also
7 received around \$60 million with 71 stations approved to
8 date. And if infrastructure provisions were fully
9 utilized, this credit revenue could be worth two to four
10 times as much.

11 I'll also note that this table does not include
12 ZEV infrastructure investment by the utilities using
13 revenue from base credit proceeds. Funding ZEV
14 infrastructure development has always been an eligible use
15 of base credit proceeds issued to the utilities for
16 residential charging. Looking to the future of the
17 program, we estimated that -- the credit value that might
18 flow to different fuels in 2045. Based on the modeling
19 from staff reported -- from the staff reported proposed
20 scenario, we support that -- we estimate that EV charging
21 could generate \$3 billion in LCFS revenue in 2045 alone,
22 and hydrogen could generate \$770 million.

23 Hydrogen's role is expected to grow. Combustion
24 fuels such as biomethane, renewable diesel, and biodiesel
25 were not -- were either not picked in the modeling or

1 because deficit generating and resulted in credit
2 generation in 2045 under this scenario.

3 [SLIDE CHANGE]

4 ISD STAFF AIR POLLUTION SPECIALIST MINER: Staff
5 is proposing to create new ZEV infrastructure provisions
6 that include medium- and heavy-duty vehicles, in addition
7 to the existing provision for light-duty vehicles. If the
8 full five percent of credits for each EV charging and
9 hydrogen stations was utilized, these new capacity credits
10 could be worth over 720 million in 2030 and over 870
11 million in 2035.

12 What I hope to convey here is that the LCFS is
13 aligned with CARB's ZEV regulations, and provides critical
14 support for their implementation, and that this alignment
15 across the LCFS NZEV regulations also fits under the
16 broader climate and air quality strategy that we have for
17 this state.

18 [SLIDE CHANGE]

19 ISD STAFF AIR POLLUTION SPECIALIST MINER: Some
20 stakeholders have pointed out that the majority of credits
21 in the LCFS have historically gone to combustion fuels,
22 and that's true. This is because to date ZEV populations
23 have not taken command of the vehicle fleets, so the
24 opportunities to credit ZEV technology have been limited
25 by vehicle populations.

1 However, this trend will reverse itself in the
2 coming years with the implementation of ZEV regulations in
3 California. Based on modeling from the staff report, from
4 2025 to 2045, staff estimates that EV charging credits
5 could be worth over \$100 billion, dispensed hydrogen could
6 be worth approximately \$8 billion. These values dwarf
7 biodiesel and renewable diesel, which would earn declining
8 credit volumes until the early 2030s and would net 764
9 million in costs over that same period. This is because
10 their carbon intensity surpassed the CI target in the
11 early 2030s, at which point they generate deficits instead
12 of credits. This is where the Program is heading under
13 the proposed amendments. In addition, fossil fuels are
14 deficit generators and do not receive credits in the LCFS.

15 [SLIDE CHANGE]

16 ISD STAFF AIR POLLUTION SPECIALIST MINER: We
17 also want to demonstrate how the LCFS has supported
18 transit and other clean equipment. Transit systems and
19 buses received approximately \$38 million worth of LCFS
20 credits in 2022 alone. Over the Program's history,
21 transit has generated approximately \$340 million in
22 credits. This is meaningful support that support -- that
23 rewards transit agencies for transporting people with
24 clean technology. This revenue is expected to increase
25 dramatically with implementation of the Innovative Clean

1 Transit Regulation as California's transit system shifts
2 to zero-emission technology.

3 In addition to transit, there are several
4 off-road zero-emission crediting opportunities that have
5 benefited from the LCFS. Crediting support for these
6 categories is especially impactful when the equipment is
7 used in heavily polluted and overburdened communities,
8 such as shore power for ocean-going vessels docked at
9 berth, cargo handling equipment operating at ports,
10 forklifts and warehouses, and transport refrigeration
11 units at distribution yards. You'll notice that these
12 cumulative credits range in value from tens of millions to
13 even \$1 billion based on the equipment type.

14 [SLIDE CHANGE]

15 ISD STAFF AIR POLLUTION SPECIALIST MINER: I
16 mentioned that the LCFS already provides for light-duty
17 ZEV infrastructure, but want to highlight the proposed
18 changes to accommodate medium- and heavy-duty vehicles.
19 Currently, the LCFS Program provides credit for the unused
20 capacity of the light-duty vehicle charge -- fast charging
21 or hydrogen refueling stations and encouraged this new
22 infrastructure to be built while consumer demand across
23 the state increases. These credits are in addition to
24 credits generated by dispensing electricity in hydrogen.
25 To date, the Program has proved 4,400 fast chargers and 71

1 hydrogen stations.

2 Staff are proposing new infrastructure crediting
3 provisions for fast charging and hydrogen refueling
4 stations, ones that serve both light- and medium-duty
5 vehicles and another provision for heavy-duty vehicle
6 stations. This concept is supported by many stakeholders
7 and was identified as an important policy lever in the
8 2022 Scoping Plan update.

9 Together, these provisions will allow credit
10 quantities for infrastructure projects up to roughly 10
11 percent of the previous quarter's credits. Light- and
12 moody -- light- and medium-duty infrastructure could be
13 built anywhere in California and be private or publicly
14 accessible, and heavy-duty would need to meet broad
15 location requirements to help ensure that the stations are
16 well utilized.

17 [SLIDE CHANGE]

18 ISD STAFF AIR POLLUTION SPECIALIST MINER: On top
19 of refueling infrastructure support, LCFS credit proceeds
20 also support investments in transportation electrification
21 by utilities. Under the base crediting provisions in the
22 LCFS, utilities generate credits for EV charging that
23 happens at residences and is not separately metered.
24 Staff are proposing to streamline and broaden spending
25 categories for base crediting to help move projects along.

1 Base credits are estimated to be worth \$8.2 billion
2 between 2025 and 2035, assuming an average credit price of
3 \$100 for illustrative purposes. Of this, 4.8 billion must
4 go to equity and transportation electrification projects,
5 which support electrification of drayage trucks,
6 multi-family housing, fleet and public residence EV
7 charging infrastructure, EV sharing, additional EV
8 purchase rebates, EV workplace development programs, and
9 grid-side distribution infrastructure investments.

10 This crediting category is a big deal and can
11 really move the needle by following investment into
12 transportation electrification, the majority of which will
13 go to overburdened communities without any direct funding
14 from the state's general fund. Both CARB and CPUC oversee
15 the use of these funds.

16 [SLIDE CHANGE]

17 ISD STAFF AIR POLLUTION SPECIALIST MINER:

18 Another aspect of this rulemaking is the support
19 that the LCFS provides for biomethane and the nexus to
20 California short-lived climate pollutant strategies.
21 California is focused on achieving our near-term SB 1383
22 methane reduction targets and 2030 greenhouse gas emission
23 reduction target. The current incentive structure has
24 successfully deployed methane reduction projects and we
25 need to continue to incentivize deployment of these

1 projects, particularly in this decade to pro -- to -- and
2 we need to continue to incentivize deployment of these
3 projects, particularly in this decade to achieve our
4 methane reduction targets. Staff are also mindful of the
5 importance of avoiding stranded assets that risk
6 backsliding on greenhouse gas reductions. We know that
7 biomethane is unlikely to be cost competitive with fossil
8 gas on its own. Without programs that provide financial
9 support that values the climate benefits from reducing
10 methane emissions, we risk methane capture projects going
11 offline and an increase in future methane emissions.

12 We also expect that while biomethane demand in
13 the future -- in the transportation sector is expected to
14 decline over time, biomethane is a useful energy source
15 that can displace fossil fuels in other sectors on the
16 path to carbon neutrality. Biomethane can still play a
17 key role as a feedstock for hydrogen production used in
18 transportation.

19 Continuing to capture methane from livestock and
20 other sources is important because methane is a potent
21 climate pollutant. For context, the methane LCFS helps
22 capture represents five percent of the state's greenhouse
23 gas inventory. And while there are a variety of methane
24 capture technologies, the digesters supported by LCFS and
25 State incentives are cost-effective methane capture

1 solution.

2 [SLIDE CHANGE]

3 ISD STAFF AIR POLLUTION SPECIALIST MINER: Diving
4 deeper into the incentive structure and purpose for
5 methane -- biomethane incentives, a recent report from the
6 Energy Institute at Haas highlighted the cost of building
7 and operating dairy digesters. Dairy digesters are one of
8 the more cost-effective methods for reducing dairy
9 methane, especially at larger carries, but they can still
10 be capital-intensive projects.

11 This analysis shows that incentives of the
12 federal renewable fuel standard and the LCFS combined, at
13 current credit prices, provide a small margin of profit
14 above the total cost of building a digester and operating
15 it for 10 years. While these numbers may change depending
16 on the RFS and LCFS prices, the cost of digesters is
17 expected to increase for smaller farms that can't realize
18 economies of scale that larger farms can.

19 [SLIDE CHANGE]

20 ISD STAFF AIR POLLUTION SPECIALIST MINER: We've
21 received a number of comments raising concerns about
22 staff's proposal to adjust avoided methane crediting that
23 we would like to address. For context, avoided methane
24 crediting reflects the capture of methane that would
25 otherwise have been released into the atmosphere, and the

1 large global warming potential of methane that is the main
2 reason behind the large negative CI seen in some fuel
3 pathways. Currently, the LCFS provides and avoided
4 methane crediting for up to three 10-year crediting
5 periods, which can result in avoided methane crediting for
6 30 years.

7 Staff have received feedback both opposing and
8 supporting staff's consideration to phase down avoided
9 methane crediting and staff has engaged in many
10 discussions with representatives of both positions over a
11 year. We believe this phaseout concept for projects
12 breaking ground after 29 -- 20 -- breaking ground after
13 2029 provides the right signal and timing for deployment
14 of methane projects in the near term, while also sending a
15 long-term signal to transition to other sectors.

16 Additionally, staff proposed requiring that
17 biomethane be delivered to California directly starting as
18 early as 2037 if ZEV truck deployments meeting
19 expectations. This would align deliverability
20 requirements of biomethane with that of low carbon
21 intensity electricity by requiring that biomethane
22 injected into the pipeline for use in California come from
23 projects that can demonstrate physical flow to California.

24 These policies help ensure near-term greenhouse
25 gas reductions while reflecting the need to move

1 biomethane into other sectors in the mid to long term.

2 [SLIDE CHANGE]

3 ISD STAFF AIR POLLUTION SPECIALIST MINER: We'll
4 now turn to crop-based fuels. The LCFS program
5 incentivizes the lowest carbon fuel stock -- lowest carbon
6 feedstocks be used in California. And for most of the
7 Program's existence, the Program has not resulted in
8 significant increases in crop-based fuels. As the chart
9 shows, waste oils like used cooking oil, tallow, and
10 inedible distillers corn oil has been and continue to be
11 the predominate feedstocks of choice for fossil diesel
12 alternatives given their lower carbon intensities.

13 However, the use of biomass-based diesel derived
14 from crop-based vegetable oil has increased in recent
15 years. While the majority of biomass-based diesel is
16 still derived from waste oil, since 2020, the use of
17 crop-derived, biomass-based diesel has increased,
18 particularly from soybean oil.

19 A rapid increase in vegetable oil demand for
20 biofuel production, without appropriate guardrails, could
21 potentially introduce a feedstock supply and land use
22 problem. We have been clear in our stance and we can all
23 agree that biofuel production must not come at the expense
24 of forestland or food production. We also see an
25 opportunity here that biofuel feedstocks, if cultivated

1 using sustainable agricultural practices, also have the
2 ability to enhance soil carbon and reduce greenhouse gas
3 emissions relative to traditional agricultural practices.

4 Staff therefore solicited feedback on crop-based
5 biofuel sustainability concerns at past workshops and was
6 directed to investigate guardrails at the September Board
7 hearing.

8 [SLIDE CHANGE]

9 ISD STAFF AIR POLLUTION SPECIALIST MINER: We've
10 received comments that the increased demand for virgin
11 oils for biofuels resulted in rapid increases in oil
12 commodity prices and may have driven feed price in -- food
13 price impacts. The chart on the right demon -- shows the
14 rapid rise in waste and vegetable oils that occurred
15 between 2021 and 2024. While it's true that there was an
16 increase in virgin oil used for biofuel crediting under
17 the California LCFS during this time period, there have
18 also been a number of significant events affecting global
19 oil production during this time frame.

20 According to the USDA, the effects of the
21 pandemic, reduced production, the Ukraine-Russia war, and
22 increased demand for biofuel production all collectively
23 contributed to the price volatility happening in 2020
24 through 2021. More recently, oil prices have receded,
25 despite continuing growing demand for both used cooking

1 oil and virgin oils.

2 [SLIDE CHANGE]

3 ISD STAFF AIR POLLUTION SPECIALIST MINER: Other
4 governments are also grappling with this issue and have
5 instituted a variety of guardrails to prevent future
6 potential deforestation or advance -- or adverse land use
7 impacts. Some of these guardrails include volume-based
8 limits on specific fuels, credit limits for specific
9 fuels, feedstock sustainability criteria to track
10 feedstock to their point of origin, and certify that
11 feedstocks are not contributing to impacts on other carbon
12 stocks like forests, explicit bans of particular
13 feedstocks deemed high risk, and bans of feedstocks from
14 particular locations.

15 Based on public feedback and Board direction,
16 staff reviewed existing strategies and suggestions for
17 creating transparency in guardrails to promote the use of
18 sustainable feedstocks. Staff determined that utilizing
19 multiple guardrails would provide better assurances than a
20 single one. Accordingly, we updated the proposal to
21 include a limiting on crediting for bio-based diesel
22 produced from soy, canola, and sunflower feedstocks. This
23 is not a volumetric cap and therefore doesn't limit
24 biodiesel nor renewable diesel use in California.
25 Instead, it limits crediting for these feedstocks at 20

1 percent of each producer's total production. If a
2 producer uses these fuel --- these feedstocks in excess of
3 20 percent for their bio-based diesel production, those
4 additional fuel quantities will not earn credits.

5 Additionally, the proposal includes requirements
6 for independent feedstock certification by a certi -- by a
7 certification body approved by the Executive Officer.
8 Staff also built in a timeline to develop those standards
9 and approval processes by third-party certifiers. And if
10 the State meets the 2030 medium-heavy duty ZEV population
11 targets in Advanced Clean Trucks and Advanced Clean
12 Fleets, no new bio-based diesel fuel pathways will be
13 approved. Moving forward, we will continue to monitor
14 feedstocks entering the market and are considering further
15 changes to the regulation.

16 [SLIDE CHANGE]

17 ISD STAFF AIR POLLUTION SPECIALIST MINER: Here
18 is a snapshot of the results of the proposed amendments
19 modeling. Targeting a 30 percent reduction in -- by 2030
20 and a 90 percent CI reduction by 2045. This scenario also
21 reflects implementing the Advanced Clean Cars II, Advanced
22 Clean Trucks, and Advanced Clean Fleets regulations
23 adopted by our Board.

24 This chart gives a visual representation of how
25 this scenario would support the continued ramping of clean

1 fuels to displace fossil fuels over the coming decades.
2 Through 2035, staff expects that the makeup and volume of
3 electricity and hydrogen used in ZEVs in the Program will
4 significantly increase. To be clear, electricity and
5 hydrogen crediting will actually be much bigger than it
6 looks on this chart. Because of the fuel efficiency of
7 electric and fuel cell vehicles, the total energy looks
8 lower than its makeup in the fleet.

9 As ZEV populations continue to increase, the LCFS
10 proposal ensures that bio-based diesel will continue to
11 displace fossil fuel. This -- while this modeling
12 presents our estimates of future fuel volumes, we may see
13 more or less electricity in hydrogen demand, and therefore
14 crediting may increase or decrease depending on the rate
15 of ZEV adoption.

16 You'll also notice that biodiesel and renewable
17 diesel are still likely to be needed for the remaining
18 internal diesel combustion engines in trucks in 2035,
19 although the vast majority of credits will support
20 zero-emission refueling. Biomethane from various sources,
21 such as landfills and dairy operations are reflected on
22 this chart as well. You can see here, represented by the
23 orange colors on the graph, that the biomethane represents
24 roughly five percent of the total diesel equivalent
25 combustion fuel volumes in 2023 and then declines to about

1 one percent by 2045 under staff's analysis.

2 This reflects the broader deployment of ZEVs that
3 is occurring as well as the transition of RNG combustion
4 out of the transportation sector, consistent with the
5 policy direction and the 2022 Scoping Plan, and the Board
6 adopted ACF resolution. The increase in hydrogen use by
7 2035 would be primarily in hydrogen vehicles deployed in
8 the medium- and heavy-duty sector.

9 And lastly, you'll notice an increase in
10 alternative jet fuel, as we work to decarbonize the
11 aviation sector, which is another goal identified in the
12 2022 Scoping Plan. So, all things considered, this gives
13 us a sense of the scale of this move away from fossil
14 fuels. An increasing amount of support will go to
15 zero-emission technology with an ongoing role for
16 alternative low-carbon fuels as part of the transition.

17 Before I close out the presentation, I want to
18 briefly touch on two more recent developments, the OEM
19 Base Crediting provision and our recent partnership with
20 the airlines to produce sustainable aviation fuel.

21 [SLIDE CHANGE]

22 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
23 staff proposal allows the EO to direct up to 45 percent of
24 base crediting to OEMs if 2024 ZEV sales are less than 30
25 percent of the total new LDV sales for all California

1 OEMs. This would enable OEMs to further support light
2 duty-zEV deployment and reduce the risk that ZEV adoption
3 slows. According to the regulatory proposal, OEMs would
4 be able to use this LCFS value to support additional
5 vehicle rebates, EV charging Infrastructure and planning,
6 outreach, and promotion of transportation electrification.

7 The proposed regulatory updates would also
8 require OEMs to report their use of LCFs value to CARB. I
9 want to be clear that in no way would this option reduce
10 the proposed amount of credits that utilities would use
11 for equity and transportation electrification efforts.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST MINER:

14 Alternative jet fuel is a viable low-carbon
15 alternative that can further reduce the aviation carbon
16 dioxide emissions and currently generates credits in the
17 program. It's inclusion as an LCFS credit-generating fuel
18 was designed to provide a support signal for alternative
19 low-carbon fuels and we have seen the market respond.
20 Alternative jet fuel production has increased since 2019
21 and 15 million gallons were supplied in California in the
22 last year of reported data. In response to calls for
23 further emission reductions from aviation, last Wednesday,
24 CARB and Airlines for America signed a partnership to
25 procure two hundred and -- at least 200 million gallons of

1 alternative jet fuel by 2035. This partnership signifies
2 a significant step in commitment towards industry's
3 commitment and the goals of the federal government to
4 achieve net zero carbon emissions by 2050, as well as
5 California's goal of meeting 80 percent of aviation energy
6 requirements with alternative jet fuel by 2045.

7 The partnership calls for data postings for
8 transparency and the creation of a working group where
9 labor, alternative jet fuel producers, and airlines can
10 work together to achieve the goals of the partnership.

11 [SLIDE CHANGE]

12 ISD STAFF AIR POLLUTION SPECIALIST MINER: If the
13 Board approves these changes today, and the proposed
14 resolution, staff will begin work on a variety of products
15 to further enhance our data dashboard and program
16 transparency efforts. These changes will include new and
17 improved tracking system with metrics on fuel production
18 locations and other data. We will also link to the energy
19 Commission's refining and production cost reporting data
20 and present more information about infrastructure
21 investments and uses of base credits.

22 Staff will also create implementation guidance
23 and public support resources to help market participants
24 understand and comply with the new and amended provisions,
25 including the sustainability and infrastructure

1 provisions, forest biomass eligibility, the automatic
2 acceleration mechanism and more. In line with feedback on
3 feedstocks, staff will also be following up to bolster our
4 verification and reporting practices and recently released
5 a request for information regarding analytical testing
6 methods to analyze the constituents of used cooking oil.

7 [SLIDE CHANGE]

8 ISD STAFF AIR POLLUTION SPECIALIST MINER: The
9 regulatory proposal in front of you today is the
10 culmination of a multi-year effort and we want to
11 recognize the substantial amount of time and effort
12 everyone contributed to improving this program. We would
13 like to thank the public, market stakeholders, the
14 Legislature, and CARB Board members for the input we --
15 for your input to ensure that we achieve a balanced -- a
16 balance in the Program and across varying perspectives.

17 Staff have worked diligently to develop a
18 proposal that sets us firmly on the path to transportation
19 decarbonization in line with our carbon neutrality target
20 and expeditiously towards a zero-emission transportation
21 network. But recognize that additional refinement and
22 improvements will be needed and that stakeholders will not
23 agree with everything in this proposal. For this reason,
24 staff are committed to continue implementing the proposed
25 regulation and Board resolution, which includes continued

1 discussions and guidance on the regulation, monitoring,
2 implementation and policy effectiveness, providing
3 additional public transparency on the program results,
4 evaluating new opportunities around E-fuels, marine,
5 hydrogen, electricity and other technology innovations,
6 and working with the Board and the public on updates to
7 the Program as needed and as part of future Scoping Plan
8 updates.

9 [SLIDE CHANGE]

10 ISD STAFF AIR POLLUTION SPECIALIST MINER: Ahead
11 of today's vote, staff posted the final Environmental
12 Impact Analysis, EIA, and responses to comments received
13 on both the Draft EIA published on January 5 and the
14 recirculated EIA published on August 16th. Staff's
15 analysis showed potentially significant impacts in some
16 resource areas.

17 [SLIDE CHANGE]

18 ISD STAFF AIR POLLUTION SPECIALIST MINER: To
19 conclude, Staff recommend that the Board approve the
20 proposed resolution, which includes certification of the
21 final environmental analysis and consideration of written
22 responses to the environmental comments, adoption of the
23 required CEQA findings, and approval of the proposed
24 amendments. Thank you for your time and we're happy to
25 answer any questions you have.

1 Chair Randolph, back to you.

2 CHAIR RANDOLPH: All right. Thank you. Before
3 we begin, Board member questions and comments, we will
4 hear from the public who signed up to speak on this item
5 who submitted a request-to-speak card or a raised hand in
6 Zoom. So I will ask the Board clerks to begin calling our
7 public commenters.

8 BOARD CLERK LEVRINI: Thank you, Chair Randolph.

9 As you mentioned earlier, I will call in-person
10 commenters first and then we will hear from those who have
11 raised their hand in Zoom. We currently have 116 commenters
12 who have turned in a request-to-speak card and wish to
13 speak at this time.

14 We will be showing a list of the next several
15 commenters on the screen so you can be prepared to come to
16 the podium. The public sign-up closure will be at 10:55
17 a.m. I apologize in advance if I mispronounce your name.
18 I'm sorry, 11 a.m.

19 Excuse me, public sign-up closure will be at
20 10:55 a.m.

21 Starting with Erick Orellana.

22 ERICK ORELLANA: Hi. Good morning, Chair and
23 Board members. My name is Erick Orellana here on behalf
24 of Community Water Center urging in opposition of the
25 adoption of the LCFS. We've heard from community members

1 who live in Tulare County of the impacts on their health
2 of incentivizing polluting industries like the dairy
3 industry, and just want you to -- to urge you to consider
4 the health impacts that it will have on community members.
5 We primarily focus on clean drinking water. And in
6 California, about a million folks don't have access to
7 safe and clean drinking water. And one of the main causes
8 of that is the dairy industry. And what you're doing
9 today is continuing to incentivize an industry that does
10 more harm than good to the communities in California. And
11 what you're doing is ensuring that the communities who are
12 farmer communities, low-income communities, continue to
13 live with the impacts.

14 And so I just wanted to urge you all to consider
15 what that means to the Central Valley region that's often
16 forgotten and often faces the harsh health impacts. So
17 again, urging you to vote no on this measure and want you
18 to more closely consider the needs that have been
19 expressed in the Environmental Justice Committee --
20 Advisory Group.

21 I wanted to bring attention to that, because one
22 of the purposes of that is to get input from folks on
23 environmental justice side. But when you ignore them and
24 we don't consider their needs, it kind of just shows that
25 it's a check mark. It's just an empty gesture to

1 communities across the state of California. And so I just
2 wanted you to really consider, and having a voice at the
3 table means considering and implementing the
4 recommendations. So I urge you to include those
5 recommendations that environmental justice groups have
6 suggested today. Thank you for your time.

7 BOARD CLERK LEVRINI: Thank you.

8 Sam Wade.

9 SAM WADE: Hi, Madam Chair, members of the Board.
10 Sam Wade with the Coalition for Renewable Natural Gas here
11 in support of the proposal before you today.

12 This vote is critical. It is fundamentally about
13 continuing California's climate leadership and delivering
14 on the well-reasoned strategy that CARB has carefully
15 crafted over the last decade. Taking action to reduce
16 methane and other climate emissions is not free, but the
17 benefits outweigh the costs for the RNG projects and other
18 clean fuel actions that the LCFS incentivizes.

19 This year has also been a stark reminder that the
20 cost of inaction, intensifying storms, heat waves, and
21 health impacts from pollution are all growing.
22 Unfortunately, after four years of uncertainty in the LCFS
23 due to a few wrong turns in this extended rulemaking
24 process, many voices are questioning whether California is
25 serious about achieving our goals. Federal support is

1 also very uncertain moving forward. The clean tech
2 investment community is struggling to make a business case
3 for continued climate action, leaving green jobs, air
4 quality, and climate benefits all in jeopardy. The LCFS
5 is one of the most important tools that we have to
6 motivate private investment and it will be appropriately
7 strengthened by this update.

8 Now, more than ever, we need regulatory certainty
9 from CARB for any of these long-lived green assets to be
10 financeable. Simply put, a yes vote today is a vote for
11 taking the most cost effective path to a stable climate.
12 And at a time when the Paris agreement's 1.5 degree goal
13 is slipping out of reach and global emissions have yet to
14 peak, the world is relying on CARB to continue to
15 demonstrate unwavering commitment to the climate fight.

16 Thank you.

17 BOARD CLERK LEVRINI: Michael Boccadoro.

18 MICHAEL BOCCADORO: Madam Chair and members,
19 Michael Boccadoro on behalf Dairy Cares. I want to echo
20 many of the comments that you just heard from Mr. Wade. I
21 also want to echo the comments of Mr. Randolph from
22 earlier about the importance of this Program in light of
23 what took place earlier this week in terms of the national
24 electorate. This Program is going to become even more
25 critical and this program -- I think the other change that

1 we need to recognize that's going occur is now duct tape
2 on the federal cookie jar that has funded many of
3 California's programs, and so we're going to need private
4 investment. And I think your staff have done a good job
5 of making changes, but still providing enough incentive
6 for private investment to continue in California. And
7 that's going to be critical with these projects as we
8 continue to move forward.

9 I also want to comment very briefly that we
10 welcome and are entirely open to a transparent and
11 fact-based process going forward. It's very important
12 that honesty be a big piece of that project.
13 Unfortunately, throughout this last three plus years,
14 we've heard a lot of misleading statements about the dairy
15 industry here in California, about the work we're doing to
16 reduce methane. I've been involved in it in the
17 beginning, and I can assure members that what we're
18 achieving is world leading. I sat through a presentation
19 the other day about New Zealand, where methane makes up
20 over 50 percent of their greenhouse gases and their target
21 is to reduce methane by 10 percent.

22 We're going to achieve a 40 percent reduction
23 here in California. And I think I don't need to tell any
24 of you how important that is. So please stay the course.
25 This is an important Program that Frankly is going to

1 become even more important over the next decade.

2 Thank you.

3 BOARD CLERK LEVRINI: Thank you.

4 Ambar Gomez

5 AMBAR GOMEZ: Hello. My name is Ambar. I am a
6 UCR public policy student and I'm here to tell you guys a
7 little bit about the Low Carbon Fuel Standard. It's a
8 policy that's supposed to mandate the reduction in carbon
9 emissions from the public transportation center. I'm glad
10 the points that you guys brought up. I'm here to tell you
11 to please revise the policy as it can be taken advantage
12 of. We've seen prior policies be taken advantage of by
13 companies that find loopholes to buy and sell credits with
14 other companies or they sometimes escape to other
15 countries that don't withstand our policies, like how some
16 companies were able to find a loophole in the Cap-and
17 Trade Policy by purchasing permits and from companies who
18 polluted less or having some facilities to operate
19 overseas.

20 You guys need some stricter regulations or
21 provide the necessary tools to properly monitor and report
22 the carbon intensity produced by the fuel types. I
23 understand that there's -- that every fuel type has its
24 own pros and cons, but think about the ones that don't
25 cause 80 percent of the people in the community to

1 health -- to have health problems that range from asthma
2 and heart conditions. The transparency that you guys
3 brought up, great, you guys are doing it. Just keep that
4 transparency. We do want those companies and city
5 officials' programs to give us that transparency, and give
6 the communities the power to refuse the -- any industrial
7 buildings that contribute to the air pollution that we
8 have in marginalized communities.

9 Again, we're not doing this out of spite. We
10 just don't want to watch factories being built next to our
11 schools, and kind of fear for our own health and being
12 able to breathe next -- with the people alongside of us.
13 So please continue doing your part to listen to everyone
14 in the community and take a look -- revise, take a look at
15 the policy and thank you.

16 BOARD CLERK LEVRINI: Thank you.

17 Alberto Leon.

18 If the next 10 so or folks -- or five folks could
19 please lineup.

20 ALBERTO LEON(through interpreter): Good morning.
21 I am hear from the community of San Bernardino. My name
22 is Alberto Leon and I'm here to ask you to please vote
23 against this regulation, because we're just getting out of
24 one problem to get into another one. This is just going
25 to create more pollution and it gravely affects our

1 communities. And that is the reason why we are all here
2 to ask you to make a responsible decision, so that our
3 communities will not continue to be impacted. And this
4 isn't just a local challenge. It is a challenge that
5 we're seeing worldwide, particularly in large cities where
6 we see all these impacts of huge pollution. And that's
7 why what we really want is to get to zero emissions,
8 instead of just getting out of this problem to create a
9 new one for our communities. So we ask that you act
10 responsibly. Thank you.

11 WILL BARRETT: Good morning, I'm Will Barrett
12 with the American Lung Association.

13 BOARD CLERK LEVRINI: Oh, go ahead.

14 WILL BARRETT: Okay. Hi. Will Barrett with the
15 Lung Association. We have a long history of supporting
16 the Low Carbon Fuel Standard. We saw many positives in
17 the original proposal from the staff, but we did grow more
18 concerned as the process went forward with several of the
19 key elements of the -- of the proposal. First off, the
20 shift away from the biofuel or the crop-based cap, that
21 was a major challenge. We wanted to see further
22 tightening of that. There is some good -- good to see
23 some good direction on that in the proposal, but more is
24 clearly needed on this front. We want to make sure that
25 the ILUC review kicks off quickly in 2025, so that we can

1 really address some of those challenges and continue to
2 focus on the need for tighter limits on the excess credit
3 gluts from that are -- that are flowing from that fuel
4 type.

5 The longer time frames for credit sunsets for
6 dairy, fossil fuel projects, fossil hydrogen, those are
7 all concerns as well that we address in some of our
8 letters, but really just wanted to raise those as ongoing
9 concerns. I want to voice support for -- by 2030 strong
10 regulations on dairy multi-pollutant standards on the
11 dairies. And again, I want to make sure that those
12 standards move forward more quickly than are planned. The
13 LCFS, as noted in the presentation, really a critical
14 driver for funding for medium- and heavy-duty
15 electrification. That has to be our main focus here. And
16 we want to voice support for the base credits reverting to
17 medium- and heavy-duty vehicle deployment in California.

18 And if there are going to be light-duty base
19 credits assigned to the OEMs, we're going to really make
20 sure that those are done in an equitable way with real
21 guardrails for spending those credits for low and moderate
22 income consumers really to make sure that we have an
23 equitable path forward, if those credits are going to be
24 used. So thank you very much. We look forward to working
25 with you as this goes forward. Thank you.

1 BOARD CLERK LEVRINI: Thank you. Alondra Mateo,
2 thank you for your patience. If Jose Avalos, Fernando
3 Marquez Duarte, and Benjamin Juna could please lineup at
4 the podium.

5 Alondra, you have go ahead.

6 ALONDRA MATEO: Good morning. My name is Alondra
7 Mateo. I'm a part of People's Collective for
8 Environmental Justice. First, I want to say, just because
9 someone is wearing a suit doesn't mean they're more
10 important than the community. I just want to highlight
11 that.

12 And, Board members, I'm here today to say that
13 there's still time to fix the LCFS, so that it works for
14 all of Californians. And today, we urge you to say no.
15 What you have -- what you have right now rewards polluters
16 and ignores the health impacts of dirty fuels on our
17 communities across the state and even the country. I
18 stand here today to acknowledge that lives are more
19 important than profit and that industry cares more about
20 their money.

21 To now fault of our own, our community's life is
22 continuing to be cut short because of air pollution. In
23 my community, I see families breaking down because of
24 terminal illnesses caused by daily pollution, our young
25 people struggling to go to school because of bad air

1 quality days, and our elders dying early, when they're
2 supposed to be enjoying retirement. You speak of public
3 engagement, but just because you show up doesn't mean that
4 you listen. I want to highlight that. Each day that
5 passes without meaningful regulation to ensure clean
6 energy resources reduces our life expectancy and raises
7 the survival of our communities.

8 Our future depends upon the strength and movement
9 of the regulations that you have the power to pass. This
10 body has a history of taking strong action against
11 pollution and the climate crisis. So why are we settling
12 when it comes to LCFS? Today is your opportunity to say
13 that it is not good enough. Put us on the right path
14 today by asking staff to incorporate EJC's
15 recommendations, put an effective limit on biofuel volumes
16 to help give air quality relief to our communities that
17 are living near refineries. And the practice of paying
18 industry dairies for livestock pollution, if we don't take
19 the time to get it right, the State will spend tons of
20 money in something that is not true clean energy.

21 Thank you.

22 BOARD CLERK LEVRINI: Thank you.

23 Jose Avalos.

24 JOSE AVALOS (throug interpreter): They say that
25 there's no one blinder than he who refuses to see and no

1 one deafer than he or she who refuses to hear. California
2 Air Resources Board, CARB, I am Jose Avalos and I am a
3 member of the San Bernardino community and a volunteer inn
4 the Collective for Environmental for Environmental
5 Justice. This isn't the first time that I come before you
6 to demand that you protect our community. We need clean
7 air.

8 The reason I come to you today is that you are
9 considering the proposed LCFS amendments, the Low Carbon
10 Fuel Standards that are produced using ethanol, biomass,
11 and others. Both you and I know that these fuels are
12 generating polluting emissions that lead to more people
13 suffering from asthma and cancer. CARB, you shouldn't
14 give credits or bonuses to corporations, because in
15 addition to being corrupt and criminal, they are merely
16 benefiting from the loopholes in this standard, and giving
17 these credits to companies that don't even move a finger
18 to actually reduce emissions. The only road to zero
19 emissions is electrification. That's why I'm here to
20 fight for clean energy and for you to vote no on these
21 LCFS amendments. You should rather give these credits to
22 people who are suffering from asthma and from cancer from
23 this pollution.

24 And finally, I am not the road to zero emissions.
25 Thank you.

1 BOARD CLERK LEVRINI: Thank you.

2 Fernando Marquez Duarte.

3 FERNANDO MARQUEZ DUARTE: My name is Fernando
4 Marquez Duarte. I'm with the People's Collective for
5 Environmental Justice. I'm also a professor at UC
6 Riverside, some of my students are giving public comment
7 today. And I want to highlight several things, but I want
8 you to focus your vote for health, not for profit. That's
9 a no vote.

10 Ethanol biomass, all these alternatives
11 quote/unquote fools -- fuels pollute, generate emissions.
12 They generate emissions such as particulate matter 2.5 and
13 10, carbon dioxide, nitrogen oxide, and all of those have
14 proven to damage the health of the communities, creating
15 cancer, asthma, and other respiratory diseases. We are
16 right now in the Inland Empire one of the most polluted
17 areas in the U.S. And if CARB approves this, companies
18 will keep polluting without any accountability. We need
19 community accountability. And this is based on the
20 information of the EPA. I'm not making this up. And this
21 is based in the information also on the side of CARB. All
22 these alternative fuels, as you call it, also increase
23 acetaldehyde - however you pronounce it - emissions, which
24 the National Institute of Health described as reasonably
25 anticipated to be a human carcinogen and it is reactive

1 for ground level ozone formation.

2 I'm looking here at a graph that you published on
3 site on CARB, and it shows that the amount of credits have
4 increased, but the amount of production of biofuel,
5 biodiesel, ethanol has not decreased at all. So the
6 credits are not really working. The Cap-and-Trade it's a
7 measure that only allows companies keep profiting without
8 really reducing emissions.

9 So, I call you to demand to end Cap-and-Trade, to
10 end the credits. I call you to instead focus all the
11 funds on electric vehicles, which are the only proven zero
12 emissions right now, both for health, not for profits.
13 Thank you.

14 BOARD CLERK LEVRINI: Thank you --
15 Benjamin Juna.

16 BENJAMIN JUNA(through interpreter): Good
17 morning, ladies and gentlemen of the jury. Maybe a couple
18 of years ago I went to Sacramento to a building much like
19 this one. And when I went into the building, I was
20 scared. And I remember that there was a person who
21 welcomed me in, who extended her hand, and even beyond
22 that she came to me and she gave me a hug and told me
23 welcome when I went into that Board meeting. And when I
24 came in here today, I saw her name, Diane Takvorian. I
25 remember that like it was today. And I remember the

1 historic decision that was made then, zero emissions.
2 News worldwide turned their eyes to California, because
3 the brave people -- of the brave people that decided to
4 vote for zero emissions made the historic decision that
5 would have impacts worldwide. What will we tell them
6 today? Back then, I got home, my kids, my mom, my wife
7 were all waiting for me. And they asked me what had
8 happened and we cried. We cried of joy knowing that a
9 zero-emission decision had been made.

10 Now, what will I tell them when I go back, that
11 you changed your mind, that they met your price? I feel
12 deceived. I feel abused. I feel disappointed knowing
13 that now you're proposing amending that law. That's not
14 possible. It's not possible. And it's -- you can't play
15 with people's lives. We're worth something. Our lives
16 are worth something and we love you. We respect you, but
17 we demand that you keep your word.

18 ANDREA VIDAURRE: Hello. Can you hear me?
19 Am I good to go?

20 BOARD CLERK LEVRINI: Yes.

21 ANDREA VIDAURRE: Okay. Hi, CARB. My name is
22 Andrea. I'm with the People's Collective for
23 Environmental Justice. Welcome to the Inland Empire, the
24 beautiful IE, where over a hundred days out of the year
25 it's unsafe to breathe outside, because every day we

1 breathe in the toxic air quality that we have from the
2 thousands and thousands of trucks that drive in and out of
3 our communities every single day.

4 We are normal people trying to live humane and
5 dignified lives here. No big houses or cars. Like I
6 heard one of the organizers that came in called us. We
7 are some of the families host impacted by this air quality
8 and by programs like this. CARB, yourself, you have said
9 there is no safe level of diesel to be breathing in. Yet,
10 you want to keep funding these false solutions, like
11 renewable diesel, that doesn't cut -- that does not cut
12 the impact so us. And yet, you want to take some of the
13 efforts away at the last minute from medium- and
14 heavy-duty electrification. Are our lives a joke to you?
15 Like are we so quickly to be dismissed here that we cannot
16 get those funds, so that we can actually electrify this
17 sector, because that's why you're here right now. You're
18 in Riverside. And if you spent more than two days here,
19 you would know that we needed all of that yesterday.

20 And it has been very clear from you all that we
21 have to head to zero emissions. And without the funding
22 to help this transition, our families will be most
23 impacted both by not being able to access the transition,
24 but also because you're delaying our health to us and that
25 relief. So please ground yourself in where you are and

1 please have respect for the neighborhoods that you are in
2 today. And given the moment we're in, we know it's more
3 important than ever to send a signal to the market that
4 electrification is going to be okay for the next four
5 years.

6 This Program doesn't do that right now. So
7 please, we urge a no vote. Let's fix the Program. And
8 for anyone here that claims that they're EJ or if you guys
9 are claiming to be equity, this isn't equity. Thank you.

10 BOARD CLERK LEVRINI: Thank you.

11 Macarmen Gonzalez.

12 MACARMEN GONZALEZ (through interpreter): I'm
13 Macarmen Gonzalez. I have been residing in San Bernardino
14 for 19 years. And I'm here with the People's Collective
15 for Environmental Justice. And I am here firmer than ever
16 today to fight for my health and the health of my family
17 and the health of my community. I'm also here to fight
18 for those who are no longer with us, who left without
19 being able to see any change, the people in my community
20 who have died. So far five people have died of cancer in
21 my community, so I'm here for them too.

22 I am here to ask that you vote no on this
23 proposed Low Carbon Fuel Standard. What we want and what
24 we need is a program that will help us electrify trucks, a
25 program that will help our community. In the Inland

1 Empire, diesel pollution is costing huge impacts on --
2 of -- on our community's health, my family's health.
3 There are so many trucks in Inland Empire on the roads
4 seven days a week, 24 hours a day, every day. And that
5 diesel we breathe in and it is a poison to our health.
6 That's why the best alternative is to electrify trucks.

7 When you talk about zero emissions, let's mean
8 zero emissions. Hydrogen, ethanol, biomass fuels are not
9 truly clean energies, nor zero emissions, because the
10 carbon dioxide and nitrogen oxide are still harmful
11 emissions that harm my community's health, a community
12 that's already overburdened. So when it comes to this
13 rule, it is obsolete, and it's a mockery for our
14 communities, but it is good business for all of the
15 businesses that can merely buy credits in their little
16 circle of corruption. Polluters have money. Don't give
17 them more money. Instead, invest in our communities and
18 listen to our communities.

19 Thank you.

20 BOARD CLERK LEVRINI: Thank you.

21 And this is just a reminder. It is now 10:55.
22 Public testimony closed -- public testimony for this item
23 has closed.

24 Our next speaker Jamie Katz.

25 JAMIE KATZ: After years of community advocacy,

1 the Board is finally acknowledging for the first time in
2 writing that California needs to move toward regulating
3 livestock methane emissions, a sector of emissions that
4 has to date been treated with deference and regulatory
5 exceptionalism. Yet, even in this moment of
6 acknowledgement, CARB staff is choosing to undermine
7 possible future regulation of livestock methane emissions
8 with a poison pill that staff snuck into a second round of
9 15-day changes. This poisoned pill would continue to
10 greenlight pollution and paying polluters for decades. It
11 would set up regulations for failure, where they would
12 burden small and sustainable dairies that produce the
13 least methane while paying the biggest polluters for years
14 to come.

15 Nothing in today's resolution prevents this
16 outcome. For that reason, and for the years of community
17 advocacy that CARB staff is so determined to undermine,
18 this Board must vote no.

19 BOARD CLERK LEVRINI: Thank you.

20 Kasey Knoell.

21 KASEY KNOELL: Good morning. My name is Kasey
22 Knoell. I'm a Senior Director of Greenhouse Gas Programs
23 at California Bioenergy, speaking in support of the
24 proposed LCFS amendments.

25 I've dedicated my career to reducing greenhouse

1 gas emissions and mitigating global climate change. I'm
2 grateful for the opportunity to work in a state that
3 shares the same values and has positioned itself as a
4 strong leader in this effort to make quantifiable and
5 measurable change. Thank you for the opportunity to
6 express support of California's leadership in creating
7 LCFS as an important tool in addressing climate change and
8 reducing fossil fuel consumption.

9 At CalBio, our team is responsible for modeling
10 the carbon intensity of preparing and -- preparing LCFS
11 fuel pathways for our digester projects in California. We
12 assess the emissions occurring prior to the installation
13 of the project, as well as emissions after the project has
14 been implemented. In that effort, we collect and analyze
15 data from each of your projects to quantify and verify the
16 real, additional and permanent emissions reductions that
17 each project is achieving.

18 We measure biogas and energy production
19 continuously using high quality metering devices and can
20 quantify exactly the amount of methane that is captured
21 and prevented from being released into the atmosphere.
22 This is done in accordance with science-based greenhouse
23 gas accounting standards. We also adhere to strict
24 requirements outlined in the LCFS, including rigorous
25 third-party verification of every input used in the

1 pathway modeling. I'm proud of our team of carbon
2 accounting experts, the integrity with which they conduct
3 their work, and their rigor underwhich our work is subject
4 to.

5 I have confidence that the reductions our
6 projects and others like it are providing benefits to the
7 state, and I urge the Board to adopt the proposed LCFS
8 amendments. Thank you.

9 BOARD CLERK LEVRINI: Thank you.

10 Ada Trujullo.

11 ADA TRUJULLO(through interpreter): Good morning.
12 My name is Ada Trujullo and I am from the San Bernardino
13 area. I'm here because our community is full of
14 pollution. You can't really say that we have an area that
15 is clean and my children have to breathe this air. So I
16 am here because we live in an area that is full of trucks.
17 It's full of cement kilns, trains, all sorts of pollution.
18 I would really like to invite you all to visit our
19 community, so that you can experience for yourselves the
20 pollution that we live every day. I'm asking you to vote
21 no on this, because it may look beautiful on paper, it may
22 seem like it's great, but it doesn't result in clean air.
23 And that's why I'm here today, I'm here to represent my
24 children, our elderly, our community, who all deserve
25 clean air.

1 So I'm here to ask you to please vote no on this
2 standard, because it seems like it helps, but it really
3 doesn't. It doesn't result in zero emissions. It's just
4 a legal way for the companies that pollute more to be able
5 to pay. And what I don't pollute what others don't
6 pollute, they now have legal permission to pollute and
7 feel like -- and feel good about it, because they're
8 paying for these credits, and it does not result in a
9 cleaner environment. And people are dying as a result of
10 this. You may not see it but, it's there. It's there in
11 the pollution, in the particulate matter. And I'm here
12 today to ask you to please take all of this into
13 consideration. That's why we're here today.

14 Thank you.

15 BOARD CLERK LEVRINI: Thank you.

16 Andrew Craig.

17 ANDREW CRAIG: Hi. My name is Andrew Craig, Vice
18 President of Greenhouse Gas Programs at California
19 Bioenergy. I'm here to support the adoption of the LCFS
20 proposal today. Thank you for the opportunity to comment
21 today on a monumental effort by CARB -- the CARB Board,
22 CARB staff, and the stakeholders have gone into this
23 rulemaking.

24 It's good to be back here in Riverside, where I
25 went to college just down the road at UCR, which is where

1 my interest in air quality and climate protection first
2 began. As a native Californian, I'm proud of the work the
3 State has done to lead the nation on climate action, which
4 is needed now more than ever.

5 For many years, CARB and the State recognized
6 that incentive-based programs were necessary to achieve
7 its climate and methane reduction goals specified in SB
8 1383. And as a result of the LCFS Program and the clear
9 signals that were set, CalBio now has over 60 operational
10 digesters which are on track to reduce approximately 1.5
11 million metric tons of CO2 equivalent per year. These
12 reductions are real, permanent, based in science and
13 meaningful. Adopting the proposed LCFS regulations are
14 important to protect the investments already made by the
15 State and to incentivize further investment in clean
16 energy technologies, which directly benefit disadvantaged
17 communities within the state.

18 California now has more digesters than any other
19 state, a tremendous success, and evidence that the LCFS
20 Program is working exactly as intended. That is a fact
21 that the Board and all Californians should be proud of.
22 CARB's timely LCFS updates will provide investment
23 certainty for clean fuel projects essential to achieving
24 California's 2045 climate neutrality goal.

25 It would be a mistake to forego additional

1 emission reduction opportunities that are right in front
2 of us, and so therefore, I urge the Board to adopt the
3 LCFS proposal. Failing to do so would result in higher
4 emissions and worse health outcomes.

5 Thank you

6 BOARD CLERK LEVRINI: Thank you.

7 Maria Arevalo.

8 MARIA AREVALO(through interpreter): Good
9 morning. My name is Maria Arevalo. I'm here from the
10 community of Pixley. I have lived in Pixley for the last
11 53 years and I'm here to ask you to vote no. I want you
12 to vote no against -- and vote against these regulations,
13 because from what I understand, it doesn't place limits on
14 dairies, for example, that emit methane and other harmful
15 pollutants. On the contrary, I think that they're
16 offering incentives now. I know that they produce milk
17 and they produce gas that is supposedly better, but it's
18 not a clean gas.

19 And these gases, the methane and everything else
20 that this is generating, is making our people ill. Our
21 people are suffering from asthma, they're suffering from
22 chronic respiratory illnesses, sleep apnea. They tell us
23 that our children are slow learners. How are they not
24 going to have problems learning if their lungs are full of
25 these toxic gases. And they say that this is so that they

1 can produce hydrogen. And, of course, all of this has to
2 affect us. It also affects your memory. My memory, for
3 example, has been harmed by this. And all of these
4 pollutants -- I have a friend, for example, who had these
5 very, very strong headaches, and shortly after she was
6 mentioning these headaches, one morning, she no longer
7 woke up. She was dead.

8 And we need now to use machines to help us
9 breathe, machines that we have to put that substance,
10 albuterol, to help us breathe at night, because we stop
11 breathing. My doctor has told me that I stop breathing
12 several times at night.

13 Thank you very much. May God bless you and I
14 hope you make the right decision for the good of our
15 families, for the good of our children. Thank you.

16 BOARD CLERK LEVRINI: Thank you.

17 If Grecia Orozco, Cynthia Pinto-Cabrera, David
18 Rodriguez, and Christian[SIC] Velazquez, and Patricia
19 Anderson, could you please form a line.

20 And the next speaker is Don Gilstrap.

21 Thank you.

22 DON GILSTRAP: Good morning. My name is Don
23 Gilstrap. I'm a Fuels Regulations Manager at Chevron.
24 Thank you for the opportunity to speak today.

25 Chevron believes in the carbon reduction goals of

1 the LCFS and technology-neutral solutions to achieve those
2 goals. We are concerned however about several of the
3 amendments under consideration today that are putting up
4 artificial barriers to proven lower carbon fuels while we
5 are simultaneously accelerating targets. The proposals
6 restrict crediting for hydrogen and biogas, discourage
7 their use regardless of life cycle emission benefits.
8 These restrictions will discourage investment in hydrogen
9 and CNG stations, renewable hydrogen production and
10 vehicle adoption.

11 We are especially concerned about the effect of
12 the proposed sustainability guardrails. The cap on
13 certain feedstocks is unnecessary, but the traceability
14 and certification requirements have a real chance of
15 reducing supply reliability for California fuels.
16 According to USDA data, there are over 300,000 farms in
17 the U.S. that produce corn with similar numbers for
18 soybean farms and 40,000 canola farms in Canada.

19 These new requirements require biofuel producers
20 to start mapping tens of thousands of farms in the U.S.
21 and Canada to document their feedstock sources to no real
22 benefit. These farms and suppliers would also have to
23 undergo burdensome sustainability audits. There will be
24 suppliers that cannot or will not participate, and that is
25 a threat to supply reliability for California. It's also

1 important to recognize that land use for biofuel
2 feedstocks is already monitored under the Federal
3 Renewable Fuel Standard, making these additional
4 constraints unnecessary.

5 The imbalance between supply and in California is
6 a major concern today. And given that the Governor has
7 just directed CARB to accelerate the adoption of E15
8 introducing new measures that reduce biofuel supply is
9 especially counterproductive. The proposed guardrails
10 should be withdrawn.

11 Thank you for your time.

12 BOARD CLERK LEVRINI: Cynthia -- I'm sorry,
13 excuse me, Grecia Orozco.

14 GRECIA OROZCO: Good morning. My name is Grecia
15 Orozco. I'm here with the Center on Race, Poverty, and
16 the Environment, an organization -- a community-based
17 organization that works with communities in Kern and
18 Tulare counties. Today, we are here to urge CARB to vote
19 no on the LCFS as amended on behalf of our communities for
20 the following reasons.

21 First, we are very concerned that the current
22 regulations allow out-of-state projects to receive
23 subsidies for enhanced oil recovery. This is out of
24 alignment with the intent of CARB to reduce and phaseout
25 fossil fuel usage and as well as the intent to SB 905. We

1 must find other ways to reduce our reliance on fossil
2 fuels and not put the burden on other communities as well.
3 We are concerned that this Program incentivizes false
4 climate solutions, such as the use of biogas and allowing
5 methane emissions credits for livestock methane. The
6 science is not with us on this particular issue. Dairy
7 digesters only exacerbate the pollution that communities
8 that are already burdened what they will already be
9 facing. So we please urge you to reevaluate these
10 emissions credits that will only stand to benefit
11 corporations.

12 We are additionally concerned that this Program
13 will incentivize fossil-based hydrogen from fossil fuel
14 feedstocks. Again, this does not align with CARB's goals
15 to move away from fossil fuels. Many refineries are in
16 disadvantaged communities already and this will only
17 exacerbate the issues that concern the communities there.

18 Lastly, CARB's own Environmental Justice Advisory
19 Committee has been advising staff to revise and revisit
20 these types of standards for environmental justice and
21 that should not be ignored. For these reasons, we urge
22 CARB to go back to the drawing board, fix the LCFS to
23 align with CARB's goals to phase out reliance on fossil
24 fuels and reduce emissions.

25 Thank you.

1 BOARD CLERK LEVRINI: Thank you.

2 Cynthia Pinto-Cabrera.

3 CYNTHIA PINTO-CABRERA: Good morning. Cynthia
4 Pinto-Cabrera with Central Valley Air Quality Coalition.
5 As an advocate in the San Joaquin Valley Breathe Air, I'm
6 here today to urge a no vote from the CARB Board. As
7 proposed, LC -- LCFS subsidizes some of the valley's
8 largest polluters and disregards necessary public health
9 and environmental justice protections. The Program must
10 be fixed to focus on a hundred percent truly zero-emission
11 technologies that prioritize environmental and climate
12 justice, as well as protect public health.

13 First, CARB's focus on biogas would worsen
14 public -- the public health crisis in the valley. Air
15 pollution from biogas processing exceeds those from fossil
16 fuel processing. Research has shown higher emissions on
17 carbon monoxide, sulfur dioxide, nitrogen oxides, and
18 ammonia. These pollutants are issues on their own, but
19 combined also contribute to the PM2.5 in the valley, a
20 pollutant that is so dangerous, that 1,200 residents in
21 the valley prematurely die each year.

22 Second, allowing enhanced oil recovery as an
23 eligible sequestration methane perpetrates fossil fuels
24 and puts communities like those in Kern County at further
25 risk for exposure to additional contaminants. Lastly, the

1 failure to eliminate avoided methane crediting will
2 continue to disproportionately impact environmental
3 justice communities, particularly in places like Tulare
4 County, home to one-third of California's dairy cows, the
5 highest concentration of the state.

6 EJAC has raised these issues as well as other
7 issues, and proposed remedies, but were ultimately
8 ignored. As proposed, the LCFS puts public health at
9 risk, especially for EJ communities in the San Joaquin
10 Valley. I urge this Board to stand with environmental
11 justice communities, uphold public health by voting now on
12 the LCFS.

13 Thank you.

14 BOARD CLERK LEVRINI: Thank you.

15 David Rodriguez.

16 DAVID RODRIGUEZ: Greetings. My name is David
17 Rodriguez. I live in the Central Valley in a small town
18 called Planada, population 4,164 residents. It's in
19 Merced County. Merced County has designated it as a
20 severely disadvantaged community. My parents moved there
21 in 1960 and I still live there. In 2002, a dairy moved
22 in, not even a mile away from our town with over 3,000
23 cows. In 2012, they were out of compliance with Merced
24 County with over 8,000 cows. Evidently, the San Joaquin
25 Valley Pollution Control from Modesto granted them a PTO,

1 permit to operate, with over 8,000 cows. Once that permit
2 was over, they were out of compliance with Merced County.

3 They still have over 8,000 cows and they want to
4 increase with another 1,700 and build a digester. Dairy
5 digesters can cost between two million and nine million to
6 install. Dairy digesters will increase environmental
7 impacts in already overburdened communities. And the
8 biogas created from digesters emits pollutants like
9 particulate matter, carbon monoxide, sulfur dioxide, and
10 nitrogen dioxide. So I implore the committee to vote no
11 on this -- on this issue. I thank you for your time and
12 for allowing me to speak.

13 BOARD CLERK LEVRINI: Thank you.

14 Christian[SIC] Velazquez.

15 CHRISTIAN VELAZQUEZ: It's Christina Velazquez

16 BOARD CLERK LEVRINI: Oh, my apologies.
17 Christina Velazquez.

18 CHRISTINA VELAZQUEZ: It's okay.

19 I'm from Pixley and this my neighbor Beverly
20 Whitfield. I've come here today, because I'm hoping I can
21 get a vote of no from you guys. It seems like the dairies
22 are more important and -- than the communities. I'm
23 fighting for my children. I'm fighting for their -- for
24 their children, and my community, and the communities
25 around us. Let me see. What happened to fighting for

1 people and not the dollar. I'm hoping that you will vote
2 no.

3 I've got something to read here that I found
4 today and I would really like everyone to listen to it.
5 It's a study that was made by some scientists. Manure to
6 the energy project has a direct negative impact on
7 front-line communities, in a recent study, the composition
8 and toxicity of the biogas product from different
9 feedstocks in California. Scientists have found that the
10 concentrations of minor chemicals and biological
11 components in biogas have the potential to be toxic to
12 humans and the environment.

13 And Maria mentioned a lady who died in Pixley,
14 that was my sister. So I'm here fighting for what she
15 started to fight for and for my children, like I said, and
16 for the community. And I'm hoping, really hoping and
17 praying that you will vote no.

18 Thank you.

19 BEVERLY WHITFIELD: I would also like to ask that
20 you please vote no on this. Thank you.

21 BOARD CLERK LEVRINI: Thank you.

22 And with that, we will actually be taking a
23 10-minute break. At 12:30, we will be taking a 40-minute
24 break. Thank you.

25 (Off record: 11:19 a.m.)

1 (Thereupon a recess was taken.)

2 (On record: 11:30 a.m.)

3 CHAIR RANDOLPH: Okay. It's time to start public
4 comment again. I'm going to turn it over to the clerk to
5 call the next commenter.

6 CHAIR RANDOLPH: Make sure the button is on.

7 BOARD CLERK LEVRINI: Okay. Patricia Anderson.

8 PATRICIA ANDERSON: Hello. My name is Patricia
9 Ramos Anderson. I've come from Santa Nella. My first
10 engagement with this group was five years ago at a public
11 meeting that I was asked to attend by phone. That's when
12 I discovered about digesters. I said what the heck is
13 that. I finally realized what it was is that it was going
14 to impact drinking water in the communities and the air
15 quality. But for me, what was important is that how could
16 you be meeting for 20 years with these communities without
17 no translators. There was no translation for the
18 Commissioners likewise for the residents.

19 We need to make sure we have meaningful community
20 engagement, but also we have to have zoning for the
21 digesters. We need to keep them at least 10 miles away
22 from the communities and towns. We also need to address
23 the cleanup of the drinking water. These long-term
24 subsidies should stop, only be used for a startup, not
25 multi-millionaires continuing to get subsidies off the

1 backs of the poor of these communities that are being
2 impact. Also, address the quality of the digesters in our
3 local areas, what impacts are they doing with
4 contamination of the air and water and the quality of
5 life, including those big flies, okay. That's what
6 happens. Okay. That's a reality.

7 Public health, there has to be accountability for
8 air, water in the communities and their quality of life
9 versus the profit of these businesses that don't even
10 reside next to or live by a digester. No, we can no
11 longer continue with this.

12 In closing, what's so important for us is that we
13 have been here for generations in our healthy communities,
14 but now the friends we're losing are due to illnesses
15 related to these digesters, long-term illnesses. No more
16 credits. They could stand on their own. They're a
17 private business. But more importantly, vote no. Vote
18 no. Protect our lives, our communities, that's what we
19 expect for you. Why do we continue to give the rich
20 money?

21 BOARD CLERK LEVRINI: Thank you.

22 And I just wanted to let everyone know that both
23 podiums are now live. You are welcome to line up on
24 either side of the auditorium to speak.

25 Next speaker is Erick Karlen.

1 ERICK KARLEN: Thank you. Good morning, Chair
2 Randolph, Board members. My name is Erick Karlen,
3 speaking on behalf of Pacific Gas and Electric Company
4 today.

5 PG&E continues to support California's ambitious
6 climate and air quality goals and adopting amendments here
7 today that revive a robust and resilient LCFS market is a
8 critical step in achieving them. While the recent changes
9 make improvements upon earlier draft amendments, PG&E
10 acknowledges that not all stakeholder concerns can or will
11 be addressed, PG&E's included.

12 However, further delay of the approval of these
13 critical amendments will be devastating for the Program,
14 risk significant market uncertainty and disruption, and
15 harm CARB and California's pioneering reputation in this
16 space. For these reasons, PG&E strongly encourages the
17 Board to finalize this rulemaking and improve these
18 critically important amendments here today.

19 This will enable and accelerate PG&E's
20 participation in the Low Carbon Fuel Standard's Program on
21 behalf of our customers with revenue going back to them,
22 not the utility, and subject to many levels of regulatory
23 oversight and reporting. In our service area, this is
24 helping to accelerate transportation electrification
25 through rebates for used EVs and home charging stations,

1 also, at multi-family and small businesses. And we
2 propose to add further incentives for public charging and
3 home panel upgrades, and accelerated grid connections for
4 charging infrastructure amongst other programs, with a
5 vast majority of those benefits going to equity customers
6 and communities.

7 And as staff noted earlier, this is indeed a big
8 deal. With these changes, with all these offerings being
9 off-bill and not ratepayer funded, this is also maximizing
10 their downward rate pressure impact benefiting all
11 customers, whether they drive and EV or not. So for these
12 various reasons, PG&E reiterates its support of the LCFS
13 program and recommended approval of the amendment package.
14 And we look forward to continuing to work closely with
15 staff on clarifications as needed and appreciate staff's
16 commitment to doing so.

17 Thank you.

18 BOARD CLERK LEVRINI: Thank you.

19 Jamie Hall.

20 JAMIE HALL: Thank you. Good afternoon, Chair
21 Randolph and Board members and thank you for the
22 opportunity to comment today and for the work that's gone
23 into this. It's been a lot of work. So my name is Jamie
24 Hall. I'm Director of policy for EV Realty. We are a
25 California-based developer, owner, and operator

1 multi-fleet truck charging hubs. So I'm coming at this
2 from the perspective of how can we electrify heavy-duty.
3 We agree with a lot of the speakers today that see that as
4 the ultimate goal and where we need to be.

5 The LCFS, from our perspective, is an essential
6 enabler for this transition. Biofuels definitely still a
7 big part of the Program. But in recent years, LCFS has
8 started to play a transformative role in supporting
9 electrification. It's helping deploy charging. It's
10 helping bring down costs, and it's even helping to deploy
11 vehicles directly.

12 This set of amendments is especially important
13 for us in the medium/heavy-duty space because the
14 infrastructure provision that staff walked through earlier
15 de-risks the investments that we're making. This will
16 help attract more private capital to this space,
17 accelerate truck charging infrastructure deployment. This
18 really is sort of a must have for our sector, especially
19 at this critical moment in time.

20 LCFS is not perfect. There's always room to do
21 more. And I think respectfully that's been how I felt
22 about every regulation that I've worked on in California
23 for the past 15 years. That's kind of how it goes. So
24 we're happy to see discussion in the resolution about next
25 steps on important issues that stakeholders have raised

1 around dairy regulation and biofuel sustainability, and
2 things like that.

3 On balance, however, what you have before you
4 today is a proposal that will support a wide range of
5 climate and clean air goals in California. I think more
6 than ever, we need to use every tool we have at our
7 disposal right now, and this is one of those tools. So we
8 urge you to move forward.

9 Thank you.

10 BOARD CLERK LEVRINI: Thank you.

11 Michael Caprio.

12 MICHAEL CAPRIO: Good morning, Chair Randolph,
13 Board members, staff. Michael Caprio with Republic
14 Services here in support. We appreciate the efforts put
15 forth by all of you in getting us to this point, but most
16 importantly appreciate the time spent listening to the
17 many stakeholders with diverse set of views on this topic.
18 The primary issue from our standpoint is how to transition
19 in a responsible manner from where we are today to the
20 zero-emission future. This has to be done in a way that
21 is re -- that is feasible from an implementation,
22 logistics, and resources standpoint, but also asked to
23 take into account the investments that have been made in
24 low-emission vehicles and fueling infrastructure so far.

25 As many of you are aware, Republic Services has

1 been involved in a journey to convert our fleet of nearly
2 2,700 heavy-duty vehicles to zero emissions over the last
3 four years. And while we've made significant progress, we
4 have a long way to go and many implementation challenges
5 that lay ahead for us. The timeline needs to take into
6 account these challenges, while being respectful of the
7 fleet conversion cost impacts to our ratepayers. The
8 transition also has to be completed without introducing
9 negative impacts to rates by prematurely eliminating the
10 support provided by the LCF Program for low -- the
11 low-emission fleet investments we've made so far.

12 So the question is how to transition to the
13 zero-emission future while supporting usage of
14 low-emission fuel vehicles during the interim -- with the
15 lowest emission fuels in the interim. Our view is that
16 staff and Board have threaded this needle quite
17 effectively with the proposed amendments to the LCFS
18 regulations, and we urge the Board to approve the
19 regulation as it stands today. And appreciate the
20 opportunity to address you. Thank you.

21 BOARD CLERK LEVRINI: Thank you.

22 Adam Browning.

23 ADAM BROWNING: Hello, Board and Chair. I'm Adam
24 Browning with Forum Mobility. We are a company dedicated
25 to the transition to zero-emission freight through

1 electric trucks. We build large charging depots in ports
2 and along freight routes to common freight destinations.
3 And we offer truck fleets charging or a truck -- an
4 electric truck plus charging together. The bulk of our
5 customers are the small fleets that make up the bulk of
6 the overall state drayage fleet. And success for us in
7 this is cleaner air for port our communities, a safer
8 climate. And for that to happen, we need to provide a
9 lower cost for truckers.

10 Simply put, I don't see how we can make this
11 transition away from diesel to zero emission without this
12 program. These are the stakes and I urge a yes vote on
13 this amendments.

14 There are two major elements to the amendments
15 here that will benefit electric trucking. First, the
16 Program provides crucial revenue for electric truck
17 operators. Every hundred dollars in credits -- for every
18 hundred dollar in credit, that translates to about a
19 thousand dollars a month for a typical electric truck
20 drayage driver. That is transformative in terms of being
21 able to compete with diesel. Simply put, if we cannot
22 offer a program that competes with diesel, they will not
23 make the transition.

24 And there is no other program that I know of that
25 can really complete that cost gap and can take the place

1 of this Program. Secondly, the capacity crediting program
2 is transformative in terms of allowing us to deploy
3 charging infrastructure in advancement of the truck
4 availability and will really accelerate our transition. I
5 would also say that a yes vote is even more important in
6 light of Trump's recent election. I think we can expect a
7 pull of the waivers for ACT and ACF. We need -- we
8 absolutely need this tool in our toolbox to make --
9 effectuate a transition in the heavy-duty fleets.

10 Thank you for your time.

11 BOARD CLERK LEVRINI: Thank you.

12 Margaret Boelter.

13 MARGARET BOELTER: Yeah. Hello, everybody. My
14 name is Margaret Boelter and I'm with Zeem Solutions,
15 who's a shared charging infrastructure company that's
16 based in California. And we work every day with
17 commercial fleet owners and tailor our services to make
18 sure California's zero-emission transition is successful.
19 I wanted to take a moment to thank you for your actions to
20 advance California's zero-emission transition in the
21 commercial sector and urge you to support the amendments
22 before you today, which will improve the Program and lead
23 to more charging infrastructure and vehicles in the
24 commercial sector in the coming years.

25 I also want to echo some of the comments provided

1 by EV Realty and Forum Mobility, and just reiterate, you
2 know, on the ground, because of LCFS credits, Zeem has
3 been able to open the largest commercial EV charging depot
4 in the U.S. based outside of LAX in Inglewood. This site
5 is providing over a thousand charging sessions per day,
6 and we're rapidly increasing utilization month over month
7 for a variety of public and private commercial fleet
8 vehicles and, yeah, demand continues to grow.

9 LCFS is also leading to the nation's largest
10 drayage truck charging station at the Port of Long Beach.
11 This site that Zeem broke ground on earlier this year will
12 become operational in 2025 and provide over 80 EV charging
13 ports for zero-emission drayage trucks that serve the port
14 region. LCFS is a critical tool for advancing
15 zero-emission freight. The LCFS program supports
16 transportation electrification by facilitating
17 infrastructure deployment. And the proposed amendments
18 significantly enhance this, especially the heavy-duty FCI
19 program, as mentioned by others before. So I urge you to
20 vote yes to support the zero-emission commercial
21 transportation sector.

22 Thank you.

23 BOARD CLERK LEVRINI: Thank you.

24 If we could have the next five speakers, please
25 for a line at either one of the podiums. Thank you and

1 we'll go ahead. Mr. Miyasato. Matt Miyasato.

2 DR. MATT MIYASATO: Great. Thank you. Thank
3 you, Madam Chair, members of the Board. Dr. Matt
4 Miyasato. I'm the Chief Public Policy Officer at First
5 Element Fuel. We are the largest retail hydrogen station
6 provider in California with 40 stations up and down the
7 state, which by default makes us the largest in the U.S.,
8 in not the world, if you look at daily hydrogen throughput
9 into vehicles.

10 And we also just opened the first ever fast fill
11 heavy-duty hydrogen truck stop at the Port of Oakland. So
12 many of you were there and appreciate your support. But
13 the only reason we exist is because of the aggressive
14 climate and air quality policies by the State of
15 California enacted by this Board. So thank you. And in
16 particular, it's the hydrogen refueling infrastructure, or
17 HRI, capacity credit that enabled us to build stations
18 ahead of vehicle ramp-up.

19 And so we were concerned when the initial staff
20 proposal came out, the 45-day and the subsequent two
21 15-days. But to staff's credit, they listened to our
22 industry. They worked with us. They made thoughtful and
23 reasonable changes to the HRI. And we think it is now
24 workable, except for one modest change. It is the
25 cumulative 1.5 times the capital expenditure limit on HRI.

1 We think this is actually a disincentive to control
2 station costs, and it also is counter to the intent of the
3 HRI, which provides an incentive do build stations before
4 vehicle ramp-up. However, we are encouraged by the
5 resolution language. And it -- with a modest change to
6 make the CapEx and the capacity limits explicit in the
7 resolution, we're happy to fully support staff's proposal.

8 We urge you to adopt the LCFS Regulation before
9 you, and we look forward to working with you and your
10 staff to make zero-emission transportation a reality.

11 Thank you.

12 BOARD CLERK LEVRINI: Thank you.

13 Gordon Russell.

14 GORDON RUSSELL: Good morning. My name is Gordon
15 Russell. And I work for Louis Dreyfus Company, a global
16 soil seeds processor and producer of biofuels. LDC wants
17 to thank CARB for its innovation and leadership in driving
18 U.S. toward a cleaner fuel economy. In discussions with
19 CARB staff, it was explained to us that the goal of the
20 proposed vegetable oil cap was to limit inclusion of veg
21 oils to 2023 share of the renewable diesel feedstock. LDC
22 is not opposed to a veg oil cap, but we want to make it
23 clear that the proposed 20 percent does not represent the
24 2023 share CARB staff has referenced.

25 In 2023 roughly 32 percent of California's RD was

1 produced from soy and canola oil, not 20 percent. CARB's
2 estimation of vegetable oil inclusion ignores 279 million
3 gallons of canola oil used to produce RD in 2023. We
4 believe an artificially low cap will have negative and
5 unintended consequences for the climate, California
6 taxpayers, and American farmers. USDA data suggests that
7 the U.S.'s market is fully utilizing domestic sources of
8 used cooking oil and tallow. Limiting the use of veg oil
9 simply results in greater imports of tallow and used
10 cooking oil from Latin America, China, and Southeast Asia
11 to fill the vegetable -- the feedstock gap created by a
12 cap.

13 Biofuel producers in Latin America and Southeast
14 Asia respond to increased competition for these waste
15 feedstocks by increasing the reliance on locally produced
16 palm and soy to meet their own biofuel mandates. This
17 substitution effect will result in continued land
18 conversion and deforestation in these areas of
19 environmental concern. The proposed changes also place
20 unwarranted burden on U.S. farmers creating impractically
21 stringent traceability requirements that are not imposed
22 on foreign feedstocks.

23 In summary, a Board Member vote for a 20 percent
24 cap under the proposed amendment is a vote for
25 deforestation and a vote for higher fuel prices in

1 California. Should a cap on soy and canola be deemed
2 necessary, we propose that CARB cap inclusion at levels
3 closer to current use. Thank you.

4 BOARD CLERK LEVRINI: Thank you.

5 Armando Munoz.

6 ARMANDO MUNOZ: Hi. My name is Armando Munoz.
7 I've been working at the airport for the past 14 years.
8 I'm also a proud member of SEIU local USWW. We are
9 committed to continue to work with our environmental
10 justice allies and raising issues that haven't been
11 effectively addressed by these LCFS changes, including the
12 impact of factory dairy farms and oil refineries in the
13 surrounding communities. We look forward to working with
14 CARB Board members and staff in the months and years ahead
15 of all these critical issues that impact predominantly
16 Black and Brown workers and communities across the state
17 of California.

18 Make no mistake, the Trump administration will
19 dismantle the environmental protections that have been put
20 in place nationally. So it will once again be up to
21 California to be the progressive leaders and pass more
22 environmental policies that other states can model after.
23 Clearly, this will be a fight and the Trump administration
24 will find ways to push back. But when we're talking about
25 the air we breathe, it's worth fighting for.

1 Environmental racism is literally killing us. We
2 are the front-line workers that will fight with you to
3 protect our air. Now, that the threat of fascism looks
4 over us, I ask you, CARB, to lead boldly, to perfect -- to
5 protect the most precious thing that we have, which is to
6 breathe clean air.

7 Thank you.

8 BOARD CLERK LEVRINI: Thank you.

9 Allison Willis.

10 ALLISON WILLIS: Thank you for the opportunity to
11 speak today. My name is Allison Willis. I'm here on
12 behalf of AGP, a farmer-owned cooperative representing
13 over 200,000 farmers who produce sustainable feedstock for
14 food, feed, and renewable fuels. We appreciate CARB's
15 commitment to greenhouse gas reductions through the LCFS.
16 The LCFS has been the most effective solution for reducing
17 greenhouse gas emissions, displacing 25 billion gallons of
18 petroleum with renewable fuels. We do have concerns about
19 the approach of this rule and would like to address three
20 areas that need reevaluation.

21 One, the cap on vegetable oil feedstock should be
22 reassessed, due to its potential unintended impacts. As
23 it stands, U.S. grown soybean oil would likely be pushed
24 out of the market, replaced by imported waste feedstocks,
25 many from areas with high rates of deforestation.

1 Two, implementation of the new sustainability
2 guardrails should be delayed by at least a year to allow
3 companies sufficient time to inform farmers and gather the
4 necessary attestations. With 2026 crops being planted in
5 2025, the current timeline is insufficient for compliance.

6 Three, when CARB updates its land use change
7 model next year, we urge the Board to implement the most
8 recent scientific data for all feedstocks. The current
9 model, nearly a decade old, buys land use scores that are
10 about 60 percent higher than the most recent updates. We
11 are concerned about all the significant challenges
12 replacing 10 percent of current feedstocks in just three
13 years, while also rebuilding on the exist -- while also
14 building on the existing 72 percent displacement of fossil
15 fuel demand.

16 These changes may restrict renewable fuel
17 supplies, increase fossil fuel use, lead to higher fuels
18 costs, and worsen air quality. We strongly encourage the
19 Board to update its data, reconsider the veg oil cap, and
20 collaborate with industry on a more achievable timeline
21 for sustainability.

22 Thank you.

23 BOARD CLERK LEVRINI: Thank you.

24 Munni Krishna.

25 MUNNI KRISHNA: Thanks, Shelby.

1 Good morning, Chair Randolph and members of the
2 Board. My name is Munni Krishna and I am the Director of
3 Policy and Incentives at Gage Zero. Gage Zero is a women
4 founded and women led charging infrastructure team who
5 develop, own and operate reliable shared multi-fleet
6 charging hubs nationwide to support the electrification of
7 medium- -and heavy-duty vehicles, including six active
8 sites in development in California.

9 I want to take a moment today to first start by
10 thanking CARB staff for their collaboration, transparency,
11 and Frankly their patience over the past three years as
12 our team has provided extensive feedback to the
13 regulations at hand today.

14 The LCFS program has always been fundamental to
15 California's efforts to decarbonize transportation and we
16 strongly support a yes vote to drive even greater progress
17 and to meet our State's zero-emission goals. Especially
18 given the events of this week, passing the amendments to
19 the LCFS Program will be one of the most important tools
20 we have to accelerate the transition to free
21 electrification in this generation. It's not dependent on
22 fluctuating State budgets, neither is it dependent on the
23 federal administration.

24 Most importantly, the amendments inclusion of the
25 heavy-duty FCI provision will significantly bring economic

1 support to freight electrification by addressing
2 utilization risks in the early market phases, helping
3 solve the phrase we hear all the time, the chicken and egg
4 dilemma that's currently hindering a bit of infrastructure
5 deployment, especially as it comes to private sector
6 investment. Not only will the proliferation of medium-
7 and heavy-duty charging stations improve air quality
8 statewide, but it's important to note that these charging
9 hubs are most often built in underserved and disadvantaged
10 communities, bringing thousands of jobs, permitting
11 dollars, and sales tax to where they have the most
12 positive effect and impact.

13 In fact, the LCFS Program is estimated to bring
14 approximately \$4.8 billion to disadvantaged communities in
15 the state. I want to thank you so much for your time
16 today and Happy Veterans Day weekend.

17 BOARD CLERK LEVRINI: Thank you. I just want to
18 make a quick note to please state your name clearly for
19 the record, speak slowly for our interpreter, and you are
20 welcome to adjust the mic to your height comfort.

21 With that, we will move onto Jovan Houston.

22 JOVAN HOUSTON: Hello. My name is Jovan Houston
23 and I'm a worker at LAX airport. I worked at LAX for
24 approximately eight years where I work as a customer
25 service agent. I'm also a member and an executive member

1 of SEIU USWW. As you know, USWW airport workers and
2 members started engaging with CARB almost a year and a
3 half ago to have jet fuel regulated under the LCFSS[SIC].
4 Since the summer of 2023, we have had a hundred airport
5 workers show up and testify and submit their stories to
6 CARB.

7 While our policy was pulled out in the staff
8 recommendations, we have worked with CARB staff over a few
9 weeks to include in their resolutions today and commit to
10 keep on going with this conversation to discuss again the
11 next time the LCFS is open for -- up for change. Trump
12 administration has no interest in environmental justice
13 regulations. California needs to be bold and protect
14 itself from the airlines. This will go on by polluting
15 unregulated under the administration. CARB take task in
16 protecting our air -- California's air that we breathe,
17 and now move more.

18 We need to go on and fight till the end in smart
19 environmental and regulation. We need to fight at the end
20 of environmental racism and start here now. We must start
21 today.

22 Thank you.

23 BOARD CLERK LEVRINI: Thank you.

24 Jonathan Harding.

25 JONATHAN HARDING: Chair Randolph and members of

1 the Board. Thank you for the opportunity to speak before
2 you today in support of the adoption of the draft
3 amendments of the LCFS. My name is Jonathan Harding with
4 the American Biogas Council, ABC. We would like to
5 comment on the following.

6 The ABC strongly supports strengthening the CI
7 targets of the program as well as the proposed nine
8 percent stepdown and the inclusion of the auto
9 acceleration mechanism. We would like to reiterate our
10 opposition to the phaseout of avoided methane emission
11 crediting and reduction in crediting periods for
12 biomethane projects. Changes to this system places these
13 projects at a significant disadvantage, could potentially
14 lead to shutdowns, and will certainly stifle investments
15 in these -- as these new pro -- in these new projects
16 going forward, undermining the key role that the
17 agricultural community has been playing to meet
18 California's GHG reduction targets.

19 Avoided methane emissions are a critical part of
20 science-based life cycle assessments, and their inclusion
21 in CI scores is consistent with internationally recognized
22 standards of carbon accounting. It is scientifically
23 proven that methane is 30 times more potent than CO2.
24 California needs to ensure that their climate policies are
25 adequately addressing short-lived climate pollutants and

1 building on the beneficial results that the agricultural
2 community is delivering. Scaling back successful programs
3 will prevent us from meeting our GHG reduction targets.

4 Regarding the Board resolution, ABC strongly
5 encourages that future regulation on livestock methane --
6 livestock methane appropriately recognizes the methane
7 reduction achievements from dairy digesters and the dairy
8 sector as a whole. Regulating dairy methane emissions
9 outside of the LCFS is a mistake and would increase the
10 abatement cost for California farmers, thus increasing the
11 price of food for Californians.

12 Lastly, we strongly encourage the Board to adopt
13 the new amendments today. Any further delay into the
14 rulemaking diminishes the clear signal that the market
15 needs to facilitate and encourage continued investments in
16 clean fuels. Without a strong policy signal, the State
17 risks missing opportunities for future GHG emissions --
18 excuse me, reduce GHG emissions from transportation fuels.

19 Thank you for your time.

20 BOARD CLERK LEVRINI: Thank you.

21 Asher Goldman.

22 ASHER GOLDMAN: Chair Randolph and the Board.
23 Thank you for being here and thank you for all of the hard
24 work. I'm Asher Goldman at Generate Capital, a San
25 Francisco Based investment firm. We invest in renewable

1 energy, sustainable infrastructure, and climate solutions
2 across the board.

3 We support the approval of the proposed rule.
4 We're certainly not getting everything that we want, but
5 hey, that's compromise. If we want the market to motivate
6 private capital, this -- approving this rule is absolutely
7 vital. I have invested hundreds of millions of dollars
8 into LCFS-linked projects. And my ability to continue to
9 do that relies on trust with CARB to be a steward of this
10 Program. And, for example, to take corrective action the
11 price of credits drops 80 percent over two years, that is
12 exactly what this proposed rule would do.

13 Further, there will always be a temptation to put
14 our thumbs on the scale and to pick winners and losers.
15 And my advise, don't. If you champion one technology at
16 the expense of others, it undermines the faith and credit
17 that I have in this Board as a steward of the program

18 I can't then believe that the current rules are
19 reliable and I just won't invest in new projects. I don't
20 have to do that. I won't invest in LCFS -- in EV charging
21 and EV deployment things that we currently do, because we
22 do believe in this Board to be a steward of the Program.
23 This package is good as it is necessary. It's not clear
24 to me that you guys this directly, but the flow of capital
25 that was a torrent several years ago, has completely dried

1 up. No one is making new investment decisions on climate
2 projects supporting the LCFS, because the price is not
3 sufficient to justify the new (technical difficulties),
4 where it drives investment and drives decarbonization.

5 We endorse the proposed package. With Donald
6 Trump as President, with full GOP control of every part of
7 government, we absolutely need CARB to be a force for
8 climate action.

9 Thank you.

10 BOARD CLERK LEVRINI: Thank you.

11 Jodie Muller.

12 JODIE MULLER: Good afternoon, Chair Randolph --
13 (Technical difficulties.)

14 BOARD CLERK ESTABROOK: It unfortunately is going
15 to take a few minutes longer to fix our technical
16 difficulties, so we're unfortunately going to need to take
17 a ten minute break.

18 (Off record: 12:00 p.m.)

19 (Thereupon a lunch break was taken.)
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AFTERNOON SESSION

(On record: 12:45 p.m.)

CHAIR RANDOLPH: Okay. It is now 12:45, time to come back from lunch. If the next few commenters on the comment list could come forward, we can get started.

Clerk, I will have you take over from here.

BOARD CLERK LEVRINI: Thank you.

Jodie Muller.

JODIE MULLER: Thank you very much. Take two. Jodie Muller with WSPA. Going back to our statement from earlier. While we support the overall intent of the LCFS, we have made several recommendations to ensure cost effectiveness and technological feasibility. First, imposing a biofuel cap would compromise the availability of lower carbon fuels that are already contributing to significant emission reductions.

Number two, imposing guardrails may limit the supply of crop-based feedstocks used to produce those biofuels. And this would likely increase costs and could compromise access to ethanol.

Three, super accelerating the CI step down in 2025 could increase consumer cost impacts and disincentivize longer term advancements in developing lower CI fuels.

Four, limiting crediting for hydrogen will limit

1 cost effective decarbonization options and create market
2 uncertainty.

3 And five, CARB needs to properly account for
4 reduced land use changes given evolving market and
5 technology advancements to produce more affordable lower
6 carbon fuels.

7 Considering a more cost effective, technology
8 neutral, and lest burdensome program will better allow
9 CARB balance programs or the ability to balance Program
10 costs with emission reduction efforts.

11 Thank you.

12 BOARD CLERK LEVRINI: Thank you.

13 Shannon Broome.

14 SHANNON BROOME: Hi. Good afternoon. Happy
15 Friday, everybody. I just wanted to acknowledge Friday.
16 I'm with Hunton Andrews Kurth and I'm here today on behalf
17 of Highly Innovative Fuels, which is an eFuels company.
18 And I wanted to appreciate CARB and the staff for the hard
19 work on the amendments that they've done and their
20 engagement with stakeholders.

21 We are requesting today that CARB take an
22 important step to encourage a diverse low CI marine
23 transportation fuel mix. And specifically, we would like
24 for low CI methanol used in marine and specialty
25 transportation applications to be able to opt in and

1 generate LCFS credits. These are hard to decarbonize
2 sectors and they present a real opportunity to get
3 immediate carbon reductions and also air toxics and
4 criteria pollutant reductions from the marine sector. And
5 we've all seen the maps of the ports with the hotspots
6 there. And so it's a real opportunity.

7 Many stakeholders in the marine sector have
8 already met with CARB staff and you'll hear from them
9 later today. And they are supporting this notion and we
10 hope that we'll be able to move forward with this sooner
11 rather than later, and not just wait for the next big
12 round of LCFS amendments.

13 Then finally, I would like to just mention that
14 we were disappointed to see the change in the book and
15 claim accounting for low CI electricity for producing
16 hydrogen as an eFuels input. We think that this is
17 misguided and misunderstanding. It was intended to
18 incentivize hydrogen as a primary transportation fuel, but
19 it assumes that transportation and electrolytic fuel are
20 competing with each other and they aren't. So we ask you
21 to reconsider that. With that, I want to thank you all
22 and hope you have a good weekend.

23 BOARD CLERK LEVRINI: Thank you.

24 Roman Partida-Lopez.

25 ROMAN PARTIDA-LOPEZ: Good afternoon. Buenas

1 tardes. Chair Randolph, Board members, I'm Roman
2 Partida-Lopez with the Greenlining Institute and I'm here
3 today in opposition.

4 What you have in front of you falls short of
5 addressing the environmental justice and equity concerns
6 brought up by previous -- by previous members here of the
7 community and other stakeholders, but you still have time
8 to course correct. The LCFS should really be focused on
9 expanding ZEV adoption to provide direct and meaningful
10 benefits to communities most affected by pollution. CARB
11 has been urged by advocates today and previously,
12 including its own advisory committee to use LCFS funds in
13 a manner that equitably transitions our leads to zero
14 emission and benefits are most disadvantaged.

15 However, the proposed changes redirecting funds
16 away from electrifying medium- to heavy-duty trucks for
17 passenger vehicles. Stripping up to \$12 billion from
18 freight-impacted communities. By backtracking on the
19 original December proposal, the LCFS removes valuable
20 rebates to help improve the public health and air quality
21 of impacted communities in lieu of OEMs for light -- and
22 in support of light-duty for limited -- with limited
23 guardrails to benefit low-income and disadvantaged
24 communities.

25 This undermines CARB's stated goals and weakens

1 support for the infrastructure needed to make ZEVs
2 accessible to all. The bottom line is that the current
3 proposal fails on EJ and on equity. And this is a setback
4 for communities that bear the brunt of transportation
5 pollution. We ask you to prioritize environmental justice
6 communities over the polluting industries and ask you for
7 a vote no and ask for the LCFS to go back and fix the
8 concerns raised by our partners.

9 Thank you.

10 BOARD CLERK LEVRINI: Thank you.

11 If we could please have the next five speakers
12 form a line at each one of the podiums. Thank you.

13 Next, Peter Zonneveld.

14 PETER ZONNEVELD: Yes. Good afternoon. My name
15 is Peter Zonneveld. I'm the President of Neste U.S.

16 I'm speaking today in support of the proposed
17 LCFS rule and urge its adoption today. Neste is the
18 world's leading producer of renewable diesel and
19 sustainable aviation fuel. We exist to create a healthier
20 planet for our children. We have been a long-time vocal
21 supporting of the LCFS Program, which has an outstanding
22 record of success, in reducing emissions from the
23 transportation sector in California, and is a testament to
24 the State's climate leadership.

25 We own 50 percent of the Martinez renewables

1 facility, which is a success story for transitioning to
2 the green economy, saving hundreds of permanent jobs and
3 creating thousands of building trades jobs. This is
4 largely due to the LCFS Program and demonstrates our
5 commitment to the community. This proposal has been
6 thoughtfully crafted. It will refresh the Program and
7 rebalance the market, which has been struggling, so that
8 it continues to deliver results on the path towards zero
9 emissions for Californians.

10 While there's always room for future improvement,
11 in our view, there's no reason to delay adoption of this
12 proposal today. There is no time to waste. Also, we
13 agree with CARB's comment in the October FAQ. Retail gas
14 prices have been at historic highs, steadily climbing
15 since 2020, while LCFS credit prices actually have been on
16 a steady decline during that same time. There are also
17 external studies that agree on this point. There is no
18 direct link.

19 We would like to thank CARB for its extensive
20 work on this rulemaking and we urge you as a Board to
21 approve this proposal today.

22 Thank you.

23 BOARD CLERK LEVRINI: Thank you.

24 Jeremy Martin.

25 JEREMY MARTIN: Yes. Thank you. My name is

1 Jeremy Martin from the Union of Concerned Scientists. UCS
2 has been deeply involved in the development and
3 implementation of the LCFS since its inception and we
4 value the support it provides for transportation
5 electrification and reducing the carbon intensity of
6 fuels.

7 I'm disappointed with several elements of this
8 final amendment package and with the process that brought
9 us here. The last year has been one of the least
10 collaborative in my 15 years working on this regulation
11 with CARB. This was a lost opportunity and has weakened
12 support for the policy in California and across the United
13 States.

14 On bio-based diesel, I appreciate that CARB has
15 recognized that increasing the use of food for fuel is a
16 problem that the State has a responsibility to address.
17 Consumption of vegetable oil-based fuels already exceeds
18 sustainable levels and continues to rise. Limiting their
19 use is necessary, but unfortunately the poorly designed
20 safeguards implemented in these amendments are too little
21 too late. They will not prevent California fuel use from
22 contributing to global food price shocks, agricultural
23 expansion, and deforestation. I ask the Board to
24 strengthen the existing safeguards by the assigning the
25 carbon intensity of fossil diesel to fuels above the 20

1 percent limit. I also urge the Board to instruct staff to
2 continue to work towards durable and effective safeguards
3 after these amendments go into effect.

4 On manure biomethane, I urge the Board to strip
5 changes to subsections 95488.9(f)(3)(A) and (B) that
6 extend crediting periods for avoided methane and introduce
7 a last minute grandfathering provision for manure digester
8 projects that break ground before 2030, reverting to the
9 version of the sections in the existing regulation.

10 CARB missed an important opportunity to fix the
11 LCFS, but the policy is too important to abandon. We must
12 commit to the longer term work of getting the LCFS back in
13 shape to steer California towards a clean transportation
14 future. Learning from experience and improving the LCFS
15 over time will serve California well and set an example
16 that other jurisdictions can adapt to their own
17 circumstances, which is ultimately how California policies
18 can have the greatest impact.

19 Thank you.

20 BOARD CLERK LEVRINI: Thank you.

21 Gracyna Mohabir.

22 GRACYNA MOHABIR: Good afternoon, Chair and Board
23 members. Gracyna Mohabir with California Environmental
24 Voters. I'm asking the Board to fix the LCFS and vote no
25 today on the proposed amendments. This Program is

1 something we can all agree crucial tool in California's
2 climate strategy. It must be modernized and needs to
3 support critical health and environmental outcomes to
4 communities in California. Yet, with where we're at
5 today, the amended rule falls short of the LCFS's role in
6 thoroughly and equitably decarbonizing transportation.

7 We've seen robust conversation from stakeholders
8 and hard work from staff, as seen by the two rounds of
9 15-day changes. Ultimately though, the asks of enviros
10 and EJ aren't thoroughly reflected. We're concerned that
11 passing the amendments would come at the expense of
12 legitimate climate benefits and community protections.
13 We'd like to see the Program accomplish several things
14 including limiting the volume of lipid biofuels, phasing
15 out harmful avoided methane crediting, and properly
16 investing in electrifying trucks.

17 During this process, there's been meaningful
18 testimonies from impacted community members, which we've
19 seen a lot of today, as well as several recommendations
20 shared from the EJAC. The asks of these groups must be
21 addressed. It's concerning that we're hearing from
22 experts who are saying that these amendments don't resolve
23 equity issues that the Program overincentivizes solutions
24 with known environmental harms and that we're not making
25 ambitious progress towards our zero-emission future. We

1 need an LCFS that champions the best interests of
2 Californians especially those who are most impacted by
3 climate and air quality issues. For these reasons, we
4 need to fix the LCFS and I urge the Board's no vote today.

5 Thank you.

6 BOARD CLERK LEVRINI: Thank you.

7 Kathy Pelayo.

8 KATHY PELAYO(through interpreter): Hi. I am
9 Catalina Pelayo. I am a resident of San Bernardino and I
10 am here to speak about the Low Carbon Fuel Standard. And
11 the rule is not about zero emissions. What you are
12 proposing does not achieve zero emissions. What we had
13 asked for did achieve zero emissions. So your plan is not
14 the correct plan. So we want you to vote no.

15 You continue to just burden us with endless
16 pollution harming our existence, physically, bodily,
17 mentally, emotionally. There are so many respiratory
18 ailments, people with asthma, lung issues, kidney issues,
19 cancer affected all throughout our bodies. When it's not
20 one part of our body, It's another part of our body being
21 hit. Killing us with these endless pains and suffering,
22 killing our babies, kids, young people, older adults, and
23 lying to us, sending us to just chemotherapy after
24 chemotherapy and telling us this one is going to make you
25 better, sure, quote/unquote better, while more and more

1 people die. And all these businesses are just lining
2 their pockets and they get -- and the doctors do the same,
3 they're getting dollars and more dollars, as well as are
4 the pharmacies, while we continue to suffer.

5 Again, all they seem to care about is lining
6 their own pockets, their bank accounts continue to grow
7 and they laugh at this. They have the luxury of having
8 mansions, trips, yachts, parties, throwing the house out
9 the window. By God, even you are being mislead. You are
10 being deceived. So our request is to please actually
11 achieve zero emissions. Thank you and God bless you.

12 BOARD CLERK LEVRINI: Thank you.

13 Lucia Aguilar.

14 LUCIA AGUILAR(through interpreter): I am Lucia
15 Aguilar and I live in San Bernardino. And all I hear is
16 money, and money, and money. And I see that all of you
17 have it, but you don't seem to think about those of us,
18 those of us who are low-income communities. So I am here,
19 because I'm very worried about my health, the health of my
20 family, and the health of my community. San Bernardino is
21 a highly polluted city. We have a lot of trains and
22 trucks and none of them are electric yet. And this
23 continues to impact a lot of people, my husband included.
24 My husband's lungs have been impacted by this pollution.
25 I brought a picture with me where you can see him

1 connected to an oxygen machine, because of all the
2 pollution in San Bernardino. He has to use a CPAP machine
3 just to be able to sleep.

4 It's not possible to give so much money to the
5 polluters. We instead need programs that will help us
6 electrify the truck fleet. We don't want false solutions.
7 What I'm asking for is for you to vote no on this Low
8 Carbon Fuel Standard amendments, and for you to create a
9 program that will be fair and that will follow the
10 recommendations of the environmental justice community.

11 I ask that you please reach into your heart for
12 everyone who is suffering from these illnesses. We don't
13 enjoy watching our family members having to use inhalers
14 or having to use oxygen machines like my husband has had
15 to. So again, reach into your heart for our community.

16 Thank you.

17 BOARD CLERK LEVRINI: Thank you. If we could
18 please please have the next five speakers after James
19 VandePutte come up to either one of the podiums. Both
20 podiums are open. Thank you.

21 James -- or Graham Noyes.

22 GRAHAM NOYES: Thank you. Madam Chair and
23 members of the Board. My name is Graham Noyes. I'd like
24 to speak in strong support of passage of the resolution
25 and the proposed amendments. And personally, on behalf

1 of -- and on behalf of my clients, I'd like to thank the
2 Air Resources Board and California for doing some of the
3 most difficult work in the world in terms of both air
4 quality and greenhouse gas -- air quality improvement and
5 greenhouse gas reduction. I'd also like to recognize
6 CARB's dedication to its work for air quality to the
7 pursuit of sound science, and to public process, which it
8 holds as difficult as it may be.

9 I represent clients who are working on some of
10 the cutting edge clean fuels and technologies out there,
11 including sustainable aviation fuel, hydrogen,
12 electrofuels, second generation ethanol, carbon capture
13 and sequestration and direct air capture, and landfill gas
14 capture. And these clients highly value the LCFS and many
15 of them rely on the LCFS as of one of the revenue streams
16 that will make their projects pencil out and enable them
17 to expand their projects.

18 Support the specific portions of the Board
19 resolution that recognize the need for continued work on
20 some of the most difficult areas that really require a lot
21 of attention and stakeholder involvement, the development
22 of a electrofuels and how they fit into the California
23 picture for the Scoping Plan, the expansion of hydrogen
24 supply and infrastructure, and also the land use change
25 work as well as the sustainable aviation fuel work.

1 Given the new federal administration, climate
2 policy is going to be more difficult, but there's also
3 some opportunity there specific to hydrogen and bio and
4 claim with 45V and specific to clean fuels with 45Z, and
5 climate smart agriculture.

6 Also, really encourage international engagement,
7 given what our federal government will not be doing.
8 California should take a leadership role and I really hope
9 there will be a strong CARB contingent at the COP30 in
10 Brazil next year.

11 Thank you.

12 BOARD CLERK LEVRINI: Thank you.

13 James VandePutte. Again, I apologize if I
14 mispronounce anybody's name.

15 JAMES VANDEPUTTE: That's Okay. It's a tough
16 one.

17 Hi, everyone. My name is Jim VandePutte. Head
18 of policy and advocacy for Raizen, the Brazilian
19 bioethanol company. Raizen appreciates the current and
20 historic efforts by CARB to reduce greenhouse gases -- gas
21 emissions from transportation through the implementation
22 of the State's LCFS. We commend the Board's continuous
23 leadership in shaping policies that advance the adoption
24 of cleaner sustainable fuels. This program sets a global
25 standard and we are grateful for the opportunity to

1 contribute. Raizen supports CARB's proposed changes
2 particularly the emphasis on advanced biofuels and clear
3 guidance on sustainability certifications. We encourage
4 CARB to align its regulations with global standards to
5 encourage the inclusion of sustainable feedstocks from
6 around the world.

7 Raizen submitted a detailed comment recommending
8 that CARB recognize and integrate the benefits of climate
9 smart agriculture into the LCFS Program. Regarding
10 indirect land use change, we urge CARB to be open to the
11 possibility of lowering scores when the evidence supports
12 it, not just increasing them.

13 Due to the substantial importance of climate
14 smart agriculture and ILUC, we would recommend that the
15 resolution that approves the LCFS revisions also direct
16 CARB staff to study these practices over the next 18
17 months and report back to the governing board in July of
18 2026 with findings and recommendations.

19 Since the LCFS is a technology-neutral
20 science-based program, it is our position that if non-U.S.
21 Fuels demonstrate lower land use change impacts, those
22 fuels should be recognized and incentivized with more
23 favorable carbon intensity scores. Thank you for your
24 consideration of these comments.

25 BOARD CLERK LEVRINI: Thank you.

1 Carlos Gutierrez.

2 CARLOS GUTIERREZ: Good afternoon, Madam Chair,
3 members of the Board, and staff. Carlos Gutierrez here on
4 behalf of the California Advanced Biofuels Alliance,
5 representing producers, transporters and retailers of
6 biodiesel and renewable diesel in California. Also here
7 to speak for Clean Fuels Alliance America, representing
8 the nation's biodiesel, renewable diesel, and sustainable
9 aviation fuels.

10 We wanted to express our support for the proposed
11 amendments to the LCFS and ask that you vote yes today. A
12 lot of work has been put into this over the last three
13 years, and today we have the opportunity to vote yes and
14 to signal to the rest of the country and to the world that
15 California is still the climate leader, and especially in
16 climate action.

17 We recognize that no rulemaking package is ever
18 perfect, but this proposal represents a significant step
19 forward that is desperately needed for industry to
20 continue down the road to decarbonization. Notably, we
21 strongly support the nine percent step down in 2025 and
22 the 30 percent CI target in 2030 that together provides
23 the regulatory certainty that is needed to rebalance the
24 market. We also recognize that even with these amendments
25 being adopted, there's still a lot of work to do and CABA

1 Clean Fuels stand ready to assist in that effort. Again,
2 thank you for the opportunity and we hope you vote aye.

3 Thank you.

4 BOARD CLERK LEVRINI: Thank you.

5 Mikhael Skvarla.

6 MIKHAEL SKVARLA: Yeah. Chair and Board members,
7 Mikhael Skvarla here on behalf of California Hydrogen
8 Coalition. I want to extend my deep appreciation to staff
9 and the Board for taking time over the past three years to
10 work with us in the development of heavy-duty HRI, the
11 extension of the light- and medium-duty HRI and all the
12 necessary pieces to get us to this point.

13 This regulation does hold hydrogen to a high
14 standard. It holds it to a higher standard than the grid
15 at a faster timeline. So let's not -- we need to work
16 diligently then to send the appropriate policy and
17 economics signals for the decarbonization and deployment
18 of hydrogen and the refueling of infrastructure necessary
19 to get the zero-emission trucks, buses, forklifts, cars,
20 and off-road equipment out there and deployed to meet the
21 goals and standards that you guys have set on that side of
22 the equation.

23 This update has some technical fixes that are
24 still necessary and I think a lot of people are going to
25 express that over the course of today. We think that the

1 resolution goes a long way to ensuring that staff will
2 continue to work with the stakeholders here to make sure
3 that that happens. We think that there might be some
4 nuanced fixes in the resolution to get us a little bit
5 closer to that in sending the appropriate economic signal
6 to our members, and to the investors in this space, so
7 that we can get the zero-emission infrastructure deployed
8 on time.

9 Carbon neutrality is the law of the state, voted
10 on by the Legislature, signed by the Governor. Cost
11 effectiveness is embodied across our climate policies. If
12 a ton is reduced below the social cost of carbon, it is a
13 cost savings to the public. This policy does that. The
14 LCFS is one of the strongest carbon markets in the world.
15 We need to continue to perpetuate that and show
16 California's leadership. Every day lost adds expenses to
17 the next day, so we urge you to adopt.

18 Thank you.

19 BOARD CLERK LEVRINI: Thank you.

20 Keona Winkler.

21 All right. We'll go ahead. John Wenger.

22 JOHN WENGER: Thank you, Board members. John
23 Wenger here on behalf of the National Oilseed Processors
24 Association, proudly providing essential food and feed in
25 America. Our oil waste by-product is a clean renewable

1 alternative to fossil diesel and has helped displaced 70
2 percent of fossil diesel in the state. The LCFS has been
3 the most successful and cost-effective solution to
4 reducing methane and CO2 emissions in the state. While we
5 strongly support the Program, we are concerned with some
6 of the direction that this LCFS is headed. Particularly,
7 we are concerned that the cap on biodiesel crediting will
8 reduce production in the state and result in more fossil
9 diesel use, and more reliance on foreign imports that come
10 from deforested regions.

11 We're also concerned with the 2026 timeline for
12 the sustainability guardrails. Those crop decisions
13 happen a year in advance, making it impossible to obtain
14 attestations from farmers in that timeline. As the Board
15 updates the land use change model next year, we would
16 encourage the use of the most recent science for all
17 feedstocks. CARB's most recent modeling was done almost a
18 decade ago and is using land use scores there are nearly
19 60 percent higher than all recent modeling updates. So I
20 believe the notion that biofuels and renewable diesel are
21 exacerbating pollution and slowing down electrification is
22 a false narrative and not based on science. Displacing
23 fossil diesel disproportionately benefits low-income
24 communities and should be supported.

25 So we look forward to working with CARB and

1 continuing to update the modeling and the data. And we
2 would appreciate a relook at the cap and the unintended
3 consequences there in the future. But today, I do urge an
4 aye vote.

5 Thanks.

6 BOARD CLERK LEVRINI: Thank you. We'll try Keona
7 Winkler one more time. If you are with us in the room and
8 would like to still make your comment, please approach the
9 podium.

10 All right. We'll move on to Chad Frahm.

11 CHAD FRAHM: Thank you to CARB Board and staff
12 for the opportunity to comment and facil -- and for
13 facilitating a thorough rulemaking process. My name is
14 Chad Frahm with Brightmark. We're a California-based
15 company committed to solving environmental challenges. We
16 invest in, develop, own, operate over 30 biomethane
17 renewable natural gas facilities across the country with
18 our largest here in California.

19 While Brightmark supports the adoption of the
20 LCFS amendments, we have some concerns for the future of
21 the Program. The goal of the LCFS is to reduce the carbon
22 intensity of transportation fuels for greenhouse gas
23 emission reductions. The LCFS is currently the primary
24 market for economic -- to economically incentivize and
25 develop carbon-negative projects like dairy biomethane.

1 While some may question the science of climate change or
2 the science of certain mechanisms like avoided methane, we
3 appreciate CARB's leadership in developing a thorough and
4 science-based program. The LCFS program is the best
5 example of market-based fuel-agnostic solutions that
6 incentivize private investment to drive GHG reductions and
7 solve climate change. The success and market certainty of
8 the LCFS Program should be based on increasing the demand
9 for credits not limiting fuels and credit generation.

10 We're concerned that carbon intensity targets and
11 auto-acceleration mechanism included in the rule do not go
12 far enough to address the extreme credit oversupply in the
13 market. The ability of the Program to function properly
14 and drive more private investment is something we
15 encourage CARB Board and staff to monitor closely and
16 prepare to address should depressed uncertain market
17 conditions continue.

18 We believe the Board should give the Executive
19 Officer the authority to make adjustments or trigger the
20 auto-acceleration mechanism earlier if necessary.
21 Brightmark supports the updates to the LCFS because it
22 will provide some certainty for stakeholders considering
23 investments in carbon-negative projects. And a delay
24 would only drag out uncertainty delaying the private
25 investments needed for California to achieve carbon

1 neutrality by 2045.

2 Thank you for your time and the opportunity to
3 comment.

4 BOARD CLERK LEVRINI: Thank you.

5 Lauren Gallagher.

6 LAUREN GALLAGHER: My name is Lauren Gallagher
7 and I am here on behalf of Communities for a Better
8 Environment. Chair Randolph and members of the Board, I
9 call on you to vote no on the LCFS so that you can fix the
10 LCFS. Communities for a Better Environment organizes in
11 the Bay Area and Southeast LA. Our communities are
12 heavily impacted by refining. In Paramount and Martinez,
13 we have seen how lucrative biofuels take over shuttered
14 refineries, opening new pathways for air, water, and soil
15 pollution. In particular, we see dangerous increases in
16 flaring and biofuels production. The biofuels incentives
17 in this program will continue to grow biofuels refining
18 and reinvestment in refinery infrastructure.

19 The flimsy attempt at a limitation on biofuels
20 oversaturation in the Program comes after EJ has long been
21 advocating for a meaningful volume limit on biofuels. I
22 implore you to correct course and meaningfully limit
23 biofuels to cover all lipid biofuel feedstocks and treat
24 overusages as ultra low sulfur diesel.

25 The Program is also outright failing on

1 biomethane and fossil-base hydrogen. Allowing these
2 incentives to go on will cause harm for decades,
3 generations. Failing to curb dirty fossil hydrogen will
4 send a bad signal to a developing hydrogen market and will
5 keep hydrogen production polluting the communities that
6 have long borne the brunt of fossil fuel refining. Now,
7 more than ever, we need a program that stands with
8 environmental justice communities. We have been calling
9 on you to correct the LCFS and limit biofuels volumes,
10 stop subsidizing dairy methane, invest in electrification,
11 and cut dirty hydrogen. Vote no, so you can make these
12 changes.

13 Thank you.

14 BOARD CLERK LEVRINI: Thank you.

15 Sarah Taheri.

16 SARAH TAHERI: Good afternoon, Madam Chair and
17 members of the Board. I am Sarah Taheri here today on
18 behalf of San Diego Gas and Electric Company and Southern
19 California Gas Company.

20 I'm here in support of the adoption of the
21 proposed regulation today and the resolution. This is a
22 step in the right direction and will help address the
23 urgent need to act to maintain the integrity of the LCFS
24 and continue making progress on our climate goals.

25 Meeting these goals will require affordable

1 energy. The LCFS provides needed funding to support
2 zero-emission vehicles and zero-emission vehicle
3 infrastructure. And it importantly does so without adding
4 cost to our customer's bills. For SDG&E specifically, I'd
5 like to underscore the importance of the utility hold back
6 credits and the value that they bring directly to our
7 customers. As an example, over a four-year period, we
8 were able to use these credits to provide approximately
9 \$27 million back to customers via ZEV bill credits.

10 Earlier this year, we launched a pre-owned EV
11 rebate program to make owning an EV more accessible for
12 our customers, including additional support for income
13 qualified customers.

14 And with the hopeful passage of this amendments
15 today, we hope to expand our ZEV offerings. We're
16 considering a variety of proposal for that, including
17 rebates for EV charging and infrastructure to serve our
18 residential customers and, as needed, the medium- and
19 heavy-duty sectors.

20 Finally, SDG&E and SoCalGas further appreciate
21 the LCFS continued support for clean fuels like renewable
22 natural gas to support short- and mid-term needs and
23 hydrogen to support the longer term transition to carbon
24 neutrality. As the Scoping Plan established, clean fuels
25 will be important to both complement and support

1 electrification, facilitating progress toward carbon
2 neutrality. With affordability as a top priority for our
3 companies, LCFS is as important now as it ever has been
4 and we urge your aye vote.

5 Thank you very much.

6 BOARD CLERK LEVRINI: Thank you.

7 Miles Heller

8 MILES HELLER: Yes. Good afternoon, Chair
9 Randolph and Board members. Miles Heller with Air
10 Products, the only U.S. based global industrial gas
11 company and the largest producer of hydrogen in California
12 nationally and globally. We have been producing hydrogen
13 for over 60 years and deploying hydrogen transportation
14 for over 30 years, including in California. Air Products
15 is very supportive of the LCFS and the many amendments
16 proposed by staff that recognize the important role of
17 hydrogen, including a simplified hydrogen carbon intensity
18 calculator, hydrogen refueling infrastructure crediting to
19 support the medium- and heavy-duty zero-emission vehicle
20 market, and carbon intensity tracking when hydrogen in
21 varying carbon intensities is blended in pipelines.

22 We strongly support adoption of the amendment
23 package today. Adoption today will send the needed market
24 signal to encourage cleaner fuel use in California and
25 meet the state's zero-emission vehicle air quality and

1 climate goals. We appreciate the inclusion of reports to
2 the Board on hydrogen fuel availability, as directed in
3 the resolution and we look forward to working with staff
4 on these reports. In fact, we propose further review on
5 the recognition for lower carbon intensity fossil
6 hydrogen, when applying renewable attributes, and the
7 impact of the limitation for hydrogen conveyed in
8 out-of-state pipelines.

9 With this direction and careful monitoring, we
10 are confident that California's ambition to significantly
11 ramp up clean fuels and clean hydrogen production and use
12 can be realized. Thanks for allowing me to provide this
13 feedback.

14 BOARD CLERK LEVRINI: Thank you.

15 Nicole rice.

16 NICOLE RICE: Good afternoon, Madam Chair and
17 Board members. Nicole Rice, President of the California
18 Renewable Transportation Alliance. It has been a long
19 road for us to get here and we appreciate the hard work by
20 both you as Board members and CARB staff during this
21 multi-year process to examine the science and get us to
22 the point we are here today. The LCFS has a long history
23 of success that has already been modeled by some states
24 and will undoubtedly be adopted by many others.

25 While the final proposal before you today does

1 not resolve all the concerns of our industry, we believe
2 the proposed amendments are supportable and we urge the
3 Board to vote in favor of them today. Their enactment
4 will reinvigorate investment in low-carbon fuels, support
5 ongoing and future project development, and continue the
6 prioritization of dairy methane emission reductions, which
7 is a critical piece to achieving California's methane
8 abatement mandates and maintaining the State's leadership
9 on this important climate issue.

10 While we had hoped to reach resolution on some of
11 our outstanding issues, such as the reduced crediting
12 period, the RNG deliverability trigger and the 4 to 1
13 penalty, we look forward to continuing those discussions
14 with you in the future.

15 Additionally, we welcome the chance to
16 participate in the process that's outlined in the
17 resolution to evaluate the merit for additional
18 regulations on dairies and we look forward to receiving
19 more clarity on the language also in the resolution
20 pertaining to projects initiated before 2030. But with
21 all of that said, again we believe that this proposal
22 before you is supportable and we urge your adoption today.

23 Thank you.

24 BOARD CLERK LEVRINI: Thank you.

25 If we could please have the next few folks after

1 Steve Compton please make your way to either one of the
2 podiums. And Steve will go ahead and take it away.

3 STEVE COMPTON: Yeah. Good afternoon. Steve
4 Compton here, President of Sevana Bioenergy. We've been
5 involved in the LCFS Program since 2010. I have a strong
6 message of support for you today, in regards to the
7 proposed LCFS amendments. My company designs, builds, and
8 operates dairy and other renewable natural gas projects.
9 We've invested over \$350 million on the basis of the LCFS
10 markets. We have seen the LCFS withstand multiple
11 challenges and has now matured into California -- one of
12 California's strongest decarbonization programs. It's a
13 success that's been adopted across the states and
14 provinces. We're eager to see it continue here within
15 California, and it's driving an unprecedented displacement
16 of petroleum in a shorter time than anyone could have
17 imagined.

18 One interesting thing to offer is we've just
19 recently acquired the Rialto Bioenergy Rialto facility.
20 It's about 15 minutes from here. It's one of the largest
21 organic waste processing facilities into natural gas in
22 the country. It depends on programs like the LCFS and
23 sustain support from the Board.

24 If you'd like a tour, we can show how it's one of
25 the programs at one of the facilities that's causing the

1 reduction of over 86 percent of California's methane
2 emissions, which are coming from organic wastes, whether
3 it's agricultural or human generated. And our projects
4 are critical to the state to efficiently recycle those
5 organic wastes and transform them into valuable renewable
6 energy.

7 Thank you.

8 BOARD CLERK LEVRINI: Thank you.

9 Quentin Foster.

10 QUENTIN FOSTER: Good afternoon, Madam Chair,
11 members of the Board and staff. Quentin Foster with H
12 Cycle. H Cycle is supportive of the package and
13 encourages this Board to adopt it. However, I would like
14 to comment on discussions we've had regarding what types
15 of hydrogen should be eligible for the book and claim
16 accounting. In this final version of the proposed
17 regulatory changes, the LCFS will no longer allow the use
18 of book and claim accounting for hydrogen use as an input
19 to make other transportation fuels as it is authorized by
20 the current regulation. Instead, the proposed LCFS
21 regulation will allow book and claim accounting only for
22 hydrogen used as a transportation fuel, i.e. used in the
23 case of fuel cell vehicles.

24 We're concerned that for a nascent industry that
25 needs a broad pathway to accelerate adoption and

1 scalability efforts, this approach may constrict the
2 addressable market for hydrogen and thereby dampen
3 investor willingness to invest in new hydrogen production
4 facilities that utilize the book and claim accounting as
5 one method to reduce carbon intensity. We, therefore,
6 would like to recommend to the Board to have staff look at
7 how to expand the hydrogen supply via the LCFS Program via
8 a study.

9 Finally, as has been articulated, this Program is
10 a step in the right direction to advance towards the green
11 economy, and clean air benefits advocated by many of those
12 who you heard from today.

13 It's why this is so important to get right, and
14 although difficult, important to continue moving forward.
15 The right incentive structure is necessary and it is a
16 foundation for our ability to build out developing
17 renewable hydrogen infrastructure, which includes
18 hydrogen.

19 H Cycle is committed to advancing our collective
20 energy and decarbonization goals. We ask for your support
21 of this package.

22 Thank you.

23 BOARD CLERK LEVRINI: Alfredo Arredondo.

24 ALFREDO ARREDONDO: Good afternoon. My name is
25 Alfredo Arredondo and I'm providing comments on behalf of

1 the Green Hydrogen Coalition today in support of adoption
2 of the LCFS amendments.

3 The GHC appreciates CARB's leadership in
4 advancing clean fuels that transition us from a fossil
5 fuel based transportation economy to a de-fossilized
6 renewable transportation economy. So let me be clear, the
7 task before us is to transition our society from Fossil
8 Fuels, and the GHC applauds CARB's work thus far through
9 the LCFS to keep us on track to achieve de-fossilization
10 of transportation quickly, efficiently, and cost
11 effectively. I'll linger on that one one bit to also
12 remind us that fuel prices at the pump are a reflection of
13 the prices of barrels of oil that are set in a global
14 market that is controlled by a cartel OPEC and OPEC+. So
15 I think we need to remind ourselves that, you know, when
16 we do see those fluctuations, they aren't being driven by
17 LCFS

18 In the consideration of alternative fuels,
19 specifically non-fossil fuels, the GHC does implore, as
20 Quentin was just alluding to, a focus on developing strong
21 supply and demand signals. This should be a key driver
22 rather than compartmentalizing fuels into specific usage
23 categories and designations. So under the current
24 proposed rules, there is a prioritization on renewable
25 hydrogen used as finished fuel for road transportation

1 within the LCFS and not for renewable hydrogen that's used
2 in the production of other low-carbon fuels.

3 Allowing its use for the production of these
4 derivative fuels will help scale renewable hydrogen
5 production and drive down costs for all applications,
6 including within renewable ammonia, E-methanol, renewable
7 diesel, and sustainable aviation fuel. And here I'll also
8 linger and remind that the recent commitment and
9 partnership that was announced on SAF will require copious
10 amounts of renewable hydrogen. So we need to be prepared
11 to send those right signals for the supply side to develop
12 that renewable hydrogen here in California.

13 We'd know that today is only the next step -- and
14 thank you for your time.

15 BOARD CLERK LEVRINI: Thank you.

16 Gary Hughes.

17 GARY HUGHES: Thank you. I have some slides.

18 (Slide presentation).

19 GARY HUGHES: Hello, Chair Randolph, members of
20 the Board. My name is Gary Hughes and I work with
21 international organization Biofuelwatch. Our engagement
22 today on the Low Carbon Fuel Standard is directly informed
23 by our tracking the conversion of refineries in the San
24 Francisco Bay Area to making high emissions liquid biofuel
25 products, like so-called renewable diesel and sustainable

1 aviation fuel.

2 Next slide, please.

3 [SLIDE CHANGE]

4 GARY HUGHES: There are good reasons why so many
5 expert stakeholders are raising alarm about the impacts
6 that the mad California pivot to liquid biofuels will have
7 on global forests. We have provided comment on several
8 occasions that the proposed safeguards in the LCFS
9 amendments regarding biofuel feedstocks are totally
10 inadequate to meet the threat. California climate policy
11 is now irrefutably a driver of global deforestation and
12 liquid biofuels are a case study in faux decarbonization.

13 Next slide, please.

14 [SLIDE CHANGE]

15 GARY HUGHES: But it's not just deforestation
16 driving commodities, like soy, that are the problem. We
17 are having recently published briefing exposing the global
18 fat grab underpinning the California push for biofuels.
19 California is soaking up constrained feedstock commodities
20 from around the world, but CARB is ignoring the social and
21 environmental harms associated with this global fat grab.

22 Next slide, please.

23 [SLIDE CHANGE]

24 GARY HUGHES: At the same time, a dynamic that
25 has simply not gotten the attention that it deserves is

1 what it means ethically and morally that California is
2 celebrating making fuel from food. This is a trend that's
3 particularly disturbing with all the evidence about how
4 these produces are not a climate solution.

5 Next slide, please.

6 [SLIDE CHANGE]

7 GARY HUGHES: The impacts on global food security
8 that arise from the explosion in the manufacture and use
9 of liquid biofuels facilitated by the LCFS are dramatic,
10 and they have not been adequately addressed.

11 Next slide, please.

12 [SLIDE CHANGE]

13 GARY HUGHES: So making fuel from food is only
14 one of the many problems with the LCFS. Unfortunately,
15 despite some good elements, there are numerous
16 technologies promoted by the LCFS that are making the
17 climate situation worse faster. Thus, we ask that the
18 Board vote no on the amendments package.

19 Thank you for your time and attention to our
20 engagement on this important issue.

21 BOARD CLERK LEVRINI: Thank you.

22 Steve Leshner.

23 STEVE LESHNER: Good afternoon, Chair Randolph and
24 members. Steve Leshner from Shell U.S.A. Thank you for
25 the opportunity to comment.

1 As you probably know, Shell has been in business
2 in California for over a century and we hope to be part of
3 the bright energy transition future in California. Shell
4 is really leaning in to the energy transition. We have
5 our own goal zero targets just as the State does. We're
6 heavily invested in California in EV charging. In fact,
7 the last government body I addressed was plan -- local
8 planning commission to permit our first EV hub in
9 California. We're heavily invested in hydrogen,
10 sustainable aviation fuels, biofuels, solar, and wind all
11 in California.

12 And we really rely on the regulatory construct
13 set up by the State, and Shell, and others, as you know as
14 you've heard today, have made significant investments to
15 support California's low carbon journey. And we really
16 see the Low Carbon Fuel Standard as the heartbeat of that
17 journey. Shell's investment decisions are made three to
18 five years before projects are completed and before any
19 return is realized on investment. The return on those
20 investments is predicated on the LCFS program language in
21 effect at the time that it's adopted.

22 To us, the LCFS plays two important roles, one as
23 a predicate for reducing emissions, and two, as being an
24 investment attractor. And so we hope that as you look to
25 renew the program, which we hope you do, as written with

1 the amendments today, that you do so with an eye for those
2 two things.

3 The impact of unexpected changes to the LCFS can
4 mean that large investments are at risk of being stranded
5 and the State being underserved in its energy transition
6 objectives. If a state is to meet its climate goals and
7 investors are to meet their business objectives, we need
8 to move forward with the language as proposed.

9 We, therefore, encourage the Board to adopt the
10 language being considered today and allow the market to
11 provide California with low carbon energy that is
12 accessible for all Californians and reliable for those
13 same consumers. CARB should continue to incentivize clean
14 energy investments by doing what we know works and
15 maintaining a stable technology-neutral program.

16 Thank you very much.

17 BOARD CLERK LEVRINI: Thank you.

18 We are at our halfway mark with our in-person
19 commenters. If you see your name on the projector, please
20 make your way to either one of the podiums. And with
21 that, Tom Campbell, you may go ahead.

22 TODD CAMPBELL: Thank you. Good afternoon. Todd
23 Campbell representing Clean Energy. And Clean Energy is
24 very happy to support today's LCF amendments. The Program
25 is working. It's a model for other states and around the

1 world.

2 Since its inception the LCFS has cost effectively
3 reduced the most carbon emissions in California's
4 transportation section. In 2002 alone, vehicles powered
5 by low-carbon fuels reduced greenhouse gas emissions
6 equivalent to 14 trillion miles driven, reduced CO2
7 emissions equal to 633 billion gallons of gasoline,
8 sequestered carbon equivalent to 93 million trees. The
9 LCFS has attracted billions of dollars of investment in
10 low-carbon fuels in California green jobs. According to
11 CARB's own analysis, the amended program would spur
12 development and use -- use of sustainable aviation fuels,
13 cover the costs of infrastructure needed to support our
14 zero-emission truck goals, and inject over a hundred
15 billion into the EV market alone.

16 We are proud to be a part of the solution that
17 was laid out by this body. California's leadership with
18 the LCFS has demonstrated to clean tech markets that the
19 state is a reliable partner and they should feel confident
20 in their investment here to reduce greenhouse gases. For
21 the State to retreat now would undermine not only this
22 Program but the certainty required to attract investment
23 in critical climate programs in the future, especially now
24 when the eyes of the country are upon us.

25 California's retreat from cali -- from climate

1 policies will be read by naysayers as a confirmation of
2 their cynicism. I implore you to adopt these amendments
3 today. This is an incredibly cost effective and powerful
4 program that we need.

5 Thank you.

6 BOARD CLERK LEVRINI: Thank you.

7 Melodee Black.

8 MELODEE BLACK: Madam Chair and CARB Board
9 members. My name is Melodee Black and I represent
10 Southern California Edison, or SCE. SCE supports the
11 proposed amendments for the LCFS Regulation, because we
12 believe that LCFS is or has and continues to be a critical
13 component of California's advancement towards a
14 decarbonized economy. As a recipient of utility-based
15 credits, we believe that the LCFS credit proceeds -- or
16 not we believe, we are utilizing the LCFS credit proceeds
17 to incentivize both EVs and also to fund what is referred
18 to as our hold-back programs services. And those are
19 services that are supporting the installation of EV
20 charging specifically.

21 We expect to spend approximately \$375 million on
22 hold-back programs and services through 2027, between
23 what's authorized already by the CPUC and what's pending
24 before them.

25 Eighty percent of this funding is for programs

1 and services that benefit equity communities directly, and
2 that includes our pre-owned EV rebate program, as well as
3 a charge ready home program that provides a rebate for
4 low-income customers who need a panel upgrade in order to
5 support EV charging. We're also utilizing a portion of
6 our hold-back funds on programs that help accelerate the
7 adoption of medium- and heavy-duty vehicles, including --
8 and specifically electric vehicles, including providing a
9 drayage truck rebate and also a zero-emission truck, bus,
10 and infrastructure finance program this aims to unlock
11 more than 80 million in low cost loans for fleets
12 electrified in SCE's service area.

13 The LCFS regulation has played an instrumental
14 role in accelerating the electric vehicles. And although
15 the amended version of the LCFS Regulation is not perfect,
16 it builds upon and strengthens the current regulation and
17 should be adopted.

18 Thank you.

19 BOARD CLERK LEVRINI: Thank you.

20 Laura Renger.

21 LAURA RENGGER: Hi. Good afternoon. Thank you.
22 I first just want to -- well, I'll introduce myself. I'm
23 Laura Renger. I'm Chair -- I'm the Executive Director of
24 the California Electric Transportation Coalition and I
25 first just want to thank Chair Randolph and the Board for

1 your leadership on this issue. CalETC has worked with and
2 with staff for a number of years. We know it's been
3 difficult. We know it's been a lot of work. And I'd also
4 just like to thank staff for all their work, because this
5 is really a critically important program for
6 electrification in California.

7 You've heard from some of our members at CalETC.
8 We represent the electric utilities that provide services
9 to enable electric vehicles. We also work with the
10 automakers that are committed to electric vehicles, and
11 the EV service providers who you've heard from today.
12 This LCFS Program will bring critical funding that in the
13 wake of what happened this week in the federal level, we
14 know California needs in order to achieve our goals. And
15 we need this funding, especially for important programs,
16 such as the ones that were mentioned earlier today,
17 including EV rebate programs for used EV -- electric
18 vehicles, chargers for multi-family residences, rebates
19 for drayage truck purchases, incentives for commercial,
20 city, and non-profit chargers.

21 We estimate that depending on the credit prices
22 and the speed of adoption, about \$10 billion over the next
23 10 years will go to these programs that will enable the
24 transition to electric vehicle for all Californians.

25 And I think it's also just really important to

1 note that a hundred percent of the LCF credits that the
2 electric utilities receive go directly back to customers
3 in equity communities for these programs. So thank you
4 again for your leadership and for your time today.

5 BOARD CLERK LEVRINI: Mary Solecki.

6 MARY SOLECKI: Hi there. I'm Mary Solecki. I'm
7 here on behalf of World Energy to voice support for the
8 Low Carbon Fuel Standard and urge you to adopt the package
9 before you today. World Energy is the world's first
10 producer of sustainable aviation fuel right here in the LA
11 basin at the Paramount plant. World Energy's products, in
12 addition to reducing carbon intensity by 80 percent or
13 more, also eliminate fuel carcinogenic compounds and SOx.
14 Their products reduce NOx by at least 10 percent and
15 reduce particulate matter by 50 percent or more.

16 World Energy makes continuous investments in
17 reducing the carbon intensity of its fuels and extends its
18 commitment to reduce emissions through \$4 billion in
19 manufacturing and new technologies. Once the Paramount
20 plant, which is currently under a conversion to move from
21 fossil infrastructure to sustainable aviation fuel is at
22 full capacity, the SAF will be able to displace 17 percent
23 of the fossil jet fuel at LAX. World Energy's goal is to
24 supply one billion gallons of SAF annually by 2030. Thank
25 you to the staff for a year's long effort to integrate

1 stakeholder feedback. We do appreciate that.

2 The LCFS is crucial to California and an
3 essential tool to further drive carbon intensity
4 reductions. We urge your support of the Program today.
5 Thank you for your time.

6 BOARD CLERK LEVRINI: Thank you.

7 Melanie Law.

8 MELANIE LAW. Good afternoon, Board members.
9 Thank you for the opportunity to provide comments today.
10 I am Melanie Law here on behalf the National Corn Growers
11 Association, who work to represent and advance the
12 interests of corn growers and farmers. NCGA would like to
13 voice our support for the LCFS and urge Board members to
14 approve the proposed amendments during today's hearing.
15 The finalization of this rulemaking is crucial, so that
16 the proposed amendments can take effect immediately and
17 ensure that the Program can capture the maximum emissions
18 reductions.

19 While we are supportive of the LCFS and feel that
20 it is imperative that the rulemaking is finalized today,
21 our concerns around the proposed sustainability
22 requirements remain. For future consideration, we urge
23 CARB staff to evaluate alternative options, such as farm
24 level crediting. Farmers are continuing to integrate new
25 technologies an innovations to increase their yields using

1 less land and resources.

2 Incentivizing these farm-level practices can be
3 more effective and lead to overall CI reductions for a
4 fuel pathway. NCGA also asks CARB to consider approving
5 E15 as it is readily available and can support additional
6 CI reductions for the LCFS Program. California is the
7 only state which has not approved E15.

8 NCGA appreciates CARB staff's work throughout
9 this rulemaking process. We are supportive of the LCFS
10 and hope to see the rulemaking finalized today.

11 Thank you.

12 BOARD CLERK LEVRINI: Thank you.

13 Asmin -- Yasmin Ochoa.

14 YASMIN OCHOA: Hi. My name is Yasmin Ochoa. I
15 lost my voice today, so my colleague Nikhil Narkar will
16 read the speech.

17 NIKHIL NARKAR: Thank you. I'm a long-time
18 resident of California and I'd like to express my
19 gratitude to the California leadership involved in
20 creating LCFS as an important tool to addressing climate
21 change. I have sought to always do good for the better of
22 the world. And as a Senior Data Manager at California
23 Bioenergy with over 14 years of data management
24 experience, I'm proud that I'm currently in a role where
25 my contributions can have a great impact for a better

1 future by reducing methane emissions and creating
2 renewable energy derived by dairy manure.

3 I strive to lead a team that quantifies the
4 emission reductions from our projects with integrity and
5 detail. And as I Senior Data Manager, I can personally
6 attest to the vigor and transparency behind the carbon
7 reduction calculation used for the Low Carbon Fuel
8 Standard. And also, our projects rely on the integrity of
9 our well maintained metering devices, allowing accurate
10 and reputable data and transcribed into an accurate
11 reporting for greenhouse gas reductions.

12 And we measure gas produced from our 60 plus
13 operational projects on a 15 minute integral basis. And
14 we know exactly how much methane is being reduced with
15 these accurate meters

16 And without these digester, the methane would be
17 released into the atmosphere harming our climate and the
18 most -- this will be impacting the most vulnerable
19 Californians. Our calculations are subject to third-party
20 verification ensuring that every ton of methane reduction
21 is accountable for full transparency and accountability.

22 Adopting the proposed LCFS amendments will ensure
23 that we continue to have a diverse range of fuel options,
24 especially RNG, which delivers some of the most
25 significant greenhouse gas reductions available today.

1 Dairies represent the presence of key opportunity
2 to reduce methane emissions and don't waste into climate.

3 BOARD CLERK LEVRINI: Thank you. That --

4 NIKHIL NARKAR: I support LCFS on this --

5 BOARD CLERK LEVRINI: Thank you.

6 Bobby Thomas.

7 BOBBY THOMAS: Okay. Thank you to the CARB Board
8 and staff for the opportunity to speak today. My name is
9 Bobby Thomas. I'm the General Manager of what was once
10 the San Francisco refinery and what is now Rodeo Renewable
11 Energy Complex. Our facility has been providing
12 California's energy needs for over 128 years. We continue
13 to evolve to make sure we're supporting the State's goals.

14 My colleagues from the United Steel Workers and I
15 wanted to be here and participate today, because we want
16 you to hear firsthand from folks on the ground. The Rodeo
17 Renewable Energy Complex positions us as a leader in
18 renewable fuels production and advances our strategy to
19 lower our carbon footprint. The conversion significantly
20 reduced our emissions, 80 percent reduction in SOx, 33
21 percent reduction in NOx, 20 percent reduction in PM10,
22 and 8 million metric tons per year of life cycle carbon
23 emission reductions. This is equivalent to 1.3 million
24 cars being taken off the road.

25 The Rodeo Renewable Energy Complex is fueling the

1 future with the next generation of cutting edge liquid
2 fuels. This conversion was, by and large, driven by the
3 State's policy direction to embrace and promote the
4 production of lower carbon fuels in California.

5 LCFS plays a central role in the State's climate
6 plan. And with your support, it will continue to foster
7 the production of renewable fuels. While we may recommend
8 tweaks around the edges that could be made, overall we
9 knew it was important for us to be here today to share
10 with you that we support the direction of the Program.
11 That's because it serves to support jobs and investments
12 in the clean energy economy. We believe that the process
13 CARB has gone through to provide a review of the Program
14 is important to keep the regulation current and working
15 towards incentivizing low-carbon fuel production in the
16 State. We ask that you support the package before you
17 today. Thank you.

18 CHAIR RANDOLPH: Thank you.

19 Joe Jawad.

20 JOE JAWAD: Good afternoon. Thank you, CARB
21 Board and staff for the opportunity to speak to you today.
22 My name is Joe Jawad and I'm the President of United Steel
23 Workers, Local 326. To my right here is Felix Luna, USW
24 Health and Safety Rep Chair. We represent roughly 300
25 operations, maintenance, and laboratory personnel at the

1 Rodeo Renewable Energy Complex. I am the USW health and
2 safety representative on-site and I've worked at Rodeo for
3 10 years.

4 We come to Riverside today to participate in
5 person so that you can hear firsthand from the people on
6 the ground who are benefiting from the conversion of our
7 facility to a renewables fuels facility. To us, this is
8 the model of how to do this right. This is what just
9 transition should look like. The Rodeo Energy Complex
10 advances our strategy to expand renewable fuels
11 production. It is the fueling future of the next
12 generation of cutting edge liquid fuels production and
13 beyond. This conversion was driven by policies such as
14 the Low Carbon Fuel Standard.

15 Converting the facility meant saving 500 jobs,
16 including almost 300 union represented jobs. Therefore,
17 on behalf of the USW Local 326, we ask that this Board
18 support the package that is before you today, because it
19 serves to support jobs, the environment, our community,
20 and investments in the clean energy economy.

21 Thank you again for today and our opportunity to
22 come up here.

23 BOARD CLERK LEVRINI: Thank you.

24 Robin Vercruse.

25 ROBIN VERCRUSE: Hi, Madam Chair and Board

1 members. I'm Robin VerCruse, the Executive Director of
2 the Low Carbon Fuels Coalition. We urge you to support
3 the proposed LCFS amendments. The LCFS has significantly
4 beat carbon reduction targets at lower than predicted cost
5 thanks to tech neutrality and crediting carbon reductions
6 in transportation from whatever source. Despite our
7 members concerns for the proposal that selectively
8 disadvantaged certain feedstocks and fuel pathways to
9 nudge the Program away from the tech neutrality that has
10 been a hallmark of the LCFS success, our primary concern
11 has been to rebalance the credit market and restore
12 investor confidence.

13 This proposal achieves these goals sending the
14 long-term signal needed to reach California's ambitious
15 climate goals at a pivotal moment for our state. There
16 have also been a lot of claims about the cost of the LCFS
17 Program and the price that consumers pay. Previous fuel
18 price production -- projections have way overshoot the
19 markup to \$1.80 a gallon. The actual number is 8 to 10
20 cents at the moment, even while carbon intensity
21 reductions are more than three years ahead of schedule.

22 Californians also benefit from fuel market
23 competition. A big reason 70 percent of our diesel is now
24 from renewables or waste sources is that it is regularly
25 cheaper than conventional diesel and can be used in

1 existing vehicles. Some oppose the package want to
2 further limit credit opportunities to favor particular
3 fuels and technologies. From realities of supply and
4 demand, more credit generation brings down cost and
5 conversely fewer credits available points to higher costs.

6 It is safe to say that the higher LCFS cost would
7 increase both the likelihood and potential magnitude of
8 consumer price impacts. This package strikes a balance to
9 accelerate progress on climate goals while reducing health
10 impacts, decreasing pollution exposure disparities,
11 fostering electrification, and promoting fuel competition.
12 For these reasons, we urge a yay vote on the amendments
13 before you today.

14 BOARD CLERK LEVRINI: Thank you.

15 Robert Parkhurst.

16 ROBERT PARKHURST: Good afternoon. I know it's
17 been a long day. Thank you, Chair Rudolph -- Randolph and
18 members of the Board for the opportunity to speak today.
19 My name is Robert Parkhurst and I run a consulting company
20 Sierra view Solutions. I work with companies and
21 organizations to help them generate revenue through
22 environmental markets by implementing practices that
23 decrease greenhouse gas emissions and sequester carbon in
24 the soil. Today, I'm here to support the sustainability
25 requirements for biomass in Section 954889(g) of the

1 proposed amendments.

2 For more than a decade farmers and ranchers have
3 sought to have their climate smart agricultural practices
4 recognized through the LCFS. Today's amendments lay out
5 an initial pathway for that crediting. The agricultural
6 community has been hard at work developing tools and
7 processes to measure, monitor, report and verify the
8 greenhouse gas benefits of climate smart agricultural
9 practices through biogeochemical models, remote sensing,
10 and chain of custody -- chain of custody tracking tools.
11 These tools can both track grain from the field to ethanol
12 plants, as well as measure the GHG benefits touch
13 practices -- of such practices, including cover crops,
14 reduced tillage, crop rotations, and nitrogen management.

15 These companies and organizations are able to
16 meet the current requirements of the regulation and are
17 excited about the current and future opportunities to
18 track and eventually credit these practices through the
19 LCFS and other sustainability programs. As staff
20 implements these amendments, I encourage you to support
21 the review and approval of additional certification
22 systems beyond those of the European Union's Renewable
23 Energy Directive. There are multiple programs in the U.S.
24 that can demonstrate reductions in GHG emissions by more
25 than 40 grams per megajoule and they should be considered

1 as part of the implementation of the regulations.

2 I also encourage the Board to direct staff to
3 study what climate smart practices should be credited in
4 the LCFS when they report back to the Board in July of
5 2026 with their findings And recommendations. Thank you
6 very much for the opportunity to speak today and for your
7 leadership in improving these amendments that supports
8 climate smart agricultural practices.

9 BOARD CLERK LEVRINI: Thank you.

10 Noah Garcia.

11 NOAH GARCIA: All right. Madam Chair and Board
12 members, thank you for the opportunity to provide comments
13 today. I'm Noah Garcia speaking on behalf of EVgo. And I
14 want to express strong support for the proposed LCFS
15 amendments before you today. My comments also reflect the
16 views of our EV and EV charging coalition partners,
17 ChargePoint, Rivian, and SWTCH.

18 The LCFS remains fundamental to California's
19 transportation decarbonization efforts and we commend CARB
20 for updating the regulation to more closely align with the
21 State's goals for zero-emission vehicle deployment and
22 overall climate policies, which include the goal of
23 deploying over one million non-residential EV chargers by
24 2030 to support CARB's signature ACC II regulations.

25 The final LCFS package is instrumental to

1 accelerate the installation of EV charging infrastructure
2 and adoption of EVs, and ultimately will provide
3 Californians with more opportunities to ride and drive
4 electric with confidence.

5 Finally, we'd like to thank staff and the Board
6 for their time and dedication to this rulemaking. CARB's
7 leadership is essential in achieving our State and
8 national climate commitments and we look forward to
9 continuing to support California's zero-emission future
10 with a strong strengthened LCFS. With that in mind, we
11 respectfully urge the Board to adopt the proposal before
12 you today.

13 Thank you.

14 BOARD CLERK LEVRINI: Thank you.

15 Elisia Hoffman.

16 ELISIA HOFFMAN: Thank you. Good afternoon,
17 Chair and Board members. My name is Elisia Hoffman and
18 I'm the Western States Lead for Electrify America.
19 Electrify America is a the nation's largest open network
20 of public DC fast chargers for electric vehicles. In
21 California alone, we have over 1,100 chargers across more
22 than 260 locations open to the public.

23 Electrify America strongly supports the Low
24 Carbon Fuel Standard and proposed amendments. The LCFS is
25 absolutely essential to deploying EV charging in

1 California and achieving California's transportation
2 electrification goals. The program has achieved
3 significant economic and environmental benefits for
4 Californians. It is single-handedly responsible for
5 creating \$4 billion market to support that transition,
6 with an estimated one billion in credits generated for a
7 robust in-state EV charging network.

8 Support for EVs, electric vehicles, will only
9 grow under the program's amendments. We sincerely
10 appreciate the efforts of CARB staff and Board members
11 over the past several months and years to get us to this
12 point today. We also support and appreciate clarification
13 in the resolution to continue to monitor verification
14 requirements for electric vehicle charging. EV charging
15 stations are not like the other fuel production facilities
16 and deserve a separate process for verification that is
17 more appropriate for EV charging pathways.

18 Electrify America urges your approval of the
19 amendments today and we look forward to continuing to work
20 with staff to effectively implement this critically
21 important program. Thank you for the opportunity to
22 provide public comment today.

23 BOARD CLERK LEVRINI: Thank you.

24 James Kast.

25 JAMES KAST: Thank you very much, Chair

1 Randolph, members of the Board. I just want to first
2 acknowledge first that -- I'm sorry. My name is James
3 Kast with Iwatani. And I want to acknowledge the efforts
4 of the Board to really listen to many diverse perspectives
5 here. I know it is very difficult. It's hard to meet
6 everybody's needs. But I just appreciate everything
7 you've done listening to everybody here and understanding
8 how we can push forward towards zero emission and what is
9 needed even today to help us get there, because it will
10 take time.

11 Also, I'd like to really talk about the effort
12 required to get to hydrogen infrastructure and
13 zero-emission infrastructure is imperative and enabled by
14 the LCFS program. Without that, we as a company that
15 operates hydrogen stations, and 10 of them now in the
16 ground and more in the pipeline, would not be able to meet
17 the investment, and more importantly would not be able to
18 reduce the cost of this lower carbon fuel to the end user,
19 which I think is really the key point of this program to
20 enable that lower cost fuel.

21 And so really, what we've seen is how important
22 this Program can work as long as it is balanced
23 appropriately, like it was a few years ago. Investment
24 was booming and we actually had very competitive pricing
25 out in the market of zero-emission fuels. And I think

1 we've all seen there's been a challenge the last couple
2 years. Prices have come down in the market and that
3 slowed investment and really increased the cost to
4 consumers because we are passing that through.

5 So I actually am very, very strongly supportive
6 of the proposals today as it helps to address these
7 issues, namely things like running -- getting the carbon
8 intensity target down to really drive the prices back up
9 and move the right direction, increasing the light-duty
10 and expanding to medium- and heavy-duty support for
11 zero-emission infrastructure credits, so we can make the
12 strong investments needed, and, of course, extending the
13 Program beyond 2030, so we have more longer term certainty
14 in this Program to help justify here.

15 So again, thank you very much, even just the last
16 couple months. You've really heard us and I think made
17 this program more effective and really heard the community
18 here. And I really urge you to adopt these changes.

19 Thank you very much.

20 BOARD CLERK LEVRINI: Thank you.

21 Brandon Wong.

22 BRANDON WONG: Good afternoon, Madam Chair and
23 members of the Board. My name is Brandon Wong. And on
24 behalf of the Electric Vehicle Charging Association, we'd
25 like to express our strong support for the proposed

1 amendments to the Low Carbon Fuel Standard. EVCA is a
2 trade association comprised of roughly two dozen leasing
3 companies within the EV charging ecosystem and we'd like
4 to wholeheartedly echo the Chair's comments and many of
5 the other comments made by other commenters today about
6 how critical LCFS is in providing a sustained market-based
7 mechanism to encourage private sector investment in
8 California's clean energy economy.

9 We know that public charging availability is one
10 of the leading barriers to EV adoption. And as staff
11 noted during their presentation, LCFS has a proven track
12 record of getting thousands of chargers into the ground.
13 It should not be understated how critical LCFS has been in
14 attracting in our members to invest in California. This
15 success has allowed California to be -- have the largest
16 EV fleet and EV charging network in the nation.

17 To put it simply, a strengthened LCFS paves the
18 way for Californians to participate in the EV transition,
19 saving over a thousand dollars in gasoline expenses
20 annually and cleaning the air we breathe. We really want
21 to thank staff for holding a thorough and transparent
22 stakeholder process over the past few years. And today's
23 amendments are essential to correcting recent trends
24 within the Program that have adversely impacted charger
25 deployment. We urge the Board to adopt today's amendments

1 and we thank you for your time.

2 BOARD CLERK LEVRINI: Thank you.

3 Sean Newsum.

4 SEAN NEWSUM: Good afternoon. I'm Sean Newsum
5 from Airlines for American, the principal trade
6 association for the major U.S. airlines. I'm here to
7 speak in strong support of the proposal.

8 We were pleased to announce with CARB on October
9 30th, the joint agreement for a new collaborative effort
10 to address the challenges of increasing SAF availability
11 for use in California. U.S. airlines are committed to
12 reducing the climate impacts of aviation and achieving net
13 zero carbon emissions by 2050.

14 Transitioning to sustainable aviation fuel, or
15 SAF, is core to this commitment and we have pledged to
16 work with governments and other stakeholders around the
17 world to make three billion gallons of affordable SAF
18 available to the United States by 2030. SAF is costly at
19 two to three times the price of conventional jet fuel and
20 it hasn't yet attracted the type of investment needed to
21 dramatically increase the level of production needed.

22 And where the capacity to produce SAF exists,
23 producers have greater incentive to produce other fuels,
24 such as renewable diesel, and thus SAF is produced and
25 used at levels below its potential.

1 The agreement between CARB and A4A not only sets
2 a goal for accelerating SAF availability for use in
3 California, but will establish a sustainable aviation fuel
4 working group of government, industry, and other key
5 stakeholders to identify new and innovative policy
6 approaches to accelerate the transition away from
7 petroleum fuels towards sustainable aviation fuels and
8 will provide the benefits of lower carbon emissions and
9 improved air quality in California.

10 California was first to implement the opt-in
11 mechanism for SAF under the LCF Program and we support the
12 continuation of the opt-in mechanism along with other
13 enhancements to the Program. The proposed amendments
14 complement the new SAF partnership between CARB and the
15 airlines, and we look forward to working together with
16 CARB and other stakeholders to explore the policy and
17 non-policy interventions that have the potential to
18 achieve our mutual objective of increased SAF availability
19 for use in California.

20 Thank you.

21 BOARD CLERK LEVRINI: Thank you.

22 Athena Tan.

23 All right. Bill Magavern.

24 BILL MAGAVERN: Bill Magavern with the Coalition
25 for Clean Air. And now more than ever, it's essential

1 that we use our clean transportation dollars wisely, so
2 when it comes to spending the credits that are accrued
3 from residential EV charging, we think that money should
4 mostly go to medium- and heavy-duty vehicles, particularly
5 in the disadvantaged communities that are most burdened by
6 toxic diesel exhaust. If any of that money goes to
7 light-duty incentives, we don't recommend that it is spent
8 that way, but if it is, we think that that should only be
9 targeted to the low- and moderate-income Californians who
10 need assistance in making that transition to ZEVs. And if
11 we can't bring everybody along, it will not be a
12 successful transition.

13 Moving to a separate issue. We really appreciate
14 the inclusion in the resolution of a very clear direction
15 to planning for a regulation on dairy methane. I've
16 supported measures to regulate methane from landfills, and
17 that one needs to be strengthened and updated by the way,
18 as well as methane from oil and gas. It's long past time
19 that we do the same for our methane emissions from
20 dairies.

21 We also appreciate that there is a mention of
22 possibly developing a zero-emission airport ground
23 operations regulation. We would suggest that be made more
24 explicit and to state that you will, in fact, move forward
25 with such a regulation, so that we can clean up that part

1 of the aviation sector that is clearly within the State's
2 jurisdiction.

3 And finally, we share the concerns of many over
4 the use of crops -- food crops for fuel. And if the
5 guardrails in this proposal are not successful, it may be
6 necessary to, I hate to say it, amend this rule again
7 sooner rather than later. So we hope the scientific work
8 continues. Thank you.

9 BOARD CLERK LEVRINI: Thank you.

10 Athena Tan, if you are in the room with us and
11 would still like to make your comment, please make your
12 way to the podium.

13 We'll move on. Jacqueline Moore.

14 JACQUELINE MOORE: Hello. Good afternoon.
15 Jacqueline Moore from PMSA. And we are the single largest
16 fuel supplying equipment registrant in the entire state at
17 over 50 percent and as such we are here in support of the
18 incredibly effective LCFS Program.

19 First, we're highly appreciative that the Board
20 has signaled interest in alternative fuels for ocean-going
21 vessels and to assess how LCFS can support this endeavor
22 for future rulemaking. LCFS is an opportunity to spur
23 investment and production in green maritime fuels and to
24 partner with us, partner with industry, as we seek to
25 decarbonize shipping.

1 We're also very, very appreciative that the Board
2 has set the path for staff to engage with those of us that
3 have invested in Zero-emissions equipment and
4 infrastructure and finds an alternative to the third-party
5 verification proposal. We very much support transparency
6 in a cost effective manner.

7 However, the resolution language for such a
8 timeline to workshop this is a bit unclear and so I
9 respectfully request for you to prioritize the assessment
10 of the third-party verification alternatives to next year,
11 so in 2025. And this is because it would be prior to the
12 2026 verification requirements. As currently written, it
13 is tied to the Scoping Plan, which I believe is scheduled
14 for 2027. And that unfortunately is just too late as
15 those requirements would be implemented at that time.

16 So making this small administrative adjustment to
17 timeline it's 2025 allows us to work together and allows
18 for Board consideration ahead of the 2026 requirements.
19 We very much welcome working with CARB on an alternative
20 and have also very much been appreciative of our fruitful
21 engagement over the last few months and that concludes my
22 comments.

23 Thank you.

24 BOARD CLERK LEVRINI: Thank you.

25 If we could please have commenters 81 through 85

1 form a line at either one of the podiums.

2 Next speaker Jackie Birdsall.

3 JACKIE BIRDSALL: Thank you. Chair Randolph,
4 Board members, and staff, my name is Jackie Birdsall. I'm
5 Senior Program Manager of Environmental Regulations at
6 Toyota Motor North America. I am pleased to offer
7 Toyota's support of the LCFS Program and our shared
8 mission towards decarbonization. We believe this Program
9 is necessary to drive California towards cost effective
10 lower carbon alternative fuels. As such, we support the
11 adoption of these amendments without delay.

12 Toyota continues to pursue a portfolio approach
13 of electrified vehicle options across the heavy-duty and
14 light-duty sectors. We believe that policies of CARB
15 should ensure that fueling and charging also reflect a
16 multi-pathway zero-emission and low carbon approach.

17 In addition to our support, we have three
18 requests today. First, as to hydrogen and fuel cell
19 development, we continue to urge CARB to ensure that the
20 LCFS drive investment in hydrogen infrastructure. Toyota
21 agrees with our hydrogen fueling partners that the
22 proposed 1.5 times cap on CapEx will chill investment in
23 necessary hydrogen station development, particularly in
24 these critical early years of infrastructure build-out.

25 Second, the current proposal includes a 50

1 percent D rate and 10-year crediting window of hydrogen
2 fueling stations that will post significant financial
3 challenges for our station developers. We support the
4 California Hydrogen Coalition's proposal of a lower D rate
5 of 37.5 percent and a 15-year credit window. We also
6 support the amendment that allows up to 45 percent of the
7 base credit generation by light-duty ZEV residential
8 charging. Such regulatory provisions would be
9 complementary in advancing ZEV markets.

10 Third, on the battery EV site, we support the
11 expansion of capacity crediting to medium-duty and
12 heavy-duty stations and the second round of 15-day changes
13 regarding verification provisions.

14 In closing, Toyota recognizes the efforts of CARB
15 to meet our decarbonization goals and supports the
16 adoption of the LCFS amendments without delay.

17 Thank you.

18 BOARD CLERK LEVRINI: Thank you.

19 Next speaker, Ryan Kenny.

20 RYAN KENNY: Hi. Good afternoon, Chair Randolph,
21 members of the Board, and staff. My name is Ryan Kenny
22 with Clean Energy. We urge strong support today for
23 adoption. It's not everything that the industry had
24 requested and needed, but after three years, it's time to
25 adopt the update.

1 This Program has been around for years. Adoption
2 today will increase decarbonization of transportation
3 displace fossil fuels, incentivize the removal of diesel
4 from our roads, provide market certainty and investor
5 confidence, help meet climate and clean air goals, and
6 provide economic benefits from projects, including green
7 jobs.

8 It's important to note that this -- that this
9 update is based on the three-year process using empirical
10 data, quantitative research, science, and been through a
11 very long public process. If you're looking for a
12 comparable policy, especially on dairy biogas, the
13 Legislature this year actually considered two bills that
14 would have either curbed or eliminated dairy biogas
15 crediting in the LCFS. And both bills died in Committee
16 in the house of origin. The LCFS is a cost-effective way
17 to meet our climate targets.

18 In fact, a Senate Appropriations Committee
19 analysis identified that the cost to the State would be
20 3.2 to 4 billion dollars if these incentive credits were
21 eliminated. The State would have to come up with that
22 money on its own to meet these same climate targets. We
23 don't believe delay is an option. Market certainty and
24 investor confidence is the foundation to project
25 development. The LCFS is working. We urge support to

1 reach our State's climate goals.

2 Thank you.

3 BOARD CLERK LEVRINI: Thank you.

4 Nina Robertson.

5 NINA ROBERTSON: Good afternoon, Chair and
6 members of the Board. My name is Nina Robertson and I'm
7 an attorney at Earthjustice. I urge the Board to reject
8 the flawed proposal before you today and to direct staff
9 to make the fixes that you asked for over a year ago. The
10 proposal is simply not worthy of your vote. It is not
11 based on science and it will undermine environmental
12 justice and the rapid transition to zero emissions that we
13 need more than ever today.

14 It represents a grab bag of giveaways to
15 polluting special interests that have turned what once was
16 a program for climate progress into a piggy bank for their
17 false climate solutions. The science could not be
18 clearer. It is time to focus all of our resources on
19 zero-emissions transportation. It is time to phase out
20 distortionary, expensive and harmful avoided methane
21 crediting. It is time to put an effective limit on
22 biofuels volumes. It is time to close the harmful
23 loophole that allows dirty hydrogen to paper over its
24 pollution with bogus credits. These dirty fuels are
25 wolves in sheep's clothing and CARB must seem them for

1 what they really are, a harmful delay tactic used to
2 thwart progress towards clean climate solutions.

3 I want to emphasize the grave errors that this
4 proposal commits on hydrogen. California is holding
5 itself out as a clean hydrogen hub and CARB is an agency
6 that prides itself in science-based decision-making that
7 protects our air. Yet, this proposal entrenches decades
8 of expensive and unjustified subsidies for dirty hydrogen
9 that will actively undermine clean hydrogen development in
10 this state. This will mean not only delayed climate
11 progress, but also heightened and prolonged exposure to
12 toxic emissions in California's front-line refinery
13 communities. CARB must do better.

14 The incoming Trump administration has promised to
15 undermine California's climate progress and this agency's
16 authority. This will be a fight for the very survival of
17 our bedrock environmental protections. At this critical
18 moment, we need CARB to muster every resource for zero
19 climate transportation.

20 Thank you.

21 BOARD CLERK LEVRINI: Thank you.

22 Matt Vespa.

23 MATT VESPA: Thank you. Chair Randolph, members
24 of the Board, Matt Vespa with Earthjustice. I ask for
25 your no vote.

1 Before you is a deeply flawed proposal that
2 continues to funnel billions to polluting biofuels without
3 effective limits. Using agricultural land for biofuels
4 has a host of serious consequences. The one I'm going to
5 focus on, in part because it has not gotten enough
6 attention, is increased food insecurity. As CARB stated
7 in its 2014 analysis of indirect land use change from
8 crop-based biofuels, which it still relies on today, "The
9 diversion of agricultural land to biofuel production will
10 exert an upward pressure on food commodity prices and
11 potentially lead to food shortages increasing food price
12 volatility and inability of the world's poorest people to
13 purchase adequate quantities of food." CARB went on to
14 say that, "GTAP....," which is the model you rely on,
15 "...predicts that price increases resulting from the
16 additional demand for biofuels will result in reduced crop
17 production leading to lower food consumption."

18 Put plainly, the climate benefits CARB is
19 claiming from biofuels under the LCFS come from making
20 food unaffordable to the world's most vulnerable people.
21 It is a consequence embedded in CARB's analysis. This is
22 the climate strategy you are being asked to vote for
23 today, reducing greenhouse gases by increasing hunger.
24 And for this and a host of other reasons, scientists,
25 academics, former CARB staff intimately familiar with this

1 Program have asked you to put an effective limit on
2 biofuels, and that means assigning the excess surplus
3 fossil diesel carbon intensity. Many of you have asked
4 for that same thing. It is not in here.

5 Instead, with no effective limits, the proposal
6 before you will result in \$20 billion wealth transfer from
7 California drivers to biofuels and oil refinery
8 industries. Vote no on this proposal. There is still
9 time to fix it.

10 Thank you

11 BOARD CLERK LEVRINI: Thank you.

12 Elizabeth Szulc. Pardon me. Szulc.

13 ELIZABETH SZULC: Szulc.

14 BOARD CLERK LEVRINI: I'm so sorry.

15 ELIZABETH SZULC: It's totally fine.

16 Thank you, Chair and members of the Board. My
17 name is Elizabeth Szulc. And on behalf of CALSTART, I'd
18 like to express our gratitude for CARB in addressing our
19 previous concerns about the proposed amendments to the Low
20 Carbon Fuel Standard. The LCFS Program is a crucial part
21 of California's strategy to improve air quality, advance
22 climate goals, and support electrification.

23 CARB's 2022 Scoping Plan outlines the State's
24 carbon neutrality goals. And it's clear that the LCFS
25 Program is essential to achieving them. Since 2011, the

1 LCFS has successfully reduced carbon in California's fuel
2 pool and accelerated the adoption of zero-emission fuels
3 and technologies, and has also served as a powerful
4 incentive for new companies and innovative technologies in
5 the State's fuel market. CALSTART particularly
6 appreciates the amendments that extend capacity credits
7 for fast charging infrastructure and hydrogen refueling
8 infrastructure to the medium- and heavy-duty
9 transportation sector. These sectors account for a
10 disproportionate share of harmful emissions, so CARB's
11 focus here is an important step.

12 Expanding credit pathways for medium- and
13 heavy-duty vehicles not only addresses high emission
14 sources, but also incentivizes essential funding for
15 charging and refueling infrastructure. This
16 infrastructure is critical for enabling fleets to
17 transition to zero-emission vehicles, especially as we
18 move toward a potential full fleet transition. Thank you
19 for your commitment to a cleaner, healthier California.

20 BOARD CLERK LEVRINI: Thank you.

21 Priscilla Monrue.

22 Okay. We're going to go ahead and move on to
23 Amanda Parsons DeRosier.

24 AMANDA PARSONS DEROSIER: Thank you. And please
25 forgive the hoarseness of my voice. I'm the tail end of a

1 cold. Thank you, Chair Randolph and Board members for the
2 opportunity to provide comments on the proposed LCFS
3 amendments and their importance to improving air quality
4 in California. My name is Amanda DeRosier and I'm the
5 Vice President of Government Affairs for Global Clean
6 Energy. Global Clean Energy is renewable fuels innovator
7 headquartered in California that has been proudly
8 operating in the State for nearly two decades.

9 In 2020, we acquired a former oil refinery in
10 Bakersfield and have invested over \$1 billion to transform
11 that old oil site into a state of the art renewable fuels
12 production facility to provide California produced ultra
13 low carbon renewable fuel under the LCFS Program. We are
14 nearly producing at the revamped site ready to supply
15 sustainable fuels to the Central Valley and throughout
16 California.

17 Our facility will provide renewable fuels with
18 ultra low carbon intensity utilizing both traditional
19 biofuel feed -- biofuel feedstocks and camelina, a
20 climate smart oil seed crop that thrives on fallow land
21 and does not displace food production or contribute to
22 land use change. Our Bakersfield facility will produce
23 renewable fuels to serve California, supporting the
24 State's emission reduction goals. The LCFS program is
25 crucial to support operations at the Bakersfield facility

1 creating hundreds of clean energy jobs, attracting further
2 private investment and decarbonizing the transportation
3 sector. We appreciate the opportunity to have met with
4 each of you and share our company's story. And we are --
5 also appreciate the robust collaboration with CARB staff
6 during the amendment process and look forward to
7 continuing to work together to meet the requirements in
8 the timeline outlined within the proposed amendments.

9 We respectfully request an aye vote on the LCFS
10 Program. Thank you for all the hard work you've done.
11 Thank you very much.

12 BOARD CLERK LEVRINI: Thank you.

13 Dr. David J. Marrett.

14 DR. DAVID MARRETT: Hello. I'm here speaking
15 primarily for myself, but I've been heavily influenced by
16 the Sierra Club, especially Sierra Club California's
17 Energy and Climate Committee and the analysis of the
18 Energy and Climate Committee, which is to vote no on this
19 set of amendments.

20 We support the overall Program, but we think this
21 set of amendments are misguided. I'm also a 36-year
22 resident of Riverside, or neighborhoods around Riverside.
23 I raised a family here, so I've breathed my share of dirty
24 diesel air, and I'm not sure that biodiesel air is much
25 healthier.

1 There's several reasons that I personally am
2 against this. And I take this from Sierra Club and other
3 groups that I'm in. There are conservation reasons --
4 land conservation reasons that work against this set of
5 amendments. Okay. There are most importantly
6 environmental justice issues and we wouldn't see so many
7 of our environmental justice allies here if it worked in
8 favor of their communities. And there are also technical
9 scientific arguments against it.

10 Now, you've heard most of these and time is
11 short, so I'm going to say thank you for your time.

12 BOARD CLERK LEVRINI: Thank you.

13 Jessie Parks.

14 Jennifer Cardenas.

15 JENNIFER CARDENAS: Good afternoon, Board. My
16 name is Jennifer Cardenas. And I am with the Sierra Club.
17 We're here today because like you've heard many of our
18 community members tell you we're saying no. You have
19 time. There is this idea that you don't have time to make
20 this intentional, to make the correct choices. That's not
21 true. We've seen you. You have a history of ensuring
22 that things are done correctly. You have the opportunity
23 to do just by all these communities, environmental
24 communities that are facing the brunt of this. We have
25 told you this time and time again.

1 Rewarding polluters is not something that we do
2 in California, and you know that. This is something that
3 you can prevent. I work for the Sierra Club, but I'm also
4 from here. I clock in. I clock out. I breathe this air.
5 My community, the people that I represent they breathe
6 this air. How many of the people that are telling you,
7 yes, this is amazing, have to carry this around?

8 This is the reality of the people that you're
9 advocating for. This is what we want. We want you to be
10 intentional. Revise this. There's committee that you can
11 talk to. Industry can show up in their really nice suits,
12 but they're not from here. They're not going to advocate
13 for the people here. You can make that happen. You have
14 that kind of power. We've seen it before, right?

15 Today, when you all drive home, you're going to
16 see all the trucks that impact us. You're going to see
17 why we want electrification. You I want -- you are going
18 to see why we want you to be so intentional, and that's
19 all I'm going to say.

20 Thank you.

21 BOARD CLERK LEVRINI: Thank you. We will now be
22 hearing from Assemblymember Lackey.

23 ASSEMBLYMEMBER LACKEY: Well, good afternoon,
24 Chair and Board members. I am Tom Lackey and I am
25 Assemblyman from the 34th Assembly District. I'm here to

1 speak on behalf of the hundreds of thousands of residents
2 of Palmdale, Lancaster, and San Bernardino County. We're
3 the hard working men and women here in the state of
4 California. We build homes, we fix roads, and we serve
5 you when you dine out. To do this we must drive hours
6 each day to work to put food on the table for our
7 families. This measure before you will cause us financial
8 pain. The Governor has pushed us to drive electric
9 vehicles. Electric vehicles are simply very expensive.

10 We're a diverse working class community with over
11 50 percent of our residents being Latinos and about 15
12 percent African American. Per capita income is
13 approximately 28,000 compared to the state's average of
14 77,000. Many of us drive older cars, because that's what
15 we can afford. The Nissan Leaf, for example, starts at
16 approximately \$30,000. It has a driving range of about
17 168 miles. Even if we can afford this sticker price, the
18 battery range doesn't work for us. Residents in my
19 community drive on average a hundred miles a day. Add
20 weather conditions, the use of an air conditioner or
21 heater, or a trip to pick up the kids, and the battery
22 will drain very quickly. This causes us a undue range
23 anxiety.

24 The infrastructure is not quite ready. We have
25 desert roads. And even if there were enough chargers off

1 the side of the freeway, who among us can afford to sit in
2 the car for another 30 minutes during our daily commute,
3 especially when it starts between 4 and 4:30 in the
4 morning.

5 We care about the environment also. We also want
6 clean air. We want our children, our grandkids to have
7 the same resources that Mother Nature gave all of us, but
8 this is also about survival, financial survival. With the
9 implementation of this policy, it's going to be
10 approximately \$0.65 to be added to each gallon of gas. We
11 are currently paying about \$1.40 gallon more than other
12 drives throughout the country. If you approve this
13 measure, California drivers will pay over \$2 more a gallon
14 than other drivers throughout the country.

15 If this retired -- I'm sorry. If the retired
16 Branch Chief of this Department is correct, then
17 California can look forward to ultimately paying nearly
18 three more -- \$3 more a gallon. We simply cannot afford
19 that. Our finances are stretched very thin. Many of us
20 are already charging basic necessities on credit cards.
21 Please don't drive us into bankruptcy.

22 On behalf of the people of the 34th Assembly
23 District, I ask you to not approve this rulemaking and
24 find other alternatives that won't cost us quite that
25 much.

1 Thank you for your time.

2 BOARD CLERK LEVRINI: Thank you.

3 Jessie Parks, if you are in the room with us and
4 would like to make your comment, please make your way to
5 the podium.

6 All right. We will proceed with Yassi Kavezade.

7 Again, apologies if I mispronounce any names.

8 Okay. We're going to continue you Joaquin
9 Castillejos.

10 Whitney Amaya.

11 WHITNEY AMAYA: Hello. Thank you. Good
12 afternoon, Board members. My name is Whitney Amaya. I'm
13 a community member with East Yard Communities for
14 Environmental Justice and a resident of West Long Beach.
15 I'm also here to speak for many of the reasons that
16 community members from here and the IE, and from other
17 parts of the state have come. My community is
18 predominantly low income community of color and we're
19 oversaturated with polluters. A lot of diesel trucks,
20 natural gas, or whatever dirty fuel they're running on
21 coming to and from the ports, the railyards, the
22 refineries. And in all honesty, enough is enough.

23 I think right now we're at a time where you have
24 the opportunity to revisit and amend this rule, so that it
25 actually works for our communities. And I also just want

1 to remind you that our communities have been advocating
2 for electric zero emissions for a really, really long time
3 now. And I think that if our communities were actually
4 heard and prioritized, we would be in a completely
5 different scenario than what we are in now. And what
6 we're seeing is that our voices are continuously pushed
7 aside. And like you're just -- you're delaying the
8 solutions that are actually going to lead to cleaner air
9 and improve public health outcomes. And I just want to
10 remind you what your role as a public agency is, is to
11 protect our communities, is to regulate polluters, and to
12 ensure that there's clean air for us all, right? Because
13 we're -- now it's our community.

14 But as I have been driving various years to
15 agency meetings, now I'm seeing a lot more trucks in other
16 communities, right? Before it used to be just majorly on
17 the 710 and now that's expanded to other freeways as well.
18 And there's actually recommendations before you from the
19 Environmental Justice Advisory Committee. And so I urge
20 you, one, to vote no and please take the recommendations
21 and prioritize electric zero emissions.

22 Thank you.

23 BOARD CLERK LEVRINI: Okay.

24 Real quick. Jessie Parks, Yassi Kavezade, or
25 Joaquin Castillejos. If any of you are in the room,

1 please make your way to the podium, if you would like to
2 still make your comments. And with that, we will pick up
3 with Abigail Odoul.

4 ABIGAIL ODOUL: I'm Abigail.

5 BOARD CLERK LEVRINI: Go for it.

6 ABIGAIL ODOUL: Good afternoon, all. My name is
7 Abigail Odoul and I live here in Riverside, but I'm from
8 the Central Valley. I'm also representing my neighbors
9 who were here earlier, but they could not stay. They had
10 to head back to work. I'm asking you to vote no on LCFS
11 and focus on our future, focus on the future of our kids
12 and their health, please.

13 My kids and their friends have asthma. The
14 pediatrician just shrugs every time I ask her saying that
15 this is normal in this area. And this is something I'm
16 really familiar with also, because when I was growing up
17 in Patterson, California, an area that's surrounded by
18 dairy farms and four biogas digesters, we would have a lot
19 of days where school was canceled, because the air was so
20 bad. We're not in 2009 anymore, when this was first
21 passed, like our choices aren't just gas or biofuels. We
22 have other solutions now. We can fix our pollution
23 problems by just doing what I tell my kid. We can stay
24 focused on what we said we were going to do, we cannot
25 stop just half way at biofuels, but go all the way to full

1 electrification.

2 I really was disappointed to see that companies
3 were going to get some long-term profits for polluting
4 livestock gas. And so it's like companies are going to
5 get paid for me to be in the ER with my kids during flu
6 season. I don't like that.

7 So, we're California and we're known for our
8 innovation and we're known for being leaders, and we're
9 also known for bad air. Is there anything that we can do
10 about this? And I think there is. I think it's a no on
11 LCFS, a no to repeating our past mistakes, because our
12 children's futures depend on it.

13 Thank you so much.

14 BOARD CLERK LEVRINI: Thank you.

15 Yassi Kavezade.

16 YASSI KAVEZADE: Hi. My name is Yassi Kavezade.
17 Good afternoon CARB Board members. I'm a Senior Advisor
18 for Sierra Club National. I work on the western region
19 for Clean Transportation For All and I want to uplift many
20 of the comments that came before me in voting no on the
21 LCFS. At Sierra Club, we believe in climate solutions and
22 environmental justice can go hand in hand. Biofuels, and
23 ethanol, and renewable natural gas from digestion isn't
24 going to cut it and perpetuating these false solutions is
25 giving a clear signal for other states to do the same.

1 We're seeing the same manufacturers, the same
2 companies attack legendary laws and policies you all have
3 passed, like Advanced Clean Trucks, out here supporting
4 this rule, because they know it's going to delay and
5 continue the usage of fossil fuels. So please I urge you
6 on behalf of 3.5 million members and supporters, I know
7 we're in scary times with the federal government and
8 they're priorities to take down environmental laws in
9 California, Sierra Club is hoping to be a partner. We
10 sued the last administration 300 times alongside states
11 like California, and we're ready to do it again. So
12 please don't set us backwards here and we encourage you to
13 work with the EJAC and the environmental justice groups
14 that have basically painted a new alternative away from
15 supporting internal combustion engines and fuels.

16 Thank you so much.

17 BOARD CLERK LEVRINI: Thank you. We will now
18 hear from Fernando Gaytan.

19 FERNANDO GAYTAN: Good afternoon. Fernando
20 Gaytan with Earthjustice.

21 I am many here today to urge you to vote no on
22 the current version of the Low Carbon Fuel Standard. You
23 already heard many of the powerful reasons to reject this
24 proposal, but I want to focus on what is an incredibly
25 missed opportunity when it comes to California's policy to

1 reach zero-emission goals, and that is the transportation
2 sector.

3 We have known for decades that emissions
4 generated from the state's large freight hubs creates
5 serious health problems like asthma, heart disease, and
6 cancer, and disproportionately harm the state's most
7 under-resourced communities. Transitioning to -- freight
8 trucks to zero emissions is a must, if we're going to
9 address these injustices.

10 The revisions before you today are not worth your
11 yes vote. The Program will funnel a majority of its funds
12 to polluting biofuels and biogas, rather than investing in
13 common sense solutions that are California's north star
14 goal of full-scale electrification. And even within the
15 funding for electrification, we are especially
16 disappointed to see CARB's cannibalization of funds to
17 electrify medium- and heavy-duty vehicles, some of the
18 dirtiest on Californias' roads, for light-duty vehicles
19 that are already heavily subsidized.

20 The current proposal would unnecessarily
21 prioritize light-duty vehicles by shifting funds that
22 would otherwise have helped electrify up to a hundred
23 thousand Class 8 trucks in the next decade. This is a
24 financial and environmental cost to California that it
25 cannot afford at this time. California must maintain its

1 commitment to electrify its dirtiest vehicles on our
2 roads. These last-minute amendments would thwart these
3 efforts and represent a significant setback to the state
4 at a worst possible moment, just as California girds
5 itself to defend its clean air goals.

6 Taking the time to get the standard right is
7 critical. And we can still build a Low Carbon Fuel
8 Standard that actually works for California. I urge you
9 to have the courage to vote no today. The statements for
10 our clean air and our climate are too high.

11 Thank you.

12 BOARD CLERK LEVRINI: Thank you.

13 We will now hear from Esther Portillo.

14 ESTHER PORTILLO: Good afternoon, Board members.
15 My name is Esther Portillo. I'm the Senior Western
16 Advocate for the Natural Resource Defense Council, NRDC.

17 Today, you have an opportunity to ensure the LCFS
18 program becomes a golden standard for the state of
19 California and an example for the rest of the country. If
20 we settle for less, the program will result in continued
21 poor air quality and water quality, and exacerbate
22 inequities in the environmental justice communities by
23 over-incentivizing livestock biomethane and other
24 problematic combustion fuels. We acknowledge CARB staff
25 efforts to improve the Program including the adoption of

1 several of our EV provision recommendations, but these
2 changes don't go far enough to sustain our progress on
3 climate. And it comes at a significant detriment to the
4 food system and the environment.

5 We ask the Board to provide staff with clear
6 collection to the fix -- to fix the following issues. We
7 ask that you set a cap to include all vegetable oils and
8 fuel types and base them on the absolute volume limits,
9 stop the flood of credits for livestock-based biomethane.
10 The LCFS should not be used for subsidizing the capture of
11 methane from dairies. A staff proposal to grandfather the
12 next five years or more of new projects is unacceptable.
13 Stop incentivizing municipal solid waste to fuel.

14 Currently the MSW to fuel facility gets credits for the
15 organic waste and plastic that is prevalent in MSW.

16 The staff proposal grants the Executive Officer
17 unilateral authority to ship electricity based credits to
18 OEMs. We recommend the EO develop guardrails and
19 requirements for OEMs to ensure equity projects continue,
20 including establishing a clean fuel reward for medium- and
21 heavy-duty trucks. The LCFS must support truly green
22 electrolytic hydrogen by requiring that it be produced
23 only with zero carbon electricity adhering to the three
24 pillars of additionality, deliverability, and hourly
25 matching.

1 We also provide recommended resolutions to
2 address these issues. At this time, we take a neutral
3 position.

4 Thank you.

5 BOARD CLERK LEVRINI: Thank you.

6 Rachel Perez.

7 Maya Inigo-Anderson.

8 MAYA INIGO-ANDERSON: Thank you, Chair Randolph
9 and Board members. I'm also with Communities for a Better
10 Environment, a statewide environmental justice
11 organization. I'm also here to urge you to vote no on the
12 LCFS given the negative impacts on environmental justice
13 communities.

14 I'm a former resident of the community of South
15 Gate, a high polluted community in Southeast Los Angeles.
16 I would like to echo my colleagues' concerns regarding
17 refineries. Biofuel factories are nearly as polluting as
18 refineries and endanger our communities. Another major
19 concern, as you have heard with LCFS, is the continued
20 practice of avoided methane crediting. Staff has proposed
21 shortening the timeline of the Program, which is a small
22 step in the right direction, environmental justice
23 communities have called on this practice to be eliminated
24 entirely.

25 Avoided methane crediting creates an incentive

1 for dairy farms to acquire larger and larger herds,
2 increasingly polluting San Joaquin Valley communities,
3 especially low-income communities, communities of color
4 and farmworker communities. As you know, these are
5 already heavily pollution burdened communities.

6 Another concern with the LCFS is the impact of
7 using lipid based biofuels, which drives up food prices
8 and causes deforestation as other have laid out. We
9 further encourage CARB staff to work closely with the
10 EJAC, which has done a lot of important analysis on the
11 Low Carbon Fuel Standard.

12 Thank you.

13 BOARD CLERK LEVRINI: Thank you.

14 Denzel Cardenas.

15 Faizal Hassan.

16 FAIZAL HASSAN: Good afternoon and thank you
17 Madam Chair and the Board. My name is Faizal Hassan and
18 I'm a Vice President with Anew Climate, one of the largest
19 climate solution providers in North America and I'm also a
20 proud resident of California. We would like to thank CARB
21 staff for its diligent work associated with the proposed
22 amendments to the LCFS Program. Anew shares CARB's
23 dedication to ensuring that the LCFS continues to play a
24 significant role in decarbonizing California's
25 transportation sector and helping California achieve its

1 ambitious climate goals. We support many of the key
2 features in the proposed LCFS revisions and we ask the
3 Board today to adopt these proposed revisions.

4 The LCFS Program has been a successful and
5 cost-effective tool to decarbonize California's
6 transportation sector and California has committed to
7 ambitious climate targets, specifically regarding methane
8 emissions. Methane is such a powerful greenhouse gas that
9 cutting these emissions is one of our fastest
10 opportunities to immediate slowing down the rate of global
11 warming. The LCFS Program has also been an overwhelming
12 success in a relatively short amount of time proving that
13 market-based programs supported by private investments
14 work. Over 70 percent of on-road diesel fuels have been
15 replaced by renewable diesel and over 250 dairy farms
16 today that are developing or have developed methane
17 capturing projects, but that's not enough. We need more
18 and adopting these proposed revisions just gets us one
19 step closer.

20 With respect to treatment of renewable natural
21 gas and avoided methane crediting, we urge CARB to
22 continue to remain true to the principles of fuel
23 neutrality and to base LCFS crediting on science and
24 carbon intensity scoring. In the future, we urge CARB to
25 reconsider arbitrary end dates for avoided methane

1 crediting, flow direction requirements for RNG delivery,
2 and the overly punitive 4X penalty for CI exceedances.

3 Thank you.

4 BOARD CLERK LEVRINI: Thank you.

5 William Graham.

6 Mauren Norman.

7 If you see your name on the projector, please
8 make your way to the podium.

9 Oscar Garcia?

10 Spencer Reeder. I'm sorry, excuse me, Ethan
11 Hendricks.

12 ETHAN HENDRICKS: Hi. I'm Ethan Hendricks and I
13 am here with AMP Americas and I'm here to support the
14 LCFS. AMP thanks CARB staff leadership and Board members
15 for the work you all have done over the last couple years
16 on this process. AMP is a methane abatement company. We
17 partner with farmers to develop projects that convert
18 methane in emissions into renewable natural gas and
19 zero-emissions vehicle fuels like hydrogen and
20 electricity. AMP projects have prevented over two million
21 metric tons of CO2 equivalent over their lifetime and we
22 plan to significantly increase our impacts in coming
23 years. Our projects, in addition to reducing emissions,
24 they improve air quality, they create great paying jobs in
25 rural communities, and they help make food more affordable

1 for everyone.

2 Operating our existing projects, let alone
3 increasing our impact, depends on the LCFS maintaining
4 stable policy for methane reduction and RNG pathways. We
5 are disappointed with some of the proposed amendments that
6 arbitrarily restrict RNG pathways, but we appreciate
7 amendments that attempt to avoid retroactively changing
8 the rules on projects that have already been developed.

9 California's climate leadership is more important
10 now than ever. I'll underscore this point with a quote
11 from Mary Nichols whose name is on this building. In her
12 statement in support of these amendments she wrote, "The
13 future of California's climate leadership and the
14 durability of climate policy in this world at all is on
15 the line." We urge CARB Board to approve the amendments,
16 so that the LCFS Program and other climate policy can
17 continue to drive climate impact and emissions reductions.

18 Thank you.

19 BOARD CLERK LEVRINI: Thank you.

20 Thomas Ashley.

21 THOMAS ASHLEY: Good afternoon. I'm Tom Ashley,
22 Vice President of Government and Utility Relations for
23 Voltera Power. Voltera invests in, develops, owns, and
24 operates charging facilities for fleets and branded
25 charging networks. Earlier this year, we announced the

1 opening of our first scale truck charging facility in
2 Lynwood, and have subsequently announced plans to develop
3 facilities in Wilmington and West Sacramento.

4 The Low Carbon Fuel Standard has been a critical
5 enabler for the zero-emission vehicle transition, and the
6 revisions before you will help enable the ZEV transition
7 for drayage truck fleets and other heavy-duty fleets.
8 This is the type of market-based policy that helps enable
9 the economics necessary to fuel the zero-emission vehicle
10 transition that is so critical to achieving California's
11 and society's climate goals.

12 Significantly, these policies help unlock private
13 investment from companies such as Voltera in
14 infrastructure build-out and our customers in acquiring
15 zero-emission vehicles and accessing charging. We wish to
16 thank staff for their thoughtful development of
17 amendments, notably the capacity credit that will help
18 enable the needed economic bridge for the HEV vehicle ZEV
19 transition. We wish to thank the Board for your
20 consideration and urge the Board to approve the proposed
21 amendments.

22 Thank you.

23 BOARD CLERK LEVRINI: Thank you.

24 And we will go to Jesse Delacruz.

25 JESSE DELACRUZ: Hello, CARB members. My name is

1 Jesse Delacruz, the founder and Executive Director of
2 Urbano Strategies. On behalf of our community of Watts
3 and South Central, we're here representing our
4 neighborhoods. About 50 of us, we plan to all do public
5 comments. Unfortunately, as working class families that
6 we are, we have to, you know, pick up our kids and we have
7 other commitments.

8 So I want to start by thanking Madam Chair and
9 the ranking members of the Board for your public service.
10 We really appreciate the Cap-and-Trade investments that
11 has happened in the Jordan Downs community in the South
12 Los Angeles community. It really means a lot for us to
13 have nature-based solutions to offset carbon. And so, you
14 know, I think we're all trying to breathe clean air. And
15 I think that's one thing we can agree on, is that clean
16 air is a right, not a privilege, but how we achieve that
17 is important.

18 So California's climate policies are threatened
19 by some groups who want to rush and all electric
20 transformation. I know it and you know it that we are
21 nowhere near ready for this. California hasn't even
22 figured out yet how to ensure we have clean, affordable,
23 safe water in all parts of our state. So how can we move
24 faster on electric than water, right, which is essential
25 for humans, lives, and our plants.

1 So one proposal you're hearing is to narrowly
2 support only electric vehicles with investment, which
3 would ignore the health and environmental benefits that
4 other views can provide -- clean fuels that is. A policy
5 that ignores the benefits of clean fuels will lead to the
6 displacement of thousands of jobs. And without proper
7 transition strategies, it would increase economic
8 inequalities. And a big yes on LCFS.

9 Thank you. Appreciate it.

10 BOARD CLERK LEVRINI: Thank you.

11 We will now hear from Spencer Reeder.

12 SPENCER REEDER: So I get to follow that.

13 Good afternoon, Chair Randolph and Board members.
14 I'm Spencer Reeder with Audi and lead our sustainability
15 work in the United States, which is centered on the full
16 transition eventually, as we heard, to all electric
17 vehicles, all electric zero-emission vehicles. We joined
18 others in support of the proposed updates to the LCFS
19 Program. We agree with the stakeholders who recognize
20 that the LCFS Program is a vital policy tool. We assess
21 that the Program is significantly strengthened by the
22 staff's proposed changes and will deliver increased
23 reductions of greenhouse gas emissions that are
24 foundational to the State's climate goals. In particular,
25 the Program revisions will serve to accelerate the

1 transition to electric vehicles that is central to the
2 State's climate strategy.

3 The revisions proposed -- the revisions proposed
4 by staff to California's Program will bring together key
5 actors in the electric transportation value chain and will
6 better support the transition to plug-in battery electric
7 vehicles including those in the light-duty segment, which
8 dominate the state's roadways.

9 LCFS Program is, in fact, unique. It is unique
10 in its ability to incentivize the utilization of
11 zero-emission battery electric vehicles generating more
12 eVMT and thus more emission reductions and better air
13 quality. CARB's proposed changes amplify and strengthen
14 this important incentive. We recognize that there's a
15 shared responsibility and a shared opportunity alongside
16 our colleagues at the electric utilities EV charging
17 companies to deliver on the promise of electrifying the
18 state's transportation system for all users in a
19 cost-efficient way.

20 What CARB staff have proposed indeed recognizes
21 the joint effort that is required to successfully reach
22 the targets. Thank you again for the opportunity to
23 comment on this latest round of proposed Program
24 improvements

25 BOARD CLERK LEVRINI: Thank you.

1 Laide Lopez.

2 Faraz Rizvi

3 FARAZ RIZVI: Hello. Chair Randolph, Board
4 member, good afternoon. My name is Faraz Rizvi and I'm
5 from the Asian Pacific Environmental Network. We
6 represent front-line communities who live in refinery
7 corridors such as Richmond and Wilmington, communities who
8 pay for our addiction to fossil fuels with their health.

9 Through this entire process, our community
10 members have raised concerns around the overreliance on
11 methane-based hydrogen in the LCFS Program. At a moment
12 when we need to be thinking about a managed phasedown of
13 oil refining, CARB is doubling down to give the oil
14 industry a line of credits to pollute from the leaking,
15 flaring, and pollution-ridden hydrogen SMRs in our
16 communities.

17 The recent 15-day changes extended credit
18 generation pathways for hydrogen from refineries until
19 2035. After 2035, it requires refineries to purchase
20 biomethane credits doubling down on harms to both dairy
21 and refinery communities. This new proposal is even worse
22 than the last.

23 In 2018, when the Chevron refinery expanded it's
24 hydrogen production units, Richmond residents saw massive
25 increases in flaring. Since then, flaring has dumped 52

1 to 63 tons of sulfur dioxide into the air annually, a
2 pollutant that stinks rotten eggs and exacerbates
3 respiratory issues for people living nearby. I also want
4 to raise immense frustration with the entire process. I
5 find it deeply cynical to hold this vote three days after
6 the most momentous election of our time capitalizing on
7 the chaos of the moment to sneak in approval of this
8 program, waiting until the very last moment so that you
9 can wash your hands of this mess and say it's too late to
10 make any changes.

11 Right now, California needs to lead when it comes
12 to electrification and defending Californians from
13 corporate industry greed. Handing out lush subsidies to
14 big ag and big oil is not leadership. It's reneging on
15 our commitments when we need them the most. We urge you
16 to vote no on the staff proposal today. There's a
17 universe where this program works for the working people
18 of California, not for polluters and we urge you to return
19 to the to the alternative scenario EJ, environmental and
20 labor advocates have proposed instead.

21 Thank you.

22 BOARD CLERK LEVRINI: Thank you.

23 We'll try Laide Lopez one more time.

24 Okay. We're going to move to Tony Brunello

25 TONY BRUNELLO: Hi. My name is Tony Brunello. I

1 would have a pulled my name, but I was still up there with
2 that last group. That's really how you should have ended.
3 I'm today here representing U.S. Energy. Most important
4 just a couple quick things. The first thing to staff,
5 really it's amazing, Jordan, Jacob, Matt, Rajinder, Steve
6 really the amount of time that staff has spent on this is
7 amazing. Also, the amount of work on compromises, things
8 to try and work with industry and stakeholders really has
9 been amazing running over four years. So as compromise
10 goes, U.S. Energy isn't ecstatic about all the changes
11 that were made. I think we were hoping that RNG avoided
12 methane crediting can have another look, as we look to the
13 next rulemaking.

14 And finally, we really supported the RNG to
15 electricity pathway that was inserted at the end. We hope
16 that there are other opportunities to expand that in the
17 future. Thank you guys so much. Appreciate it.

18 BOARD CLERK LEVRINI: Thank you.

19 Roy Bleckert.

20 Phoebe Seaton.

21 PHOEBE SEATON: Good afternoon. I'm Phoebe
22 Seaton with Leadership Counsel for Justice and
23 Accountability. And on behalf of Defensoras, who were
24 here earlier. I'm going to violate two of my basic
25 tenet -- comment-making tenets. One, don't use limited

1 time with thank yous and don't talk too much about process
2 when our substantive arguments carry the day as they do
3 today, and have during the entire course of this
4 rulemaking.

5 We are deeply appreciative of the Chair and Board
6 members who have met with us time and again and listened
7 to us and grappled with the complexities of the Low Carbon
8 Fuel Standard and tangled web of agricultural
9 exceptionalism that the LCFS unfortunately inhabits.
10 Unfortunately, we're not so appreciative of the process.
11 The last minute change that allows dairies to enjoy
12 avoided methane crediting far into the future, even if a
13 regulation exists that mandates livestock methane emission
14 reductions will have harmful short- and long-term impacts
15 on the environment and in particular the San Joaquin
16 Valley. This 11th hour change is also an unfortunate call
17 back to a similar process in 2016 when last minute
18 amendments to Senate Bill 1383 tilted in favor of the
19 dairy industry and against environmental justice, science,
20 and sound policy. Then, like now, decision-makers were
21 presented with a policy that was not good enough, but told
22 it was too late to make changes necessary to make it so.

23 Then, like now, decision-makers could have taken
24 a stand for good policy and rejected the measure. We hope
25 that now, unlike then, you will take the opportunity to

1 stand for good policy and fix the Low Carbon Fuel
2 Standard, so that it can fulfill its lofty promises.

3 Thank you.

4 BOARD CLERK LEVRINI: Thank you.

5 And that concludes our in-person commenters. We
6 will now take a 10-minute break.

7 (Off record: 2:58 p.m.)

8 (Thereupon a recess was taken.)

9 (On record: 3:12 p.m.)

10 CHAIR RANDOLPH: Okay. We are ready to come back
11 from our break and we will be hearing the Zoom commenters,
12 so I will ask the Board Clerk to call the commenters on
13 Zoom.

14 BOARD CLERK LEVRINI: Thank you, Madam Chair. We
15 actually have one last in-person commenter who's come back
16 to speak. That is Roy Bleckert.

17 ROY BLECKERT: So let's go back to 2007 at the
18 bogus Tran report that CARB was presented that we were all
19 going to die from diesel smoke. Mary Nichols, whose name
20 on this building, said that was a very annoying
21 distraction. This whole agency, these whole hearings have
22 been built on a sham. I'm going to blow your electricity
23 deal right out of the water and I challenge anybody to
24 prove me wrong.

25 If we -- if the electric powered everything was

1 going to work, we would have continued and would still be
2 building nuclear power plants from San Diego to Eureka,
3 because that's the only clean, 24/7, reliable power that
4 we know of that could possibly power anything we've got
5 that we know of. What you're doing is killing the
6 economic ability of the lower income people to rise up to
7 the level that they can afford this stuff, because you're
8 hurting them the worst with this. More of their
9 percentage of their income is going to go to all these
10 taxes and everything, and rules and regulations you
11 propose. Please stop it.

12 If you're really concerned about everyone in
13 California, you'll stop the madness. Let's start putting
14 some sane policies that are going to fix energy, housing,
15 and everything else, because if we don't, it's going to
16 get worse, mark my words. History has a way of repeating
17 itself and we keep doing the insanity thing over and over
18 again.

19 BOARD CLERK LEVRINI: Thank you.

20 We will now hear from our Zoom commenters.

21 BOARD CLERK GARCIA: Thank you.

22 So we currently have 52 commenters with their
23 hands raised in Zoom. I apologize in advance if I
24 mispronounce your name. I would like to remind everyone
25 to speak slowly and clearly for our interpreters. And

1 just a reminder that speaker sign-ups have closed for this
2 item.

3 The first five speakers we'll hear from are Dan
4 Lashof, Bonney Shehadey, Jim Stewart, Frank Harris, and
5 Christine Ball-Blakely.

6 So, Dan I have activated your microphone. Please
7 unmute and you can begin.

8 DAN LASHOF: Thank you. I'm Dan Lashof, U.S.
9 Director of the World Resources Institute. And I've been
10 a strong supporter of the LCFS program for many years, but
11 today I'm profoundly conflicted.

12 CHAIR RANDOLPH: Dan -- Dan, could you hold on
13 one second. We're getting an echo in the room, so I want
14 them to fix it and then you can restart your comments.

15 DAN LASHOF: Okay.

16 (Technical difficulties).

17 BOARD CLERK GARCIA: Okay. Dan, go ahead.

18 DAN LASHOF: Okay. Thank you. Again, I'm Dan
19 Lashof, U.S. Director of the World Resources Institute.
20 And I have been a strong supporter of the LCFS Program for
21 many years, but today, I'm profoundly conflicted.

22 Chair Randolph made a compelling case for the
23 LCFS and its benefits for transportation electrification
24 in her opening comments. But at the same time, I'm
25 alarmed by the rapid increase in the use of crop-based

1 renewable diesel in the last several years. The record
2 for this rulemaking is chock-full of detailed comments
3 showing that crop-based biofuels are worse for the climate
4 than petroleum fumes when the opportunity cost of using
5 prime farmland for fuel production is accounted for.
6 These comments include a devastating critique of the GTAP
7 model currently use by CARB to calculate ILUC written by
8 the Chief -- the Chair of the Yale Economics Department.

9 Debate on ILUC can seem esoteric, but it comes
10 down to a very simple question. Does it make any sense to
11 turn food crops into fuel? The answer to that question is
12 clearly no, given the impact of dedicating millions of
13 acres of prime farmland to fuel production on food prices
14 and global deforestation. The proposed rule nominally
15 includes a 20 percent credit limit on some virgin
16 vegetable oils, but its impact is highly questionable,
17 given the way it's written.

18 The proposed resolution also calls for a workshop
19 on ILUC modeling. Given all the workshops CARB has
20 already hosted and the detailed comments in the record,
21 this frankly looks like a box-checking exercise. I urge
22 the Board to adopt a resolution that specifically calls on
23 staff to replace its current approach to calculating ILUC
24 with one that is empirically grounded and scientifically
25 sound. I also urge the Board to call for an effective cap

1 on crop-based fuels followed by a phaseout by 2030.

2 As noted, what CARB does has enormous influence
3 on other states and countries. Please send a clear
4 message that turning food into fuel is not an effective or
5 acceptable climate policy.

6 Thank you.

7 BOARD CLERK GARCIA: Thank you.

8 Bonney.

9 BOARD MEMBER KRACOV: The Chair stepped out. I'm
10 in control now.

11 (Laughter).

12 BOARD CLERK GARCIA: Bonney, you can unmute and
13 begin.

14 BONNEY SHEHADEY: Hello. Can you hear me?

15 BOARD CLERK GARCIA: Yes, we can.

16 BONNEY SHEHADEY: All right. Hi, everyone. My
17 name is Bonney Shehadey. I'm a Greenhouse Gas Analyst for
18 California Bioenergy. And I'm also part of the fourth
19 generation of Fresno family dairy farm, the Bar 20 Dairy.
20 I'm here today to encourage CARB to support the motion to
21 adopt LCFS Regulation as drafted.

22 Being from a dairy farming family, working on
23 farm, and even studying dairy science in college, I'm very
24 proud of my agricultural background and community.
25 Throughout my experiences on farm, I have been able to see

1 the many benefits programs like LCFS have had on family
2 dairy farms and their surrounding communities. In the
3 future, I'm hoping to continue my family's business, and
4 like my family before me, I value and look forward to
5 being part of taking care of the land and the resources.

6 I'm incredibly thankful for California's
7 leadership in creating LCFS as an important tool for
8 creating real environmental and clean energy benefits for
9 our state and aiding people like me to be a part of that.
10 I believe that the LCFS Program has been very beneficial
11 in helping both my family and many others implement more
12 sustainable practices on our farm. And without it, I do
13 not think that the same kind of emission reductions and
14 improvements in agricultural sustainability would be
15 possible.

16 Increasing sustainable practices in agriculture
17 will require collaboration in retaining access to programs
18 that help farmers like LCFS. We should be supporting
19 farmers' efforts towards cleaner renewable energy sources
20 and trying to work in ways that make high-tech climate
21 solutions more accessible to them.

22 If we want to continue to be climate leaders,
23 LCFS and programs that complement it are vital to
24 supporting farmers and their investments in effective,
25 climate-smart technologies. So again, I encourage CARB to

1 support the motion to adopt LCFS regulations as draft.

2 Thank you for your time.

3 BOARD CLERK GARCIA: Thank you.

4 Jim Stewart. Please unmute and you can begin.

5 JIM STEWART: All right. I'm Jim Stewart and I'm
6 representing the hundreds and thousands of people that
7 read Senator Dean Florez's op-ed in the CalMatters saying
8 that this is not an economic, environmental, or social
9 justice proposal that you have before you. You heard from
10 the people who are suffering in the Central Valley and
11 elsewhere from these fossil fuel -- excuse me -- biofuels
12 because you know that biodiesel produces just as much NOx,
13 and therefore as much as pollution, and asthma, and other
14 kinds of diseases as regular diesel.

15 So why are you going to vote to continue the
16 suffering of these people in the Central Valley? Are you
17 going to listen to these mostly well-heeled, many of them
18 probably live on the coast, lobbyists for the biofuel
19 industry?

20 No.

21 I know that you Board members really care about
22 the health of people, so I know that you're going to
23 reject this horrible proposal that is before you now, send
24 it back to staff, and come back with no more of these
25 liquid biofuels that are killing people every day in the

1 Central Valley and elsewhere.

2 Thank you for caring for the people.

3 BOARD CLERK GARCIA: Thank you.

4 Frank Harris, go ahead and unmute and begin.

5 FRANK HARRIS: Hello, Chair Randolph and
6 Honorable Board members. My name is Frank Harris. I'm
7 with the California Municipal Utility Association and I'm
8 here to speak in support of this item. CMUA is a
9 statewide organization of non-profit, local public
10 agencies that provide electricity and water service for
11 California consumers. CMUA membership includes
12 public-owned electric utilities that serve approximately
13 25 percent of the state's electric load. Our member
14 agencies provide cleaner transportation fuels and programs
15 for our communities, including programs and incentives to
16 promote vehicle charging. CMUA is pleased to support the
17 LCFS.

18 In particular, we support many of the changes
19 presented in the second 15-day package, which we
20 addressed, which addressed concerns that CMUA had
21 previously submitted. We've provided more detail in
22 written comments which were submitted earlier today.
23 California's electric sector has provided a significant
24 share of emission reductions in the state, but the
25 transportation sector still lags in supporting the State's

1 efforts to reduce GHG emissions.

2 California's POUs utilize LCFS credit value to
3 develop programs to further promote transportation
4 electrification consistent with the needs of the
5 communities they serve. The LCFS Program is key to
6 reducing GHG emissions from the transportation sector.
7 But alone, California cannot solve the climate crisis. To
8 that point, California's LCFS Program serves as an example
9 of a successful approach to reduce emissions that can be
10 adopted in other regions.

11 Again, CMUA appreciates the opportunity to
12 provide these comments on the LCFs proposed amendments and
13 we encourage the Board to vote in favor of these proposed
14 changes.

15 Thank you very much.

16 BOARD CLERK GARCIA: Thank you.

17 After Christine, we'll hear from Julia Levin,
18 Lawrence Navin, Chris Shimoda, Emily Lemei, James Duffy,
19 Paul Townsend, and Pete Montgomery. So Christine, I have
20 activated your microphone. Please unmute and begin.

21 CHRISTINE BALL-BLAKELY: Good afternoon, Board
22 members. Christine Ball-Blakely with the Animal Legal
23 Defense Fund. Environmental justice communities across
24 California and the entire country are counting on you
25 today. I echo the many previous calls for you to vote no

1 on these unacceptable changes to the LCFS. For many
2 years, residents of environmental justice communities and
3 advocates for those communities have urged you to regulate
4 factory farm methane. Accordingly, we appreciate that you
5 properly directed staff to shift to a regulatory approach.
6 But as others have noted, in response to your proper
7 direction, staff immediately moved to undermine any such
8 future regulation.

9 Specifically, staff inserted a poison pill
10 sentence into Section 95488.9 of the LCFS Regulation in
11 the second round of 15-day changes. This poison pill
12 would shelter factor farms with digester projects that
13 break ground before 2030 from the existing rule, which
14 says that avoided methane crediting is only available for
15 the remainder of a pathway holder's ten-year crediting
16 period in the event the CARB adopts regulations mandating
17 reductions of livestock methane.

18 This poison pill would lock in a bogus baseline
19 for large dairies that is wholly incompatible with CARB's
20 obligations under AB 32 and SB 1383. At the same time, it
21 would create two classes of California dairies, small
22 dairies that would be subject to regulation and large
23 dairies that would not. In this way, it would ensure that
24 the LCFS continues operating as cash cow for large dairies
25 for decades by lavishly rewarding their intentional

1 creation of manure and methane.

2 This scheme is unjust and ineffective and would
3 fan the flames of factory farm consolidation and
4 expansion, as well as the climate crisis. With all due
5 respect to one of the recent commenters, the point of the
6 LCFS is not to subsidize factory farms, but that is
7 exactly what they thanks you for doing.

8 In sum, staff has attempted to undermine future
9 regulation of factory farm methane. I respectfully urge
10 you not to let them. Emissions from large dairies are an
11 existential threat and CARB must act like it.

12 Please vote no, fix the LCFS, and insist on
13 effective and equitable regulation of factory methane.

14 Thank you.

15 BOARD CLERK GARCIA: Thank you.

16 Julia, please unmute and begin.

17 JULIA LEVIN: Good afternoon. Julia Levin with
18 the Bioenergy Association of California.

19 We strongly support the proposed regulation and
20 urge the Board to adopt it today. It is very clear from
21 the data that the benefits of the Program far outweigh the
22 costs. And that is especially true when you're talking
23 about low-carbon fuels that are produced from organic
24 waste. That -- those fuels not only reduce pollution from
25 fossil fuels, but they also reduce pollution upstream from

1 landfills, dairies, wildfires, and open burning of forest
2 an ag waste.

3 Speaking of forest and ag waste, California
4 voters spoke very clearly on Tuesday in our election in
5 passing Proposition 4, the climate bond. That proposition
6 includes tens of millions of dollars to convert forest and
7 ag waste to biofuels, advanced carbon negative biofuels.
8 In order to implement the voters clear direction, we urge
9 the Air Board not just to adopt the regulation today, but
10 to clarify the definition of eligible forest waste.

11 There are two areas that need clarification. One
12 is the exclusion of clear-cutting, which, in general, we
13 support, but clear-cutting should be allowed when it is
14 done to create defensible space around homes, communities,
15 power lines, et cetera, or to create a large fire break to
16 stop a catastrophic wildfire.

17 The second clarification is around the exclusion
18 of forest waste that can be used for any other wood
19 products. Wood products aren't defined. And if they are
20 defined in the future to include biochar or mulch, that
21 would effectively exclude all forest waste, which would
22 really go against the voters' clear intentions in passing
23 Prop 4.

24 So we urge you to make these two clarifications
25 and in addition going forward to adopt a design-based

1 pathway for forest waste-based biofuels and to recognize
2 biochar as a form of carbon capture and sequestration.

3 Thank you for your leadership and please move
4 forward on the regulation today.

5 BOARD CLERK GARCIA: Thank you.

6 Lawrence, please unmute and begin?

7 Lawrence Navin, if you'd like to comment, please
8 unmute and begin.

9 Okay. We'll move on. Chris, I've activated your
10 microphone. Please unmute and you can begin.

11 CHRIS SHIMODA: Madam Chair and Board members,
12 Chris Shimoda with the California Trucking Association.

13 I first would like to thank staff for meeting
14 with us electricity transaction verification and further
15 direction in the resolution to engage stakeholders on this
16 issue moving forward. We urge the Board to direct that
17 this work take place well ahead of the start date for
18 verification in 2026. We join with our coalition partners
19 at the Pacific Merchant Shipping Association, the
20 California Manufacturers and Technology Association, and
21 the California Transit Association in committing to work
22 together with your staff to explore ways to reduce burdens
23 for fleets making the transition to zero emissions, while
24 also maintaining the integrity of the LCFS Program. Thank
25 you for the time.

1 BOARD CLERK GARCIA: Thank you.

2 Emily, please unmute and begin.

3 EMILY LEMEI: Hi. Good afternoon, Board members.
4 I'm Emily Lemei with the Northern California Power Agency,
5 or NCPA, representing 16 public power utilities throughout
6 Northern California. We support the amendments to the
7 LCFS Program as presented today. LCFS funds are vital for
8 public utility programs that support transportation
9 electrification and the needed infrastructure buildout.

10 For POUs, program priorities and program design
11 are driven by community, regional, and utility needs.
12 NCPA members represent a wide range of EV adoption and
13 customer needs. For example, I represent several
14 utilities in more rural areas and in areas with lower EV
15 adoption, and there's a significant need for this funding
16 to support programs in these communities. Public
17 utilities provide a range of programs to meet their
18 community needs, such as funding for city-owned EV
19 infrastructure, multi-family charging support, medium- and
20 heavy-duty vehicle rebates, technical assistance programs,
21 pre-owned EV programs, and fleet advisory support.

22 These programs and more have only been possible
23 due to the LCFS program and LCFS funding is invested back
24 into our communities. We urge your approval of the LCFS
25 amendments today. Thank you so much.

1 BOARD CLERK GARCIA: Thank you.

2 James Duffy, please unmute and you can begin.

3 DR. JAMES DUFFY: My name is Dr. James Duffy,
4 former LCFS Branch Chief. I am urging the Board to vote
5 no on these amendments and direct staff to start over next
6 year with a proposal that addresses Board member and
7 environmental community concerns about biofuels and
8 includes a robust discussion of strategies for reducing
9 Program costs for lower income consumers of gasoline.

10 If, however, you intend to approve these
11 amendments, I ask you to make one key change as part of a
12 post-approval 15-day notice and then come back with
13 further amendments as soon as possible. For those volumes
14 of renewable diesel exceeding the 20 percent threshold, I
15 ask you to assign the fossil diesel carbon intensity
16 instead of the benchmark CI. This simple change, which is
17 sufficiently related to the proposed amendments, will put
18 some real teeth into that provision.

19 As I said to the Board over a year ago, CARB's
20 own land use change modeling shows that the diversion of
21 food crops to produce biofuels results in tropical
22 deforestation and less food consumption by the most
23 food-insecure populations. And this reduced food
24 consumption is part of the emission reductions being
25 counted by the Program.

1 The fact that California is making the choice -
2 and I repeat, is making the choice - to mitigate the
3 climate problem by reducing the amount of food consumed by
4 the poorest people in the world very much troubled me as a
5 CARB employee and continues to keep me awake at night
6 today. It is long past time for California to stop
7 contributing to tropical deforestation and world hunger
8 and say no to further increases of crop-based and lipid
9 biofuels.

10 BOARD CLERK GARCIA: Thank you.

11 Paul, I have activated your microphone. Please
12 unmute and begin.

13 PAUL TOWNSEND: Hi. This is Paul Townsend on
14 behalf of POET. POET is the world's largest producer of
15 biofuel and a leading supplier of ethanol to the
16 California market. The company has been actively engaged
17 in this rulemaking over the course of the last year and we
18 appreciate the opportunity to provide further comments
19 today.

20 POET supports CARB's LCFS Program and has made
21 strategic investments to lower the carbon intensity of its
22 fuel in alignment with California's program goals. And
23 POET is also encouraged by Governor Newsom's recent
24 directive urging CARB to approve E15, which will lower
25 gasoline prices as well as advancing the State of

1 California's climate goals.

2 Unfortunately, the proposed rulemaking adopts
3 policy features that seriously undermine POET's incentives
4 to ship lower carbon ethanol to the California market and
5 fail to address the possibility of higher ethanol blends.
6 As POET has explained in its engagements with the Board
7 and staff and through several written public comments,
8 CARB's proposed sustainability requirements will not
9 incentivize further decarbonization of ethanol production
10 and will operate only to constrain the supply and raise
11 the cost of ethanol in California.

12 POET must also express its disappointment that
13 CARB did not seek serious dialogue or engagement with
14 biofuel stakeholders before drafting a set of
15 sustainability requirements that reach deep into the
16 domestic agricultural supply chain and seek to regulate
17 matters that are already the province of existing State
18 and federal environmental law.

19 For these reasons, and those expressed in prior
20 comments, POET opposes CARB's proposed LCFS amendments and
21 urges the Board to reconsider the proposed sustainability
22 requirements as part of a future rulemaking that includes
23 substantial consultation with the biofuels industry.

24 Thank you for your time today.

25 BOARD CLERK GARCIA: Thank you.

1 After Pete, we'll hear from Dan Bowerson, Daniel
2 Gage, Jack Hedge, Ravi Sekhon, Sarah Somorai, Alessandra
3 Magnasco, and Jacob DeFant.

4 So Pete, I have activated your microphone.
5 Please unmute and begin.

6 Pete Montgomery.

7 PETE MONTGOMERY: Hi. Pete Montgomery on behalf
8 of Kern Energy, California's last remaining small
9 refinery, producing CARB gasoline diesel and renewable
10 fuels. We are an independent, family-owned and operated
11 transportation fuel provider located in Bakersfield. And
12 we've been operating in continuous existence for 90 years.

13 Kern Energy embraced the challenge presented by
14 the LCFS becoming just the second refinery in the U.S. to
15 produce renewable diesel, becoming the first small
16 refinery in California to blend biodiesel.

17 And to date, Kern Energy has produced more than
18 58 million gallons of renewable diesel since 2009, blended
19 more than 74 million gallons of biodiesel in the last 12
20 years. We've been an active participant in the LCFS.
21 We've worked closely with CARB staff over the years to
22 help provide an understanding of what it means to operate
23 a small refinery in California and the uniqueness a
24 facility like Kern's.

25 I'm here today to emphasize the challenges we

1 face and the real scenario where continuing to reliably
2 produce transportation fuels to our neighbors, local
3 businesses, and communities is jeopardized. You may have
4 heard public comments from major refiners indicate that
5 the industry is in a prolonged period of negative margins.
6 Layering on the significant costs the Kern will incur with
7 these amendments, combined with the additional cost from
8 Cap-and-Trade, it will be very difficult to bear for Kern
9 as a small independent refinery. We cannot ignore the
10 established reality that Californians will rely on
11 conventional transportation fuels for decades.

12 Continuing to drive out small refineries that
13 provide those fuels will only increase costs for consumers
14 and increase the burden on those who can afford it least.
15 I urge you to consider when implementing the LCFS the
16 immediate impact it has on a small California business.
17 The Governor, the Legislature, and the CEC have all
18 recently put increasing emphasis on retail gasoline
19 prices. Now, is not the time to jeopardize the continued
20 operation of current local fuel providers.

21 Thank you.

22 BOARD CLERK GARCIA: Thank you.

23 Dan Bowerson, please unmute and begin.

24 DAN BOWERSON: Thank you. Madam Chair and Board
25 members, I am Dan Bowerson, Vice President of Energy and

1 Environment Policy at the Alliance for Automotive
2 Innovation, or Auto Innovators. We are a trade
3 association representing manufacturers and value chain
4 partners who together produce nearly every light-duty
5 vehicle sold in the U.S. Auto Innovators has long
6 supported the LCFS and continue to do so, including the
7 proposed modifications in the 15-day notice that would
8 allow automakers to generate base residential EV charging
9 credits.

10 At this formative point in the EV transition, the
11 LCFS is a critically important policy designed to support
12 the transition, while reducing the carbon intensity of
13 those vehicles that are not yet electrified. Automakers
14 remain committed to the electrification of light-duty
15 vehicle sales, but the transition is far from complete.
16 Despite a 25 percent market share for new light-duty EV
17 sales in 2023, substantial additional progress is needed
18 to meet the ACC II requirements of 50 percent sales in
19 2028 through a hundred percent EV sales in 2035.

20 The LCFS Program should promote EVs and expand
21 the market to all communities. However, this will not be
22 the case if the LCFS proceeds from light-duty EVs are used
23 to fund medium- and heavy-duty EV projects. We support
24 providing up to 45 percent of the base credits generated
25 by light-duty EV residential charging to the automakers

1 producing those vehicles, since automakers are best
2 positioned to promote EV sales.

3 But regardless of who receives the funding, LCFS
4 credit revenue generated by light-duty EVs should be used
5 to promote the light-duty EV market. We have seen ups and
6 downs with market acceptance of EVs. And the most common
7 reasons consumers don't choose them are up-front vehicle
8 costs and charging infrastructure. The LCFS can greatly
9 assist in resolving both of those issues which is why Auto
10 Innovators strongly supports the LCFS and has continued to
11 engage with CARB on advancing and evolving this policy so
12 that it supports the EV transformation that underpins
13 California's climate goals.

14 We thank California for its continued leadership
15 on LCFS policy and specifically CARB staff are developing
16 this proposal in front of the Board today.

17 Thank you.

18 BOARD CLERK GARCIA: Thank you.

19 Daniel Gage, please unmute and begin.

20 Daniel Gage.

21 Okay. Let's try Jack, please unmute and begin.

22 JACK HEDGE: Hello. Can you hear me?

23 BOARD CLERK GARCIA: Yes, we can.

24 JACK HEDGE: Good. Good evening, Chair Randolph,
25 and Board members. Thank you for the opportunity to

1 provide comments today. My name is Jack Hedge and I'm the
2 VP of Commercial and External Affairs at The Pasha Group.
3 Pasha is a global transportation company most likely known
4 for our fleet of vessels that provide timely and necessary
5 ocean transport of goods between the west coast and
6 Hawaii. We're proud to have a team of over 1,200 people
7 working across California with a corporate office in San
8 Rafael in the Bay Area and terminal operations in San
9 Francisco, Oakland, Los Angeles, Long Beach, and San
10 Diego.

11 We support the LCFS Program. Within CARB's
12 resolution that was released earlier this week, we
13 appreciate the inclusion of an evaluation for
14 incorporating ocean-going vessels into the future LCFS
15 rulemaking. Incorporating maritime fuels into the LCF
16 Program would create a vital incentive to overcome
17 barriers and transition legacy fleets to lower carbon
18 technologies.

19 Most of the ships today run on traditional marine
20 diesel. However, a significant percentage of new build
21 orders are incorporating LNG capability and recent trends
22 show that LNG is quickly becoming the alternative fuel of
23 choice for all new builds. The timing is right to
24 incentivize more ships to be LNG capable and encourage the
25 use of bio-LNG or significantly decrease emissions in the

1 ocean-going sector. We look forward to continuing to work
2 with CARB and other stakeholders to support the inclusion
3 of ocean-going fuels in the next LCFS rulemaking and urge
4 approval of the current proposed amendments.

5 Thank you.

6 BOARD CLERK GARCIA: Thank you.

7 Ravi, please unmute and begin.

8 RAVI SEKHON: Good afternoon. My name is Ravi
9 Sekhon and I'm the Director of Engineering and
10 Sustainability at Centerline Logistics. I appreciate the
11 opportunity to provide these brief comments remotely.

12 Centerline Logistics is a leading marine
13 transportation company operating along the U.S. west coast
14 in the east and Gulf coast, as well as Alaska, Hawaii and
15 Puerto Rico. We specialize in transporting and storing
16 petroleum products providing ship assist and escort
17 services and conducting general cargo and rescue towing.
18 We are passionate about our work and are committed to the
19 opportunities for decarbonizing the marine transportation
20 sector. We believe methanol can serve as an effective
21 marine fuel. In fact, we recently introduced an
22 innovative solution called Clean Harbor Alternative Mobile
23 Power, or CHAMP. This platform will use methanol-fueled
24 generators to supply clean power and thereby reduce
25 emissions from vessels such as container ships, cruise

1 ships, and tankers by up to 93 percent while they are
2 idling at port.

3 Offering LCFS credits or initiatives like the
4 CHAMP would significantly accelerate the adoption of
5 methanol in the marine industry. Additionally, we believe
6 our existing bunkering operations, which involves
7 delivering marine fuels to other vessels, can support
8 methanol with minimal infrastructure adjustments compared
9 to the other options being contemplated. We urge the
10 Board to act swiftly to enable opt-in credits for
11 alternative fuels like methanol within the marine sector.

12 We support a resolution that initiates and
13 expedites these necessary amendments.

14 Thank you.

15 BOARD CLERK GARCIA: Thank you.

16 Sarah Somorai, please unmute and begin.

17 SARAH SOMORAI: Good afternoon. My name is Sarah
18 Somorai. I'm Manager of Eco-Strategy at Hyundai Motor
19 North America speaking in support of the Low Carbon Fuel
20 Standard amendments. I want to thank CARB staff for their
21 hard work and dedication in the proposed revisions to the
22 rule. Specifically, we want to show our appreciation for
23 the inclusion of automakers to earn a portion of base
24 credits for residential charging.

25 These changes, as proposed, align well with

1 California's other electrification initiatives, such as
2 Advanced Clean Cars II, ZEV requirements and related EV
3 investments. Automakers are California's most vested
4 stakeholders in delivering a hundred percent zero-emission
5 vehicle sales by 2035. We are therefore in the best
6 market position to efficiently and effectively use these
7 credit proceeds to help California achieve this historic
8 accomplishment.

9 Hyundai has made significant investments into
10 designing and manufacturing EVs, building a brand new EV
11 production facility in the U.S., entering into multiple
12 battery plant joint ventures. We are also a proud member
13 of IONNA, a partnership among eight OEMs to build out a
14 network of ultra fast chargers, as well as many other
15 efforts Hyundai has made to ease and accelerate the
16 transition.

17 Hyundai is all in on electrification. And for
18 these reasons, we are highly motivated to utilize the base
19 credit proceeds to increase EVD -- EV adoption bolstering
20 our efforts in achieving California's emission reduction
21 goals. We strongly urge the Board today for a speedy
22 approval of the LCFS proposal as written.

23 Thank you very much for your time.

24 BOARD CLERK GARCIA: Thank you.

25 Alessandra, please unmute and begin.

1 ALESSANDRA MAGNASCO: Good afternoon, Chair and
2 members of the Board. Alessandra Magnasco on behalf of
3 the California Fuels and Convenience Alliance. Our
4 organization represents about 300 members including nearly
5 90 percent of all independent marketers and over half of
6 the State's convenience retailers, many of which are
7 small, family, and minority-owned businesses. We are here
8 to express our opposition to the proposed amendments to
9 the Low Carbon Fuel Standard. While we support
10 California's climate goals, these amendments present
11 severe concerns for fuel supply, affordability, and
12 overall market stability.

13 First, the proposed nine percent increase to a 25
14 percent CI reduction by 2025 represents an abrupt and
15 stringent change that is not aligned with technological
16 readiness. Many technologies needed to meet these
17 targets, like next generation biofuels and carbon capture,
18 are still in early stages. A rapid escalation of
19 standards without a viable path to compliance risks
20 significant supply shortages and infrastructure strain
21 leading to higher costs at the pump, especially for
22 working families and disadvantaged communities.

23 Price volatility is already a significant concern
24 and these changes could make gasoline and other essential
25 fuels even more expensive for Californians. Additionally,

1 introducing a 20 percent cap on credits for biomass-based
2 diesel from certain feedstocks could skew the market. By
3 restricting eligible feedstocks, this cap creates
4 artificial barriers to competition, potentially reducing
5 innovation and driving up costs for biofuels that would
6 otherwise contribute to California's clean energy
7 transition.

8 Moreover, the exclusion of hydrogen produced from
9 fossil fuels will likely disrupt the hydrogen market. As
10 renewable hydrogen production remains limited, this change
11 could lead to higher hydrogen prices affecting both
12 consumers and industries investing in hydrogen to
13 decarbonize.

14 In short, these changes could undermine LCFS
15 Program goals by reducing the availability and
16 affordability of low-carbon fuels. We urge CARB to
17 consider a more balanced inclusive strategy that fosters
18 innovation without sacrificing market stability or placing
19 an undue burden on Californians.

20 Thank you.

21 BOARD CLERK GARCIA: Thank you.

22 Next, we'll hear from Charles Watson, Andrea
23 Villarin, Josh Stoops, Adam Mohabbat, Amanda Myers Wisser,
24 a Brian McDonald.

25 So Charles, I have activated your microphone.

1 Please unmute and begin.

2 CHARLES WATSON: Good afternoon. Charles Watson
3 on behalf of Mainspring Energy a leading California
4 headquartered manufacturer of linear generators, which
5 deliver local, non-combustion power that is dispatchable
6 and renewable fuel flexible.

7 Cleaner generators are playing an important role
8 in advancing California's zero-emission vehicle goals,
9 including accelerating the deployment of charging
10 infrastructure, to support all electric -- all electric
11 drayage trucks at the Port of Long Beach. We appreciate
12 the inclusion in the resolution of the need for new
13 provisions that accelerate the deployment of new
14 technologies that support low-carbon electricity for EV
15 charging in the near term, such as linear generator.

16 Thank you to the Board and staff for the past and
17 future work to ensure a level playing field for fuel cells
18 of linear generators within the LCFS Program, including
19 book and claim accounting for new technologies, such as
20 linear generators. We look forward to continuing to work
21 together.

22 Thank you.

23 BOARD CLERK GARCIA: Thank you.

24 Andrea, please unmute and begin.

25 ANDREA VILLARIN: Can you hear me?

1 BOARD CLERK GARCIA: Just barely. If you could
2 speak up

3 ANDREA VILLARIN: Is that better?

4 BOARD CLERK GARCIA: Not really. It's very
5 faint.

6 ANDREA VILLARIN: Okay. Just a second let me
7 just fix my settings here.

8 Okay. Is that better?

9 BOARD CLERK GARCIA: That's better.

10 ANDREA VILLARIN: Okay. Thank you.

11 Good afternoon Madam Chair and members of the
12 Board. I'm Andrea Villarin representing the Los Angeles
13 Department of Water and Power, or LADWP. I'm here to
14 reaffirm our support for the LCFS Program and to propose
15 amendments that will help utilities continue our
16 transportation electrification programs and expand our
17 equity programs for priority populations. Proceeds from
18 our hold-back credits have funded our EV infrastructure
19 installations and EV rebate programs, significantly
20 reducing, if not eliminating, the costs of infrastructure
21 upgrades passed through to the ratepayers, and also
22 allowing LADWP to provide rebate incentives to low-income
23 and disadvantaged communities.

24 Through LCFS funds, we've been able to promote
25 the electrification of medium-duty and heavy-duty

1 municipal fleets through MOUs with other Los Angeles City
2 departments. We've also been able to promote
3 transportation electrification in communities that are
4 disproportionately burdened by pollution through our
5 Community Emission Reduction Grants Program. To date, we
6 have invested over \$90 million of our LCFS funds on
7 various transportation electrification efforts that have
8 benefited our ratepayers, including the low-income and
9 disadvantaged communities that we serve.

10 LADWP supports the Board's adoption of the
11 proposed modifications to the LCFS regulation. We
12 appreciate CARB staff's efforts to address our concerns
13 and we look forward to working with them in ensuring a
14 smooth implementation of the new provisions.

15 Thank you.

16 BOARD CLERK GARCIA: Thank you.

17 Josh, please unmute and begin.

18 JOSH STOOPS: Good afternoon. Josh Stoops for
19 the Sacramento Municipal Utility District or SMUD. First,
20 we wanted to express our appreciation to CARB staff for
21 the thought and effort put into this rulemaking and for
22 staff's robust engagement with stakeholders. We support
23 the LCFS Program and urge the Board to adopt the proposed
24 amendments. Utility programs funded through LCFS provide
25 benefits to all ratepayers through downward pressure on

1 electric utility rates, and lower rates enable ratepayers
2 to electrify.

3 We anticipate that SMUD's largest single LCFS
4 investment in the next few years will be EV charging
5 infrastructure incentives specifically within
6 under-resourced communities. Consistent with the
7 Sacramento Region ZEV Deployment Strategy, SMUD also
8 expects to invest LCFS funding in additional E-mobility
9 hubs, programs aimed at developing the workforce needed to
10 support our electrification plans and other high-value
11 programs that benefit both under-resourced communities and
12 ratepayers in general.

13 These LCFS amendments are critical to enable SMUD
14 to continue to offer these programs while also keeping
15 rates affordable. Again, we support the adoption of the
16 proposed amendments and appreciate the careful
17 consideration that CARB staff, stakeholders, and the Board
18 have devoted to the rulemaking.

19 Thank you.

20 BOARD CLERK GARCIA: Thank you.

21 Adam, please unmute and begin.

22 ADAM MOHABBAT: Hello. Can you hear me?

23 BOARD CLERK GARCIA: Yes, we can.

24 ADAM MOHABBAT: Good afternoon, Chair Randolph,
25 Board members, and staff. Thank you for the opportunity

1 to speak today in support of the Low Carbon Fuel Standard
2 Regulation. My name is Adam Mohabbat and I'm Director of
3 the Transportation Electrification at the LA Cleantech
4 Incubator, also known as LACI.

5 For context, LACI convenes the Transportation
6 Electrification Partnership, a public-private partnership
7 made up of more than 25 members committed to rapidly
8 accelerating transportation electrification in the greater
9 LA region by 2028, when the world turns its attention to
10 the LA region for the Olympic and Paralympic games.

11 CARB's landmark LCFs program has been
12 instrumental in advancing our state's transition to
13 zero-emission vehicles. Since its inception, the LCFS has
14 played a key role in advancing State and regional climate
15 goals by reducing GHG emissions and other air pollutants.
16 It has also provided a stable funding source and
17 regulatory certainty fostering the growth of the green
18 economy in LA and beyond.

19 Importantly, the LCFS Program has sent a clear
20 market signal that has spurred billions of dollars in
21 investment in zero-emission vehicles and infrastructure
22 and it continues to attract significant private capital to
23 the state. To keep LA and the State on track to meet our
24 climate and transportation targets, while ensuring
25 equitable access to ZEVs for all communities, CARB should

1 approve today's amendments, preserving and continually
2 improving program rules that support charging
3 infrastructure and finding new ways to use LCF revenues to
4 grow the light-, medium- and heavy-duty EV market as
5 quickly as possible.

6 Thank you so much.

7 BOARD CLERK GARCIA: Thank you.

8 Amanda, please unmute and begin.

9 AMANDA MYERS WISSER: Good afternoon, Chair
10 Randolph, Honorable Board members and staff. Amanda Myers
11 Wisser speaking on behalf of WeaveGrid. WeaveGrid is a
12 California-based software company focused on electric
13 vehicle charging optimization to enable cleaner and
14 cheaper charging. LCFS plays an essential role in
15 supporting California's ambitious transportation
16 electrification and climate goals. WeaveGrid strongly
17 supports the LCFS Program and urges the Board to adopt the
18 proposed amendments.

19 In particular, we are supportive of proposed
20 amendments related to increasing program stringency and
21 streamlining regulatory language, and broadening spending
22 categories regarding electrical distribution utility
23 hold-back credits. This includes opening up opportunities
24 for utilities to invest in vehicle grid integration and EV
25 load management technology, as well as clarifying language

1 around hold-back credit equity project requirements.

2 These proposed amendments can accommodate a
3 growing number of EVs on California's roads and lower the
4 carbon intensity and cost of EV charging by more readily
5 integrating renewable energy and shifting EV charging to
6 when and where there is less electric grid congestion.

7 We applaud California's strong climate
8 leadership, particularly at this time. LCFS is a
9 fundamental piece of the transportation electrification
10 support system in California. WeaveGrid appreciates the
11 ample opportunity staff has provided for stakeholders to
12 participate in the rulemaking process. Thank you for the
13 opportunity to provide these comments today.

14 BOARD CLERK GARCIA: Thank you.

15 After Brian, we will hear from Brandon Friend,
16 Tim Taylor, Molly Armus, Greg Kester, Michael Pimentel,
17 Neil Koehler, and Steven Fenaroli.

18 So Brian, I have activated your microphone.
19 Please unmute and begin.

20 BRIAN MCDONALD: Good afternoon. Can you hear me
21 okay?

22 BOARD CLERK GARCIA: Yes, we can.

23 BRIAN McDONALD: Okay. Thank you. Good
24 afternoon Chair Randolph, members of the CARB Board and
25 CARB staff, my name is Brian McDonald. I'm with Marathon

1 Petroleum Corporation. Marathon supports an
2 all-of-the-above market-based approach to reduce carbon
3 emissions.

4 Under the proposed LCFS amendments, CARB has
5 again chosen to place its finger on the scale by limiting
6 opportunities for liquid fuels to compete. Marathon is
7 appreciative of the time CARB staff has put into this
8 rulemaking, but Marathon continues to have concerns with
9 the proposal. The first is the inclusion of an arbitrary
10 credit limit on soybean, canola, and sunflower oils that
11 will unfortunately only limit innovation in crop-based
12 feedstocks. The second is the implementation schedule of
13 CARB's proposed sustainability guardrails.

14 Marathon does not support a credit limit on any
15 feedstock used to produce renewable diesel. We recommend
16 one not be included in the adopted regulation.
17 Additionally, Marathon has provided CARB information that
18 shows U.S. acreage for crops used to produce feedstocks
19 for fuels has declined over time. This information
20 supports a decision by the Board and staff to delay the
21 implementation of the sustainability criteria by two
22 years.

23 With additional time, Marathon recommends CARB
24 hold a series of workshops aimed at ensuring all
25 stakeholders are prepared to provide the information CARB

1 seeks. Doing this will ensure there is no disruption to
2 the feedstock supply chain resulting petroleum fuels
3 replacing crop-based feedstocks that just a few short
4 years ago replaced petroleum fuels.

5 Thank you for your time and the opportunity to
6 provide comments.

7 BOARD CLERK GARCIA: Thank you.

8 Brandon, please unmute and begin.

9 BRANDON FRIEND: Good afternoon. Can you hear
10 me.

11 BOARD CLERK GARCIA: Yes, we can

12 BRANDON FRIEND: Great. Thank you. My name is
13 Brandon Friend and I'm a site director of GOpac. GOpac
14 provides storage and infrastructure solutions at ports all
15 around the world. We operate at several ports in
16 California and we respectfully urge the Board to adopt a
17 resolution that would involve amending the LCFS
18 regulations to allow for credit generation of methanol as
19 a marine fuel.

20 There are significant opportunities to generate
21 low-carbon methanol and we believe that existing
22 infrastructure, such as ours, could quickly support
23 methanol as a marine fuel. Providing LCFs credits would
24 at least be implementation of this opportunity to reduce
25 greenhouse gas emissions as well as emissions Of

1 traditional pollutants.

2 We hope the Board will take this important step
3 today and that any amendments can be adopted in a timely
4 manner. Thank you for allowing me to provide these brief
5 comments remotely.

6 BOARD CLERK GARCIA: Thank you.

7 Tim, please unmute and begin.

8 Tim Taylor.

9 Okay. Let's try Molly. Molly, please unmute and
10 begin

11 TIM TAYLOR: Hello.

12 BOARD CLERK GARCIA: Okay. Tim, go ahead.

13 TIM TAYLOR: Yeah, my apologies. Good afternoon.

14 Tim Taylor with the National Federation of Independent
15 Business. First of all, I'd like to thank Judy Nottoli
16 with CARB who's done a great job in her role reaching out
17 and engaging with the business community, including NFIB.

18 California's economic engine is fueled in large
19 part by small businesses. Over 90 percent of all
20 businesses are small businesses and they generate about
21 half of the countries GDP. I want to be clear that we're
22 not opposed to the greenhouse gas initiative goals of the
23 State, but the choice today is not one of endorsing a zero
24 emissions electrification of the state. It's one of
25 subsidizing biofuels. When we speak with our small

1 business members throughout California, they express great
2 concerns about the cost of the increases associated with
3 these LCFS proposed amendments, specifically they cite the
4 potentially massive gasoline price hikes and the adverse
5 impacts those increases will have on their businesses, and
6 the rippling effect it will have on all Californians
7 without actually improving the air quality of the state.

8 Originally, CARB had indicated these amendments
9 could increase prices at the pump by some \$0.47 a gallon.
10 Later, CARB revised that number, which seems to have been
11 confirmed today, and indicated the cost increases may be
12 negligible. What changed? What's the new methodology or
13 inputs that account for that massive revision? None were
14 proffered.

15 Currently, California pays the highest prices for
16 gasoline at the pump, about \$1.69 over the national
17 average. Taking on additional \$0.50 to that number would
18 be crushing to small businesses. Employees and employers
19 who already face inflationary hardships and soaring rents
20 would find their already expensive commutes even more
21 economically challenging.

22 Additionally, the downstream economic impact and
23 the entire supply chain could be staggering, further
24 driving up the costs of goods and services throughout
25 California. NFIB believes these amendments will not

1 improve our air quality, but will certainly exacerbate the
2 economic woes of our small business owners --

3 BOARD CLERK GARCIA: Thank you.

4 TIM TAYLOR: -- and their employees.

5 Thank you very much.

6 BOARD CLERK GARCIA: Molly, please unmute and you
7 can being.

8 MOLLY ARMUS: Thank you. Good afternoon. My
9 name is Molly Armus. I'm am the Animal Agriculture Policy
10 Program Manager with Friends of the Earth. Friends of the
11 Earth is a national organization that fights to create a
12 health and just world. I'd like to echo the call that San
13 Joaquin Valley residents, community advocates, and other
14 organizations here today and ask you to reject the
15 proposal, particularly reject the extension of the
16 timeline for avoided Methane crediting under Low Carbon
17 Fuel Standard.

18 Maintaining the avoided methane credits for
19 decades to come for dairy biomethane rather than phasing
20 it out immediately will simply entrench this highly
21 polluting unsustainable system that is devastating nearby
22 communities. Your heard from them today. The dairy
23 industry will not make the changes we desperately need to
24 mitigate the climate crisis, if the State continues to
25 incentivize the creation of its primary greenhouse gas.

1 California can absolutely remain a leader in the
2 climate movement by looking beyond digesters and
3 considering more effective climate solutions for the dairy
4 industry that does not exacerbate environmental justice --
5 injustice and results in actual methane reductions,
6 including direct regulation of livestock methane
7 emissions. Digesters are not a substitution for
8 regulation.

9 Again, as it stands, the State's current approach
10 tilts the playing field in favor of the largest livestock
11 operators that are positioned to capitalize on the
12 policies and incentives rewarding methane -- biomethane
13 production, as digesters are really only economically
14 feasible for the largest farms. Pasture-based producers,
15 who are using the best least methane producing manure
16 management strategies in the first place. They are not
17 able to produce and sell manure biogas. They did not
18 collect waste in lagoons making it even harder for them to
19 compete with industrial scale dairies.

20 We urge this Board to prioritize the health of
21 communities and true climate solutions over short-term
22 acquiescence and special interest, and encourage you to
23 reject the current proposal. Thank you.

24 BOARD CLERK GARCIA: Thank you.

25 Greg, please unmute and begin.

1 GREG KESTER: Thank you.

2 I'm Greg Kester, the Director of Renewable
3 Resource Programs for the California Association of
4 Sanitation Agencies, or CASA. CASA appreciates this
5 opportunity to provide comments on the proposed revisions
6 to the LCFS standard and we represent more than 90 percent
7 of the sewered population of the state as nonprofit
8 providers of the essential public service of wastewater
9 treatment.

10 The wastewater sector is aligned with the LCFS
11 Program goals in order to deliver transportation fuels
12 away from fossil fuel-based sources and achieve carbon
13 neutrality. The biogas we generate provides a reliable
14 low-carbon fuel to replace diesel fuel in vehicles.

15 The wastewater sector is seen as critical for
16 successful implementation of SB 1383 by utilizing our
17 existing digesters to co-digest diverted food waste from
18 landfills. This, however, will exponentially increase the
19 biogas we produce and will only be viable if all markets
20 for the biomethane are available and support for
21 demonstrating wastewater biogas to hydrogen is provided.

22 CASA continues to disagree with the proposed
23 phaseout of avoided methane crediting for both biomethane
24 and hydrogen pathways from wastewater treatment, as well
25 as the eventual phaseout of credit for our biomethane as a

1 transportation fuel, which supports and will continue to
2 support wastewater sector fleets in maintaining essential
3 public services of wastewater collection and treatment to
4 protect public health and the environment, and to meet the
5 need for immediate reductions to meet SIP requirements in
6 nonattainment zones or ozone, a priority especially in the
7 South Coast.

8 Without considering the full life cycle of biogas
9 to renewable biomethane and hydrogen fuels in the support
10 from the LCFS Program, these projects become financially
11 infeasible. Members will be forced to flare a renewable
12 resource. So we support --

13 BOARD CLERK GARCIA: Thank you.

14 GREG KESTER: Well, thank you very much. Thank
15 you.

16 BOARD CLERK GARCIA: Michael, please unmute and
17 begin.

18 MICHAEL PIMENTEL: Good afternoon, Chair Randolph
19 and Board members. I'm Michael Pimentel, Executive
20 Director of the California Transit Association. And I'm
21 joining you today on behalf of my 220 member organizations
22 which includes 85 transit umbrella agencies in the state
23 to voice our support for the amendments to the Low Carbon
24 Fuel Standard that are before you today and to thank you
25 for ensuring that the proposed amendments address our

1 priorities for credit generation for fixed guideway
2 systems and For including language in the Board resolution
3 that speaks to the importance of making adjustments to the
4 verification requirements for electric fueling.

5 Now, throughout its life, the LCFS has been an
6 essential program for accelerating California transit
7 agencies transition to zero-emission technologies and
8 providing new funding resources to maintain an expand
9 zero-emission service. This means that the Program is
10 delivering on three critical fronts, the decarbonization
11 of our fuel supply, the greening of our fleets, and the
12 maintenance and expansion zero-emission mobility options
13 that incentivized Californians to take high capacity
14 public transit that reduces vehicle miles traveled.

15 And to be clear, these are the priorities and the
16 outcomes that this body has expressed time and time again
17 you want to see in our transportation system. Now, the
18 amendments before you today strengthen the Program and
19 will help maximize its benefits to industries like mine
20 that are diligently working to improve the lives of
21 everyday Californians by expanding the access to
22 opportunity through the services that we provide.

23 Now, we look forward to working with you in the
24 year ahead to move the Program forward and respectfully
25 request that you prioritize assessment of alternatives to

1 the verification requirements next year. As requested by
2 our partners at the Pacific Merchant Shipping Association
3 and California Trucking Association, again I ask that you
4 adopt the amendments today.

5 Thank you.

6 BOARD CLERK GARCIA: Thank you.

7 Neil, Go ahead and unmute.

8 NEIL KOEHLER: There, can you hear me now?

9 BOARD CLERK GARCIA: Yes, we can.

10 NEIL KOEHLER: Hello. My name is Neil Koehler
11 with the Renewable Fuels Association representing U.S.
12 ethanol producers. We support the LCFS. The hallmark of
13 the Program's great success is its design as a technology
14 neutral market-based program that has cost effectively
15 achieved significant emission reductions. We do, however,
16 have serious concerns with the sustainability provisions
17 of the proposed amendments that threaten to steer the
18 Program away from technology neutrality and unnecessarily
19 restrict the supply of needed low-carbon fuels, increased
20 petroleum use, and raise prices to consumers due to the
21 burdensome costly and unworkable nature of this proposal.

22 Sustainability requirements should also provide
23 credit opportunities for farmers who are employing climate
24 smart agricultural practices that are significantly
25 building soil carbon and lowering the carbon intensity of

1 ethanal feedstocks. This is missing from the current
2 proposed amendments.

3 RFA recommends that the Board approve the LCFS
4 amendments today, while delaying the sustainability
5 provisions until a more appropriate and affordable
6 approach can be developed in collaboration with all
7 stakeholders. We are encouraged by the recent letter from
8 Governor Newsom to Chair Randolph directing CARB to
9 expedite The E15 approval process. As pointed out by the
10 Governor, E15 can save California consumers \$0.20 per
11 gallon at the pump, while at the same time significantly
12 reducing GHG and criteria emissions. California is the
13 only state in the Union has not approved the use of E15.

14 We trust that CARB will Conduct and expeditious
15 approval of E15, which can support an even stronger LCFS
16 in the future while lowering gas prices. E15 adoption is
17 the kind of initiative that can help California achieve
18 its climate goals while addressing the affordability
19 issues for California drivers that is a major concern in
20 this LCFS amendment process.

21 Thank you very much.

22 BOARD CLERK GARCIA: Thank you.

23 After Steven, we'll hear from Audry Platt
24 Christine Wolfe, Tyler Lobdell, Chris Nevers, Vanessa
25 Hyslop, Teresa Bui, awe Brent Newell.

1 So, Steven, please unmute and begin.

2 STEVEN FENAROLI: Thank you, Board members and
3 staff for all your work. It's a very technical subject
4 that you've done a thoughtful job to find a middle ground.
5 My name is Steven Fenaroli and I'm with the California
6 Farm Bureau. I'd also echo comments from the Chair on the
7 importance of the LCFS Program, given today's election
8 results. Even today, vehicle companies are saying they
9 can't meet the ZEV goals. California is working towards
10 these goals. They are very lofty and we should be mindful
11 that LCFS has always been a bridge fuel.

12 But I would just mind everyone that the dairy
13 industry is on track to meet our goals, and they are
14 lofty, and they should be, which -- and is something that
15 we should be incredibly proud of. And we ought to be
16 doubling down on our investment for avoided methane
17 pathways, not limiting our options in this critical time.

18 Thank you.

19 BOARD CLERK GARCIA: Thank you.

20 Audry, please unmute and you can begin.

21 AUDRY PLATT: Hi and thank you so much for having
22 me in this space. I am a lifelong Californian and I'm
23 humbled by all the voices of other Californians that spoke
24 today. I came initially to encourage you to really
25 strengthen the Legislature that I love your work has done

1 so far. Hearing the voices today, it needs to be
2 reconsidered. And it is so critical after Tuesday's
3 election that you not be pandering to all of the voices of
4 privilege that have come here today from corporations and
5 have been able to take this time to encourage that we
6 continue to live in a ICE emissions space. We must move
7 beyond this faster and harder. And I appreciate all the
8 efforts you've done, but many people have said today, we
9 have to go back to the drawing board. And it's not too
10 late. And I must echo them.

11 We hate to see the emissions as we drive through
12 Riverside and San Bernardino counties. We hate to see
13 what happened in LA and what is happening in so many other
14 parts of the world. Today in Pakistan they are in a state
15 of emergency for their air quality. We need to go above
16 and beyond call here in California and go faster, farther
17 to electrification and not pander to biofuels and the
18 dairy industry the way that we are. We all need to change
19 and it will be painful. And under the Trump presidency,
20 we need to do more.

21 Thank you.

22 BOARD CLERK GARCIA: Thank you.

23 Christine, please unmute and begin.

24 CHRISTINE WOLFE: Good afternoon, Chair Randolph
25 and Board members. This is Christine Wolfe with Waste

1 Management urging your yes vote today. Staff's
2 recommendation strengthened this cost-effective,
3 technology-neutral program that has shown itself to be one
4 of the most effective tools to meet the climate mandates
5 enacted by the Legislature, including AB 1279 and SB 1383,
6 while giving fleets performing essential public services
7 like ours a pathway to decarbonization.

8 Thank you.

9 BOARD CLERK GARCIA: Thank you.

10 Tyler, Please unmute and begin.

11 TYLER LOBDELL: Thank you. Good afternoon, Chair
12 Randolph, Honorable Board members. Tyler Lobdell, staff
13 attorney with Food and Water Watch.

14 To quote the Vice President for Operations at
15 Dynamic Renewable, which is a company that operates
16 digesters in the midwest, where the LCFS is driving
17 factory farm expansions, quote, "More cows and more manure
18 means more energy," end quote. You know, the evidence is
19 increasingly showing that CARB's decision to allow factory
20 farms to profit off the Low Carbon Fuel Standard with
21 avoided methane crediting is counterproductive and unjust
22 climate policy. Because the proposal today doubles down
23 on rewards for the most polluting factory farms and
24 thereby encourages further harm to communities in
25 California and across the country, we urge a no vote.

1 The resolution also compromises CARB's statutory
2 obligation under SB 1383 to reduce manure methane
3 emissions in the dairy sector. As staff's presentation
4 reiterated this morning the LCFS works to quote,
5 "Decarbonize our transportation sector," end quote, not
6 the dairy sector. By pushing agricultural methane
7 mitigation through the LCFS and treating it as this
8 powerful offset mechanism, and then also saying you're
9 going to comply with 1383 with the same reductions, you
10 ignore the obvious and staff's own recognition of how
11 methane capture in one sector, which is used to meet legal
12 obligations, and another actually works.

13 So finally, the resolution offers a timeline for
14 1383 regulation that is at odds with the statute. The
15 resolution calls for staff to implement regulations
16 starting in 2030, but SB 38 -- 1383 obligates CARB to meet
17 the 40 percent reduction by 2030, not sometime after. The
18 resolution misstates this mandated timeline.

19 So to fix here is clear and required by law.
20 CARB must prioritize 1383 regulations that rationally
21 address manure methane emissions and stop rewarding
22 factory farms. We ask you to vote no and get back on
23 track. Bold and equitable climate action is needed now
24 more than ever.

25 Thank you.

1 BOARD CLERK GARCIA: Thank you.

2 Chris, please unmute and being.

3 CHRIS NEVERS: Thank you for the opportunity to
4 speak today. My name is Chris Nevers, Senior Director of
5 Public Policy at Rivian.

6 The LCFS is helping to unlock an EV future for
7 Californians, while tackling climate emissions across the
8 transportation sector. We specifically support several
9 key aspects of the proposed amendments, including revised
10 CI targets, the extension of capacity credits for EV
11 infrastructure, and new rules that would allow automakers
12 to share in the generation of residential base credits.

13 Achieving California's EV goals require every
14 tool at the State's disposal as well as collaboration
15 across industries and stakeholders. CARB's proposal
16 allows for just that, creating opportunities for both
17 automakers and utilities to participate in growing the EV
18 market in ways that reflect their unique competencies.
19 OEMs would be empowered to make market-enhancing
20 investments. Rivian is already considering several
21 possibilities, including further expansion of the Rivian
22 Adventure Network.

23 New opportunities would also exist to support
24 take-home fleets who, under current rules, cannot capture
25 credits from residential charging, a blind spot of the

1 current policy. We look forward to working
2 collaboratively with CARB to implement improved --
3 approved projects. As a medium-duty ZEV manufacturer, we
4 appreciate the calls for establishing a medium- and
5 heavy-duty rebate program using the LCFS as credit -- LCFS
6 credit revenue. But we believe the staff proposal to
7 allow OEMs to earn a share of base credits is more fully
8 developed at this stage and will allow for much more rapid
9 efficient reinvestment of credit proceeds.

10 This proposal will help our growing industry
11 sustain this momentum. Once again Rivian thanks the Board
12 and the staff for the care and thought put into this
13 proposal. We respectfully encourage your vote to adopt
14 the proposed amendments today and look forward to further
15 engagement and implementation.

16 Thank you.

17 BOARD CLERK GARCIA: Thank you.

18 Vanessa, please unmute and begin.

19 I see that you've unmuted. You can go ahead and
20 begin your comment.

21 Oh. Okay. You muted yourself and now you're
22 unmuted again, so go ahead and state your comment.

23 We're not able to hear you at this time. If you
24 would like to submit a written comment to the docket, it's
25 currently open.

1 VANESSA HYSLOP: Hi.

2 BOARD CLERK GARCIA: Oh, there we go. Go ahead.

3 VANESSA HYSLOP: So sorry.

4 Hello, CARB Board and staff. My name is Vanessa
5 Hyslop and I am a proud community member of Kings County.
6 I was born and raised in the rural areas around dairies
7 and it's where my heart has always been. As the daughter
8 of immigrant parents who came to the Central Valley
9 seeking opportunity, I'm especially proud to share that
10 they found their place in the dairy industry. This is
11 more than just a job to us. It's a legacy, a livelihood,
12 and a symbol of hard work and dedication.

13 Growing up around dairies, I've seen firsthand
14 the care, commitment, and effort it takes to provide
15 nutritious wholesome milk and dairy products for families
16 across California. I'm proud to live in this incredible
17 State where agriculture plays such a key role in feeding
18 not just our local community, but people across the
19 nation.

20 California isn't just where I live, it's where we
21 work together to produce high quality dairy products that
22 nourish and sustain families. Being part of that feels
23 like being part of something bigger, something that truly
24 makes a difference. I encourage CARB to support the
25 motion to adopt LCFS regulations as drafted.

1 Thank you so much.

2 BOARD CLERK GARCIA: Thank you.

3 Teresa, please unmute and begin.

4 TERESA BUI: Good afternoon, Chair Randolph and
5 Board members. This is Teresa Bui with Pacific
6 Environment. Thank you to staff for all your hard work
7 and to the Board members for your attention. As you
8 already know, ocean-going vessels have surpassed
9 heavy-duty trucks and locomotives as the number one
10 cancer-causing emissions in the South Coast Basin and the
11 number one emissions at the ports. If we don't do
12 anything, emissions from OGVs are expected to grow to 33
13 percent of NOx, 17 percent of PM2.5, and 80 -- 58 percent
14 of diesel particulate matter in 2050 across California's
15 mobile sources.

16 We are looking at holistic ways to address the
17 climate and toxic air pollution associated with shipping.
18 As CARB worked on the in-transit rule to tackle emissions
19 from the shipping sector, the LCFS is a critical tool and
20 we are pleased to see and support the inclusion of marine
21 fuels in the -- in the Board resolution language. It is
22 imperative that we use non-combustion solutions wherever
23 possible, such as fuel cell, as well as prioritizing the
24 least carbon-intensive fuels, such as truly green hydrogen
25 made from renewable energy and not false solution such as

1 liquified natural gas.

2 One of the reasons that we want to make sure that
3 we're using non-combustion is not just for the climate,
4 but also for -- because front-line communities continue to
5 bear the impacts of biofuel productions. So long as the
6 LCFS is incentivizing fossil hydrogen and biofuels, this
7 does pose a risk for the Program and for the community
8 members, as you've heard from numerous environmental
9 advocates and environmental justice groups today.

10 Given all the remaining outstanding concerns from
11 environmental and front-line communities, we also urge
12 CARB to open another period of rulemaking immediately at
13 the close of this one, as a number of topics were unable
14 to fully be addressed in this round of revisions.

15 In summary, we support the inclusion of the
16 marine fuels in the Board resolution language and urge
17 CARB to revisit all the outstanding issues that we've
18 heard from front-line communities as soon as possible.

19 We look forward to working with you on these
20 issues. Thank you

21 BOARD CLERK GARCIA: Thank you.

22 And after Brent, we'll hear from Krysta Wanner,
23 Harrison Clay, Dan Willis, Rita Nagle, Dan Chia, Tim
24 McRae, and Mike McCarthy.

25 So Brent, I have activated your microphone.

1 Please unmute and begin.

2 BRENT NEWELL: Good afternoon, Chair Randolph and
3 Board members. My name is Brent Newell and I represent
4 Leadership Counsel for Justice and Accountability. I join
5 the comments previously stated by Tyler Lobdell.

6 Please vote no. The LCFS allows double counting
7 of methane reductions in the transportation sector and the
8 agriculture sector. CARB should end avoided methane
9 crediting and ensure that it achieves the reductions
10 required by Senate Bill 1383. The proposed amendments
11 will not only continue the policy of avoided methane
12 crediting, but an 11th hour change in the second 15-day
13 changes doubles down on avoided methane crediting to
14 incentivize more credit generation before and after any
15 implementation of regulations required by Senate Bill
16 1383.

17 Throughout this entire rulemaking and the SB 1383
18 proceedings, CARB staff have not provided any explanation
19 that allows such double counting. Cooking the books in
20 the CARB inventory is not an explanation but a cover-up.
21 The Board should end avoided methane crediting
22 immediately, stop allowing double counting, and take all
23 actions under Senate Bill 1383 to achieve the methane
24 reduction target.

25 Stopping avoided methane crediting is important,

1 because it is not fair to force Californians to pay for
2 those pass -- for the pass-through costs of those avoided
3 methane credits. Disproportionately, low-income
4 communities of color residing in inland rural areas will
5 pay those pass-through costs. Jim Duffy, the former LCFS
6 Branch Chief, has estimated these pass-through costs and
7 they are significant, so has Danny Cullenward. Leadership
8 Counsel has submitted the expert analysis of economist
9 Jonathan Shefftz who found that low-income San Joaquin
10 Valley residents would pay significantly higher
11 percentages of their income for these pass-through costs,
12 forcing low-income Californians to pay the pass-through
13 costs of avoided methane credits is just plain wrong.

14 Thank you.

15 BOARD CLERK GARCIA: Thank you.

16 Krysta, please unmute and begin.

17 KRYSTA WANNER: Krysta Wanner with the Western
18 Propane Gas Association. WPGA acknowledges the LCFS is a
19 successful mechanism in providing Californians with an
20 affordable method to meet the goals of the state's energy
21 transition.

22 The Low Carbon Fuel Standard leads to direct
23 investments in California, as we develop the clean
24 renewable fuels of the future. That being said,
25 reasonable compliance targets, accurate carbon

1 intensities, and considerations of impact to renewable
2 fuels production are necessary for an industry shift to
3 meet set air quality targets. While WPGA supports LCFS
4 generally, we cannot support the most recent amendments
5 and respectfully request that CARB delay the vote or
6 reject these amendments and continue to work with
7 stakeholders on appropriate updates to the rule that
8 protect consumers from unnecessary costs and improve
9 carbon intensity reductions across all fuels.

10 The propane industry remains committed to
11 providing safe, reliable, affordable and clean fuel to
12 Californians.

13 Thank you.

14 BOARD CLERK GARCIA: Thank you.

15 Harrison, please unmute and you can begin.

16 Harrison Clay.

17 Okay. Let me move on to Dan Willis.

18 Dan, you can unmute and begin.

19 DAN WILLIS: Thank you. Good evening and thanks
20 for the opportunity to provide this brief comment. My
21 name is Dan Willis with the San Francisco Public Utilities
22 Commission. As a publicly-owned electric utility, we
23 provide zero carbon intensity electricity as a
24 transportation fuel to several city agency customers of
25 ours, who are LCFS participants. Those are the San

1 Francisco Municipal Transportation Agency, which operates
2 the local Muni system, the San Francisco International
3 Airport, and the Port of San Francisco.

4 The SFPUC and our customer agencies strongly
5 support the LCFS and want to thank staff for their hard
6 work on this rulemaking, as well as our strong support for
7 the proposed amendment that would equate LCFS credit
8 generating potential of older fixed guideway electric rail
9 systems with that of newer such systems. This amendment
10 will provide crucial support for clean public transit
11 systems working to reduce emissions and vehicle miles
12 traveled throughout California.

13 Thank you very much.

14 BOARD CLERK GARCIA: Thank you.

15 Rita, please unmute and begin.

16 RITA NAGLE: Hi, there. My name is Rita Nagle
17 with Louis Dreyfus Company. Louis Dreyfus would like to
18 thank CARB for its innovation and leadership in driving
19 the U.S. towards a cleaner fuel economy. We're an
20 agricultural company that is committed to eliminating
21 deforestation and adverse land use in our supply chains.
22 Additionally, we are committed to decarbonization
23 projects.

24 We believe that a few proposed amendments should
25 be reconsidered today. We kindly request the removal of

1 field level traceability requirements on domestic
2 feedstocks. The ethanol industry can supply California's
3 needs without threat of land use change. It will be
4 difficult for the industry to comply with traceability
5 requirements as written, which will at least temporarily
6 block approved low-carbon fuel pathways into California.

7 In particular, the corn fiber pathway is an
8 industrial by-product. Corn fiber does not receive a land
9 use charge under LCFS today. It is therefore inconsistent
10 to apply traceability requirements to corn fiber. Corn
11 fiber ethanol should be exempt from traceability
12 compliance based on this alone. However, if it is
13 included, traceability must be on mass balance only. If
14 CARB deems the proposed traceability rules necessary, the
15 current proposed regulation does not allow adequate time
16 to sustain our pathway. We urge that any drafted
17 traceability requirements be delayed by at least three
18 years to allow for orderly and verifiable implementation.

19 And I want to say thank you and have a great
20 weekend.

21 BOARD CLERK GARCIA: Thank you.

22 Dan, please unmute and begin. Dan Chia.

23 DAN CHIA: Thank you. Dan Chia with Omni
24 Government Relations on behalf of the Port of Long Beach.

25 Chair and Board members, we want to thank you and

1 your staff for the hard work on this important issue and
2 rule. I'd like to express the Port's strong support for
3 the staff proposal to open a future rulemaking to include
4 ocean-going vessel fuels as eligible opt-in fuels under
5 the LCFs Program. The Port of Long Beach is the second
6 largest containerized port in the nation, and as the green
7 port, we recently celebrated historic reductions in air
8 pollution with diesel emissions down 92 percent, nitrogen
9 oxides down 71 percent, and sulfur oxides down 98 percent
10 over the last two decades.

11 However, if we were going to hit our goals around
12 decarbonization, we need to lower the cost of and expand
13 availability of cleaner alternative fuels. Additionally,
14 we'd like to express our support for the heavy-duty fast
15 charging credit E provisions and more broadly for the
16 urgent need to continue public investment in heavy-duty
17 ZEVs to accelerate the transition of the drayage and
18 freight sectors to zero emissions. Thank you for this
19 opportunity to testify.

20 BOARD CLERK GARCIA: Thank you.

21 Tim, please unmute and begin.

22 TIM McRAE: Good afternoon, Board members and
23 Madam Chair. I'm Tim McRae with the California Hydrogen
24 Business Council, the largest hydrogen trade association
25 in the United States, representing over 100 companies and

1 community stakeholders.

2 California's Low Carbon Fuel Standard is critical
3 to build the markets for decarbonized molecules/fuels,
4 including hydrogen. As the requirements expand for lower
5 and zero-emission transportation and goods movement, the
6 LCFS provides an economic pathway to begin the transition
7 now. We appreciate the years that staff have committed to
8 developing the proposed LCFS updates, as well as the time
9 working with stakeholders. The LCFS is one of the primary
10 drivers of private investment in California's climate
11 change programs and remains one of the most pivotal policy
12 innovations that influences other states to adopt climate
13 policies.

14 The LCFS drives innovation and investment that
15 has substantially reduced emissions in the transportation
16 sector. Our sector relies on the investment signals sent
17 by the declining carbon intensity standard, which
18 incentivizes hydrogen producers to make significant
19 long-term investments to deliver zero-emission low-carbon
20 fuel to California drivers and fleets, who are adopting
21 fuel cell electric vehicles of all classes.

22 The California Hydrogen Business Council supports
23 the final version of this regulation as proposed today and
24 urges the Board to vote for approval.

25 Thank you.

1 BOARD CLERK GARCIA: Thank you.

2 Next, we'll hear from Ashley Arax, Colin Murphy,
3 Daniel Chandler, James Ottam, Stefan Unnasch, and Kevin
4 Hamilton. So Ashley, please unmute and begin.

5 ASHLEY ARAX: Good afternoon, Chair Randolph and
6 Board members. I'm Ashley Arax, Senior California Policy
7 Manager with the Clean Air Task Force. Thank you for the
8 opportunity to comment today and thank you to staff for
9 your work on this proposal.

10 CATF believes California's LCFS is an important
11 regulation for reducing the carbon intensity of
12 transportation fuels. We appreciate that this proposal
13 strengthens the 2030 carbon intensity benchmarks and adds
14 benchmarks out to 2045. One of our chief concerns is the
15 increased reliance on crop seed oils as a feedstock for
16 making transportation fuels, particularly given the rapid
17 growth in renewable diesel use in California. This growth
18 poses risk to global food markets and ecosystems and can
19 also cause substantial indirect GHG emissions, which
20 undermine the very climate goals the LCFS seeks to
21 achieve.

22 This proposal's inclusion of credit cap to limit
23 the crop seed oil used is an important first step.
24 However, we view it as a short-term measure with several
25 features that weaken its effectiveness, not a strong

1 long-term signal that limits unsustainable levels of crop
2 seed oil. Furthermore, this approach will still allow
3 substantial growth of these oil based fuels, even if the
4 caps provision are strengthened. We appreciate that the
5 Board resolution attempts to address some of these
6 shortcomings by requiring a public assessment of ILUC and
7 emissions associated with biofuel feedstocks and
8 monitoring and reporting on the impacts of the guardrails.
9 We also support the directive to evaluate adding marine
10 fuels to the LCFS, which could be another large market for
11 drop-in crop oil fuels.

12 We recommend upon completion of the ILUC and
13 guardrail review that CARB initiate a regulatory process
14 to introduce broader safeguards that address these risks
15 over the long term. In summary, while we support this
16 proposal's inclusion of an essential short-term action, we
17 urge CARB to establish future measures as part of a
18 broader long-term framework that supports California's
19 climate goals and food security.

20 Thank you. And we look forward to continuing to
21 engage with staff moving forward.

22 BOARD CLERK GARCIA: Thank you.

23 Colin, please unmute and begin.

24 COLIN MURPHY: Hi. My name is Colin Murphy. I'm
25 the co-lead of the Low Carbon Fuel Policy Research Group a

1 the UC Davis Institute of Transportation Studies. Thank
2 you to everyone who has made this long process possible
3 and also to those of you who have stuck with the --
4 through the long hearing at the end of a long process.

5 We've been deeply engaged in LCFS scholarship and
6 analysis really since its inception, but certainly through
7 this rulemaking. In the course of the last two years,
8 we've submitted about 140 Pages of technical comments on
9 this, as well as published two reports on the LCFS
10 modeling, and developed a new LCFS credit market model,
11 based on one that correctly predicted during the last
12 major rulemaking that the current 20 percent target was
13 going to be too low.

14 There has been a lot said on this that I
15 certainly can't rehash in the time I have left. I think
16 the summary could be best stated as the proposed
17 amendments that we're voting on today, they don't truly
18 address many of the major core issues in the LCFS,
19 including the very low credit prices we've experienced for
20 the last couple of years. They're unlikely to shift the
21 fundamental dynamic that has caused those credit prices.
22 And certainly you've heard from a number of stakeholders
23 that feel that significant issues are not adequately
24 addressed right now, but taken individually, they do make
25 a number of useful changes and improvements to what is an

1 important program that's going to even gain an importance
2 given the election results of last Tuesday.

3 I leave it to you to make a decision about
4 whether that sort of incremental improvement justifies
5 vote right now. What I will say, and this is
6 unambiguously clear, is that there is a need to open
7 another rulemaking as soon as possible without any
8 limitations on scope. Because of the crisis of the LCFS
9 credit market, this rulemaking was always meant to exclude
10 several major structural issues that will -- they are not
11 crises right now, but if they wait until the next
12 scheduled major rulemaking after the next Scoping Plan,
13 likely in 2028, there will be a crisis at that point. So
14 it is vital that we, as soon as possible, open another
15 rulemaking to address these deeper structural issues, and
16 I look forward to get to work on those after we move
17 forward.

18 Thank you.

19 BOARD CLERK GARCIA: Thank you.

20 Daniel, please unmute and begin.

21 Daniel Chandler

22 DANIEL CHANDLER: Yes. I'm Daniel Chandler. I'm
23 one of the Climate action California team that wrote the
24 petition to CARB to regulate dairy methane. First,
25 Climate Action California would like to thank Board

1 members for recognizing that over-incentivizing digesters
2 is an unjust and ineffective method of reducing our
3 largest source of methane emissions. We are grateful for
4 your courage and persistence in insisting that CARB comply
5 with SB 1383 and regulate dairy methane.

6 Second, we are grateful to CARB staff for making
7 CAD data public. However, I would like to point out
8 briefly why the CAD system is inadequate. In our
9 petition, we advocated for a system like CAD that was
10 based on research by Professor Francesca Hopkins at UC
11 Riverside who also used Water Board data. However, we
12 showed in our comments to CARB that USDA county level data
13 in the San Joaquin Valley is closely matched by Professor
14 Hopkins' data, but CAD data doesn't match either the USDA
15 census data or Professor Hopkins' data. CAD also does not
16 collect the manure management details needed to make
17 accurate farm level estimates of enteric and manure
18 methane emissions

19 We would like to propose a way of collecting data
20 to regulate dairy methane that minimizes the impact on
21 dairy farmers. CARB can organize all the water boards and
22 air quality districts to agree on one annual uniform data
23 request that also includes what CARB needs in order to
24 estimate farm level manure and enteric emissions. One
25 streamlined package would save farmers time and it would

1 accurate, because the request from CARB has the force of a
2 subpoena.

3 Finally, we believe that crop-based biofuels and
4 avoided emission credits will both lead to more rather
5 than fewer emissions and more injustice.

6 BOARD CLERK GARCIA: Thank you.

7 James, please unmute and begin.

8 James Ottam.

9 Okay. We'll move along to Stephan. Please
10 unmute and you can begin.

11 STEFAN UNNASCH: Hello. I'm Stefan Unnasch with
12 Lifecycle Associates and thank you for the opportunity to
13 comment. The LCFS Program has proven successful in
14 reducing petroleum fuels, providing incentives for
15 electric and hydrogen vehicle operation infrastructure,
16 it's launched an industry to capture methane. Yes, that
17 money does go to private businesses, but it's been
18 extremely effective and it spawned innovation in dozens of
19 new technologies. And as such, I urge the Board to
20 approve the LCFS amendments.

21 Also, well over a quarter century ago, I worked
22 on methanol-fueled cars and buses, and methanol has proven
23 actually the fuel that motivated the introduction of
24 reformulated gasoline, because the oil industry was so
25 afraid of methanol that they invented reformulated

1 gasoline. And now, here we are well over 20 years later,
2 and we see methanol as a potential fuel for marine
3 applications. And as we all know, methanol combustion
4 doesn't form any particulate emissions and it has an
5 excellent opportunity to also reduce criteria pollutants,
6 which are very important along the Highway 710 corridor.

7 Therefore, I urge the Board to provide
8 opportunities to include methanol as an opt-in fuel for
9 marine applications and other sectors where this zero
10 particulate fuel can help reduce both criteria pollutants
11 and provide an opportunity for low-carbon options, such as
12 eFuels, and renewable, and waste-based methanol.

13 Thank you very much.

14 BOARD CLERK GARCIA: Thank you.

15 After Kevin, we'll hear from P. Hernandez, Chris
16 Hunt, Lisa McGhee, Audry Platt, Jim Stewart, and Molly
17 Armus. So, Kevin, you can unmute and begin.

18 KEVIN HAMILTON: This is Kevin Hilton. Can you
19 hear me?

20 BOARD CLERK GARCIA: Yes, we can.

21 KEVIN HAMILTON: Great. This is Kevin Hamilton,
22 Senior Director for Government Affairs for Cental
23 California Asthma Collaborative, and a member of the
24 Environmental Justice Advisory Committee. I'm not going
25 to repeat and reinforce all of the comments from my

1 colleagues, from Leadership Counsel, and Brent Newell's
2 comments and from PSR-LA and so many others, who have
3 pointed out to the deficiencies that are nested within
4 this latest attempt at building this Program out for the
5 future, and instead suggest that the Board consider those
6 and the fact that all of the experts -- virtually all of
7 the experts CARB had hired to advise them on this have
8 come forward and said that we did not expect them to be
9 that generous in assumptions for so many things, prices of
10 gasoline where it would be, the CI itself and the formula
11 used to support that, how do we handle dairy biogas for
12 the future and how are we handling it now, and what's
13 going on that's wrong there and how could this potentially
14 fix it, which it could, but this Program is not going to
15 do that.

16 And again, how do we deal with the idea of
17 trading food for energy, which has always sounded crazy to
18 everyone who understands that half the world is starving
19 on any given day. So as move forward, just one example
20 jumps out to me of how disingenuous some parts of this
21 latest amendment are, and that is in the cost of gasoline.
22 And Mr. Duffy pointed this out -- well, I just saw his
23 letter yesterday but I'd already started working on this a
24 month ago. And I found this report at CEC that they have
25 every year SB 1322 that CARB had mentioned very briefly

1 and suggested that that pointed to a five to ten cent
2 possible rate in gasoline when, in fact, the base cost it
3 puts into gasoline --

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

6 KEVIN HAMILTON: -- every single month is \$0.58.
7 And that is --

8 BOARD CLERK GARCIA: Thank you.

9 P. Hernandez, please unmute and begin.

10 PAUL HERNANDEZ: Good afternoon, Chair Randolph
11 and Board. Thank you for the opportunity to address you
12 today. My name is Paul Hernandez. I live in Richmond
13 California and today I address you as an individual
14 representing myself and my family. For more than 10 years
15 I've worked in the California ZEV policy sector. And I'm
16 also in the early stages of establishing a
17 California-based start-up that's focused on E-mobility.

18 And today, I join you in support of the LCFS
19 amendments under consideration and support the amendments
20 because of their positive impact across the transportation
21 electrification sector.

22 So the LCFS Program is indeed an accelerator to
23 ZEV deployment across all vehicle classes. For light-duty
24 vehicles, the continuation of the capacity credit
25 provisions, which now include both public and private

1 access are going to help us get more infrastructure rolled
2 out faster and more diversely. For the medium-duty,
3 heavy-duty vector, the new capacity credits will indeed
4 help medium- and heavy-duty fleets pursue ACT and ACF
5 mandates.

6 It's awesome to hear that the LCF hold-back
7 credits can be deployed innovatively, can target specific
8 communities, can be further structured to help rebate
9 programs deploy EV car sharing, all kinds of specific and
10 targeted investments to help accelerate access to EVs.
11 And for electric rail, LCFS also encourages rail systems
12 to electrify. And when these things run off of renewable,
13 we're building the state's largest and biggest ZEVs. This
14 is a major opportunity. And lastly, there's other
15 opportunities through the Tier 2 revision process that
16 allow for E-mobility entities to also gain from the
17 Program. I stand with you today and thank you for the
18 opportunity to stand with you in support of the
19 regulation.

20 BOARD CLERK GARCIA: Thank you.

21 Chris, please unmute and begin.

22 CHRIS HUNT: Thank you for the opportunity to
23 comment. My name is Chris Hunt and I'm here to urge CARB
24 to reject the amendments and to stop incentivizing manure
25 biogas production through the LCFS. I'm speaking today

1 both as a resident of California and also in my capacity
2 as a Deputy Director of Socially Responsible Agriculture
3 Project. My organization works throughout the U.S. to
4 help communities protect themselves from the harmful
5 impacts of large-scale industrial livestock operations.

6 During today's hearing, we heard from numerous
7 community members who have suffered and continue to suffer
8 the damaging health and environmental impacts of pollution
9 from large-scale dairies here in California. Sadly, my
10 organization hears the same heartbreaking stories from
11 communities across the country on a regular basis.

12 Methane is a significant greenhouse gas, but it
13 is only one of many hazardous pollutants generated by
14 industrial livestock operations. And unfortunately,
15 installation of methane digesters does nothing to address
16 these other pollutants. In fact, research published
17 earlier this year by my organization and Friends of the
18 Earth suggests that after installing digesters, industrial
19 livestock operations tend to increase their herd sizes,
20 likely in large part due to government incentives for
21 manure biogas production like the LCFS.

22 As a result the largest most polluting industrial
23 livestock operations grow bigger burying more waste an
24 exacerbating the threats posed to the environment, public
25 health, and surrounding communities. This is especially

1 problematic because it's promoting the expansion of
2 industrial livestock operations in other states where
3 environmental regulations and regulatory oversight are
4 much weaker. Until industrial livestock operations are
5 able to clean up their pollution and operate in a manner
6 that doesn't sicken neighbors and pollute the air and
7 waterways, we shouldn't support them with subsidies or by
8 creating a lucrative market for manure biogas.

9 Finally, climate change is clear an existential
10 crisis and it demands urgent action, but we shouldn't
11 attempt to address it with strategies that create new
12 threats to the environment and public health, particularly
13 when these damages are disproportionately borne by
14 low-income communities and communities of color. I
15 believe that California must do better.

16 Thank you for the opportunity to comment today.

17 BOARD CLERK GARCIA: Thank you.

18 Lisa, please unmute and begin.

19 LISA MCGHEE: I am Lisa McGhee with Tom's Truck
20 Center. We are an HVIP dealer and a medium- and
21 heavy-duty commercial truck dealership that has been in
22 business since 1949. We represent six different ZEV
23 medium- and heavy-duty OEMs including Nikola fuel cell
24 trucks. We agree to adopt the LCF Program with the
25 modification to the HD HRI station crediting, which is

1 required for private investments, because as is, there are
2 too many restrictions and limitations. This is a nascent
3 heavy-duty technology at 700 bar, which does not
4 commercially exist. The supply chain and equipment
5 components are being invented currently with heavy losses,
6 at upwards of 30 to 40 percent upon dispensing creating
7 very high pump prices. Consistent industry commitment is
8 required to obtain the ZEV transportation goals required
9 for the long haul transportation sector, which will
10 largely be dependent on our future hydrogen fuel cell
11 technology.

12 Regulatory certainty is required. Tom's Truck
13 Center opened up the very first commercial dealership
14 hydrogen station in the world on August 12th. Seven
15 hundred and thirty-three fuel cell rebates exist to date
16 in HVIP Program, compared to 7,666 BEVs, resulting in only
17 8.5 percent fuel cell technology and a total of 78
18 delivered cell trac -- fuel cell tractors by two
19 heavy-duty fuel cell tractor OEMs.

20 We have a long way to go before catching up to
21 the BEV technology volumes and population. We encourage
22 the necessary HD HRI station program to be modified as
23 follows: increase the crediting duration; increase the
24 credit capacity from 6,000 kilograms; maintain the same CI
25 fuels through 2035 or review progress in 2030. This will

1 ensure the technology is affordable and can be fairly
2 scaled for private investments. This will play a key role
3 to foster ZEV adoption in the heavy-duty long haul sector.

4 Thank you.

5 BOARD CLERK GARCIA: Thank you.

6 Jim Stewart, please unmute and begin.

7 Jim. Jim Stewart.

8 Okay. Let's move on to -- so okay the remaining
9 commenters we have are Adriano[SIC] Martinez, Jose Lopez,
10 a phone number ending in 528, Alexandra Lavy, Scott
11 Hedderich, and Kathleen Van Osten.

12 So Adriano[SIC], please unmute and you can begin.

13 Okay. Let's try Jose Lopez.

14 Jose, you can unmute and begin.

15 Okay. How about a phone number ending in 528.

16 You'll need to push star six to unmute.

17 LAURA ROSENBERGER HAIDER: Hello. This is Laura
18 Rosenberger Haider, Fresnoans Against Fracking.

19 You see I'm against the low carbon fuel credit,
20 because incentivizes natural gas and also incentivizes
21 fossil fuel-based hydrogen -- fossil fuel -- hydrogen
22 fossil fuels, and it's all leaky -- it often leaks and --
23 but also I can't make any decisions till this full life --
24 complete life cycle analysis is done. I haven't had time
25 to read it yet. And all the different fuels, because --

1 and also it creates another problem, vegetable shortages,
2 that we cannot -- no one can live without vegetables.
3 We'll have to import them from other countries and you
4 figured that in.

5 But we could live without driving. We could just
6 start small -- most of us can start small home-based
7 businesses and just not have to drive at all, which would
8 probably be better for this country.

9 And also the -- I think the life cycle, the
10 fertilizer used -- the mining for the fertilizer, the
11 transport, but -- and fumigant pesticides, and the water
12 pollution, and the water shortages and good water, if it
13 wasn't growing crops. So we'll kind of make -- we'll
14 actually make it -- biofuels more expensive. And nitric
15 oxide gas, the greenhouse gas that comes out of the
16 fertilizer used for the crops and all the new technology
17 that needs to be built and then done away with when we go
18 a hundred percent -- a hundred percent solar electric.

19 All right. Thanks.

20 BOARD CLERK GARCIA: Thank you.

21 Okay. And then Adriano[SIC], it looks like you
22 did unmute. So if you're ready to make your comment
23 please go ahead.

24 ADRIAN MARTINEZ: Yes. Good evening, Chair
25 Randolph and members of the Board. My name is Adrian

1 Martinez. I'm attorney with Earthjustice. I'm testifying
2 today to respectfully request that the Board reject the
3 proposal and go back swiftly to adopt a proposal that's
4 more in line with California's need to get to zero
5 emissions to address our air pollution crisis, and our
6 climate crisis. I say this, because it's -- there's an
7 important, you know, realization that the kind of tenor of
8 the discussion of this rule is that we have these
9 liquid-based fuels to kind of tide us over until we can
10 meet the zero-emission targets in our regulation.

11 And, you know, I get the, you know, logic of that
12 argument, but I think it doesn't comport with reality that
13 we're facing right now. We need to use this Program to
14 more effectively push electrification, particularly in the
15 medium- and heavy-duty sector as we're about to face a
16 potentially hostile federal administration on California's
17 standards. Many of the same interests that are here
18 asking for you to support this regulation will be
19 embracing efforts to defeat California's ability to
20 protect residents from air pollution.

21 And so I think the Board needs to measure twice
22 and cut once, go back, fix the problems with the current
23 proposal, make it more aligned with electrification. When
24 folks are defending the Program, they're primarily talking
25 about the electrification dollars anyway. There's several

1 measures that can be provided that can fix this Program as
2 detailed in several written comments from a wide range of
3 stakeholders. So we encourage your no vote today and
4 direct staff to swiftly bring back a proposal that
5 comports with California's goals.

6 Thank you.

7 BOARD CLERK GARCIA: Thank you.

8 And Jose Lopez, I'm going to try you one more
9 time. If you'd like to unmute and say your comments.

10 JOSE LOPEZ: Hello. Can you guys hear me?

11 BOARD CLERK GARCIA: Yes, we can.

12 JOSE LOPEZ: Okay. Well, thank you for the
13 opportunity for me to speak today. My name is Jose Lopez
14 and I work for CalBio. I was raised here in California's
15 Central Valley. And I've seen firsthand how much the
16 dairy industry means to our communities and to families
17 like mine. These dairies aren't just businesses. They're
18 family operations often run by people who have been part
19 of this land for generations

20 The perception that dairies are large corporate
21 factory farms is simply not true for the vast majority of
22 us. Dairies like ours are family owned, deeply rooted in
23 the community, and committed to responsible practices
24 because we want to keep this industry strong for future
25 generations. It's a point of pride for us. Beyond that,

1 the dairy industry is a life line for these communities.
2 It provides jobs, supports local businesses, and
3 contributes significantly to economic stability in areas
4 that might otherwise struggle. For people like me and
5 many others in the valley, dairy isn't just a job, it's a
6 way of life. We take pride working in an industry that is
7 both sustainable and valuable.

8 CARB's support of the LCFS regulation is crucial.
9 It allows us to build on what's already working
10 demonstrating that California can lead the way on
11 sustainability through innovation, not overregulation. I
12 urge you to adopt the LCFS Regulation as written to help
13 keep California's dairy industry moving forward in a
14 positive direction.

15 Thank you.

16 BOARD CLERK GARCIA: Thank you.

17 Alexandra, please unmute and begin.

18 ALEXANDRA LAVY: Good evening. My name is
19 Alexandra Lavy and I'm speaking on behalf of the
20 Agricultural Energy Consumers Association. As the Board
21 considers approving changes to the Low Carbon Fuel
22 Standard, I want to thank you for your efforts that have
23 helped shape California's world-leading climate policies.
24 Under the LCFS, the State of California works with dairy
25 farmers to develop digesters and alternative manure

1 management programs that significantly curb methane
2 emissions, something that climate experts across the globe
3 agree is the best and fastest strategy for combating
4 climate change.

5 For context, more than 150 governments have
6 pledged to reduce methane emissions by 2030, but few are
7 living up to their commitment. So far, the California
8 dairy industry is the only one close to achieving their
9 methane reduction goal and is on track to exceed the
10 ambitious 40 percent by 2030 reduction goals set for them.
11 The LCFS role in this achievement cannot be overstated.
12 This Program has encouraged public-private partnerships
13 and reduced industry emissions benefiting the environment
14 and rural residents living in the San Joaquin Valley
15 greatly. The world looks to California as the gold
16 standard in climate policy and greenhouse gas emission
17 reduction efforts. It makes zero sense to change course
18 and undue the progress that is already made when we are
19 this close to the finish line.

20 I urge the members of the Air Resource Board to
21 approve the suggested changes to the Low Carbon Fuel
22 Standard so that this good work can continue.

23 Thank you.

24 BOARD CLERK GARCIA: Thank you.

25 Scott, please unmute and begin.

1 SCOTT HEDDERICH: Can you hear me all right?

2 BOARD CLERK GARCIA: Yes, we can.

3 SCOTT HEDDERICH: Excellent. So my name is Scott
4 Hedderich. I'm with a company called Nuseed America. We
5 actually have a agricultural seed operation in West
6 Sacramento. We're developing a crop called Carinata that
7 will be focused on growing on fallow land and won't
8 compete with food or feed.

9 But that's really not what I want to talk about,
10 because I think I'm one of the last speakers and I know
11 it's been a long day. So the first thing I want to do is
12 say thank you and sympathize with everyone on the Board.
13 I've been, as a member of the public, attending these
14 hearings for a number of years, almost a decade. I know
15 it's hard work. I know it's thankless work. As you can
16 tell from all the comments everyone is very passionate
17 about what they believe in.

18 I guess if I could leave the Board with one
19 sentiment it's this, you've heard a lot about our science
20 versus their science, and at the end of the day, I think
21 the best thing you can look to is what the staff have put
22 together. As an independent government agency, that's
23 what they're supposed to do look at both sides, come up
24 with the best interpretations, and put them forward. It's
25 not perfect. It's never been perfect. That's why you

1 exist as a Board to come back, and make changes, and to
2 tweak, and approve as we go forward, but it's an excellent
3 start.

4 And so having said that, I think the Board should
5 adopt these amendments, move forward, continue to put
6 California on pace to be the leader, not just in the U.S.,
7 but around the globe when it comes to low-carbon fuel
8 adoption.

9 Thank you.

10 BOARD CLERK GARCIA: Thank you.

11 Kathleen, Please unmute and begin.

12 KATHLEEN VAN OSTEN: Hi there. Can you hear me
13 all right?

14 BOARD CLERK GARCIA: Yes, we can.

15 KATHLEEN VAN OSTEN: Fantastic. Kathleen Van
16 Osten. I represent United Airlines and just want to thank
17 the CARB Chair, members, and staff for the work that
18 you've been doing over the past really almost decade on
19 sustainable aviation fuel, first as an opt-in into the
20 LCFS, and most recently with the announcement last week of
21 the SAF Partnership. And United has been very engaged
22 over the last nearly two decades in the development,
23 testing, production and use of SAF. And we look forward
24 to working through this partnership with CARB and
25 stakeholders to develop the SAF market in California, and

1 once again place California as the leader in the SAF
2 market in the nation globally. And thank you so much for
3 your work. We look forward to working with you.

4 BOARD CLERK GARCIA: Thank you. That concludes
5 the commenters for this item. I'll turn it back to Chair
6 Randolph.

7 CHAIR RANDOLPH: All right. Thank you.

8 The docket on this item is now closed to
9 additional comments. We are going to take a 15-minute
10 break to give the court reporter a chance to have a break
11 and then we will return for Board discussion.

12 (Off record: 5:04 p.m.)

13 (Thereupon a recess was taken.)

14 (On record: 5:17 p.m.)

15 CHAIR RANDOLPH: Okay. All right. We are going
16 to get started on Board discussion. A couple things.
17 This dais is a little harder to see everybody, so I want
18 to do the up-microphone thing. So if you want to speak,
19 put your microphone up. When you're done speaking, put it
20 down. And I'm going to organize this a little bit by
21 topic, that way we can kind of cover topics and Board
22 members can ask questions or make comments -- oh, hold on
23 a second, my general counsel is waving at me.

24 Oh, I'm sorry. My general counsel gave me
25 instructions that I forgot. So staff is working on

1 responding to some last minute CEQA comments and is
2 preparing a document to respond to those comments. That
3 process will go on as we -- while we are discussing and
4 then I will -- once that is completed, I will turn it over
5 to staff. They will explain their responses in a written
6 document. It will be provided to the public and to the
7 Board members.

8 Okay. Back to the Board discussion process.
9 Before you guys came back, I was saying you need to put
10 your microphone up if you want to talk, because it's
11 difficult for me to see you.

12 We're going to organize the discussion by topic.
13 So we're going to start with zero-emissions vehicles and
14 infrastructure. Then we're going to talk about other
15 fuels, you know, biofuels, SAF, hydrogen. So you can do
16 your questions and comments on those topics. We're going
17 to spend some time talking about gas prices, transparency,
18 some of the questions that have been raised. We will then
19 talk about dairies and avoided methane. And then if
20 there's anything that anyone needs to talk about that has
21 not been covered, we'll have a -- I will give you a cue to
22 speak about any topics that haven't already been covered.

23 Okay. So we are going to start with questions or
24 comments on zero-emission vehicles and infrastructure.

25 Board Member Guerra.

1 BOARD MEMBER GUERRA: Yes. Thank you, Chair, for
2 this. First, I think I'll be very quick on this one. I
3 really want to recognize and align my comments and
4 concerns by the Coalition for Clean Air who brought up the
5 issue of the base credits. And I'd like to make sure that
6 we put language or direction into the resolution that if
7 the Executive Officer executes the option of up to 45
8 percent of the base credits to be used for light-duty
9 electrical vehicles that we be very clear about the
10 restrictions of those for low- and moderate-income
11 families and that the credits go to existing programs that
12 have shown success. And I know from Sacramento County and
13 Air District that Clean Cars 4 All has been very
14 successful. I won't be limiting to that, but I think a
15 program that has shown success, and I know there's others
16 throughout the state that have, that we limit it to that.

17 So, for that I know that that's been an issue.
18 So if the -- if that is the case -- obviously, the
19 status -- the default is that we go to heavy-duty
20 vehicles, that the money be used for heavy-duty vehicles,
21 and that would be my preference again, but I know it's in
22 the regulation. And again for Sacramento, a federal
23 non-attainment zone, heavy-duty vehicles are the largest
24 emitters of particulates. And so -- but again, if the --
25 if the Executive Officer chooses to execute that option, I

1 want to provide direction to limit it only to low-income
2 families. That's -- those are my comments on that issue,
3 Madam Chair.

4 CHAIR RANDOLPH: All right. Dr. Pacheco-Werner.

5 BOARD MEMBER PACHECO-WERNER: Thank you, Chair.
6 I have a question for staff and also a comment. First of
7 all, on the zero emissions, I think it's important to note
8 and I definitely heard from the community around the need
9 to do more. And I think that staff is outlining to do
10 more than the current regulation on the zero-emission
11 aspect, on the zero-emission transition. However, I know
12 firsthand, having gone through three power outages this
13 year that were not due to fires or anything like that,
14 just due to aged infrastructure, that we are not where we
15 need to be to fully transition that at an instant. And
16 yet, we know that the symptoms of climate change are
17 there.

18 So I also wanted to make a clarifying point from
19 a comment that was made earlier on in the -- in the public
20 comment that our other zero-emission regulations continue
21 to be implemented and we are absolutely committed to a
22 zero-emission transition in the state.

23 My question to staff is as we think about how the
24 OEMs use the credits, right, I also want to know and
25 understand more and look forward to seeing those projects

1 that are poised to be used with that other money, you
2 know, how they're being used now. So anything that you
3 can comment on the vision for those projects I think would
4 be helpful for the public as well.

5 DEPUTY EXECUTIVE OFFICER SAHOTA: Good evening.
6 Rajinder Sahota, Deputy Executive Officer. So there's two
7 parts to that. One is that some of that money that goes
8 to the utilities, they can directly use for equity and
9 transportation projects, project such as zero-emission
10 buses, chargers, rebates for used cars, in disadvantaged
11 communities, and they have -- there's a menu of things
12 that they can do, because not every service territory is
13 the same. And so we worked with some of the community
14 voices and some of the utilities to figure out what should
15 appropriately be on that list. And so a lot of those
16 projects have happened and we have reporting for those
17 projects and we have reports that we will be posting on
18 our website. So there is an accounting of how that money
19 is used, and that's submitted by every utility that gets
20 those base credits.

21 Moving forward, we've estimated that between now
22 and 2035, the utilities would get about 4.8 billion with a
23 "B", billion, dollars to invest in equity and
24 electrification in the transportation sector. So that's a
25 significant amount. And as electric vehicles are deployed

1 more and more, the base credits that generate those
2 credit -- that -- the base credits will increase, because
3 they're generated off of charging for vehicles. So it's
4 almost a self-feeding mechanism. What we have is 45
5 percent left after that 4.8 billion that's gone for that
6 purpose, and then there's 45 percent left -- 45 percent
7 left. Of that, the default is that there would be a
8 statewide rebate for medium- and heavy-duty zero-emission
9 vehicles. So that would help to deploy and help with the
10 costs of meeting some of the requirements in ACT and ACF.

11 There's an option in the regulation to divert
12 that to OEMs for supporting light-duty vehicles. And none
13 of that diversion would be pulling from that \$4.8 billion
14 that the utilities are going to get, but it would help
15 support light-duty for just making sure that there's
16 deployment support like chargers, panel upgrades, rebates,
17 all those pieces and what I think I'm hearing is if we
18 decided that that was the place that we wanted to go, we
19 should make sure that there's an equity component in that
20 portion as well. But right now, the default is to make
21 sure that money is earmarked for the statewide heavy- and
22 medium-duty rebate program.

23 BOARD MEMBER PACHECO-WERNER: Thank you.

24 CHAIR RANDOLPH: Board Member De La Torre.

25 BOARD MEMBER DE LA TORRE: Thank you. I do have

1 a question and a proposed action for us. But before that,
2 I want to be really clear and I want to support the
3 comments that were made by my colleagues. This proposed
4 regulate -- regulatory package is completely in sync with
5 the Advanced Clean Trucks Rule, the Advanced Clean Fleets
6 Rule, the Advanced Clean Cars II Rule and a whole bunch of
7 rules that I can't even think about right now, because
8 it's late.

9 So our commitment to zero-emission vehicles is in
10 no way affected by our actions here today, no way. Those
11 commitments are those commitments. This Program has been
12 round for 13 years and it has lived side by side with
13 those zero-emission commitments for most of that time.
14 So, we've been doing both this whole time and we will
15 continue to do both as you just heard from staff.

16 In fact, I can give a very practical example just
17 this last week with some hold-back money, which is this
18 Program. Nineteen low-income people in the City of South
19 Gate signed up to get used EVs. With this Program,
20 because of this Program -- if this Program didn't exist,
21 that would not have happened. Nineteen people in a
22 low-income community in Southeast LA County are going to
23 be driving an EV vehicle, zero emissions, because of this
24 Program. That's just this week. I was there. I saw it.

25 And then finally, to the point that Board Member

1 Guerra made, I actually want to be more certain than what
2 was said earlier. I want that our OEM -- that our base
3 crediting eliminate the option in the resolution that the
4 EO may direct up to 45 percent of base credits to OEMs and
5 that we just do the default for medium- and heavy-duty
6 vehicles. That is the priority. If we're doing the
7 equity programs, as was said, then the other side of that
8 coin for our communities, communities like the one I live
9 in in the Southeast LA County along the 710 corridor, is
10 that medium- and heavy-duty needs to switch over as well
11 and we shouldn't dilute that with some other stuff for
12 people who aren't going to appreciate it any way.

13 So that is my request is that we just stick to
14 the default. I also want to say that this action does
15 not, in any way, change the LCFS structure today, so it
16 would not require a 15-day change. It's already there as
17 an option. We're taking that option.

18 Thank you.

19 CHAIR RANDOLPH: Okay. Board Member
20 Rechtschaffen.

21 BOARD MEMBER RECHTSCHAFFEN: Well, did you want
22 staff to respond to Board Member De La Torre's suggestion
23 or do you want --

24 CHAIR RANDOLPH: We can do more comments and then
25 we'll --

1 BOARD MEMBER RECHTSCHAFFEN: Okay. Well, I
2 strongly support and echo what he just said. I think we
3 should stick with our default. I think we should stick
4 with having the IOUs administer a program for medium and
5 heavy-duty vehicles. There's a great need there and it
6 much better serves our most heavily burdened communities,
7 so I would strongly support that.

8 I want to say one other thing about the hold-back
9 programs and encourage the investor-owned utilities who
10 are here, as you're developing those programs, to focus on
11 distribution infrastructure investments, including those
12 upstream investments in substations and otherwise upstream
13 in the distribution system to accommodate the needs we
14 have for medium- and heavy-duty vehicles. That is proving
15 to be a very significant challenge. Other agencies are
16 working on that, but there is money here for the utilities
17 to do that, and I would urge you to focus some portion of
18 your hold-back funding on that.

19 Thank you.

20 CHAIR RANDOLPH: Board Member Hurt.

21 BOARD MEMBER HURT: Thank you, Chair. I'd like
22 to also echo what my colleague just stated, Board Member
23 Rechtschaffen. That was actually the direction I was
24 going to go. And I'd like to maybe learn a little bit
25 more as we talk about equity in the infrastructure

1 process, whether we're helping to define that or are we
2 leaving it to the utilities with the 4.8 billion? And as
3 I sit in different places, this idea of equity in quotes,
4 people come at from many different directions as to what
5 that means, and are we thinking, from a CARB perspective,
6 how we would like to define that.

7 CHAIR RANDOLPH: Rajinder, do you want to talk
8 about the PUC process?

9 DEPUTY EXECUTIVE OFFICER SAHOTA: Sure. So as I
10 said earlier, there's a menu of actions that can be done
11 with that money, the 4.8 billion for equity, and a certain
12 amount has to absolutely be done for equity purposes,
13 which means that it's happening in communities that are
14 identified as disadvantaged communities. And so if a
15 utility wants to do that, they will identify the program,
16 the benefits it will have, and they will have to go get --
17 if you're an IOU, you actually go to the PUC and you say
18 this is how we're going to spend this money. We
19 collaborate with the PUC to make sure that they
20 understand, this staff there understand, what the rules
21 are requiring. If they have questions, we answer those
22 questions.

23 And we successfully worked with utilities to fund
24 various programs, like the rebate program, like the
25 drayage trucks, like the school buses. And so, there is a

1 very set type of investment that you can do, and then
2 there's also something that allows the utilities to come
3 to the Executive Officer and say, for our service
4 territory, we believe this is going to benefit a
5 disadvantaged community in our region and this was the
6 project we're proposing. And then the Executive Officer
7 can review it and approve it, and then that money flows to
8 the -- to the community.

9 BOARD MEMBER HURT: Thank you. I think it's
10 really important that the public understands that we are
11 really invested in improving those most vulnerable
12 populations. And when we say disadvantaged, that's what
13 we're referring to. And there is a very intense process
14 that has been thought out and will continue to evolve as
15 this process moves forward, but that we have them at the
16 forefront in our mind.

17 Thanks.

18 CHAIR RANDOLPH: Board Member Guerra.

19 BOARD MEMBER GUERRA: Yeah. Thank you again
20 yeah. And I would, again, echo that the priority is on
21 the heavy-duty default. One thing that I would ask though
22 is I'd like to see a report back on how these IOUs's, one,
23 distribute them, and, you know, speaking specifically for
24 the Sacramento Air Basin, you know, we don't have -- I
25 think drayage is necessary, but we don't have as large

1 drayage in the area, so I want to make sure that there's
2 some also regional equity here in accessing to these
3 points here. So I'd like to see that.

4 I'm very proud of like the work that SMUD has
5 done in our region. But outside of the County of
6 Sacramento, I want -- I want to make sure how those
7 credits are distributed. So if staff can report that in
8 that -- in that direction.

9 CHAIR RANDOLPH: Dr. Balmes.

10 BOARD MEMBER BALMES: Thank you, Chair Randolph.

11 I wasn't going to say anything about this
12 particular item, but I want to strongly support what Mr.
13 De La Torre put forward. Thank you.

14 CHAIR RANDOLPH: Okay.

15 EXECUTIVE OFFICER CLIFF: Chair Randolph, can I
16 just note that in response to Board Member Guerra's
17 comments, there is language in the resolution that
18 directs -- would direct us to report information on equity
19 projects implemented by utilities, funded by LCFS annually
20 starting with the 2025 data.

21 CHAIR RANDOLPH: Okay. I am also supportive of
22 that suggestion. I understand the desire of the
23 light-duty OEMs to be able to access these funds, but the
24 reality is, is that the medium- and heavy-duty sector is
25 not as mature as the light-duty sector and I think it's

1 going to need that additional support. So I think we
2 should go back to the default.

3 I do have one suggestion and I don't if anyone
4 else will agree, we know that it's going to take a fair
5 amount of time to get our zero-emission motorcycle reg
6 sort of revised and back on track. And so I was going to
7 suggest maybe we use a tiny bit to authorize the Executive
8 Officer, if appropriate, to use no more than three percent
9 of those credits to jump-start the zero-emission
10 motorcycle market.

11 BOARD MEMBER PACHECO-WERNER: Agreed, Chair. I
12 support.

13 CHAIR RANDOLPH: Okay. Dr. Shaheen.

14 BOARD MEMBER SHAHEEN: Thanks so much, Chair.

15 I really appreciate all the stakeholder feedback
16 today. And I just wanted to underscore how important this
17 policy is to the ZEV transition and I felt like sometimes
18 comments reflected that people did not think that this was
19 advancing zero-emission vehicle technology. And I think
20 it was very clearly presented by staff that LCFS is
21 reducing the cost of zero-emission fuels and contributing
22 to our package of ZEV policies, including Advanced Clean
23 Cars II, Advanced Clean Trucks, and Advanced Clean Fleets.

24 I did have a quick question for staff. I've just
25 got to zip over to it. It was on the infrastructure and

1 how we are defining access to heavy-duty truck
2 infrastructure. So this was slide 33, if that's helpful.
3 For heavy-duty anywhere in California within five miles of
4 an alternative fuel corridor. So I was curious how we're
5 defining alternative fuel corridor, because I know this
6 has though come um in the past.

7 DEPUTY EXECUTIVE OFFICER SAHOTA: So we have made
8 adjustments since the 45-day proposal where it was one
9 mile from a freight corridor. We aligned with the freight
10 transportation plan from the Biden administration and we
11 expanded it to five miles and in comments from
12 stakeholders.

13 And while the language seemed a a little wonky,
14 we believe that we've provided the flexibility to get most
15 of the freight corridors, give most of the flexibility
16 that the folks are asking for, because limiting it to just
17 one mile off of the freight corridor may mean that you're
18 still waiting for an upgrade for electricity upstream, or
19 you don't avenue a permit, or you don't have access to
20 land. And so, it was critical that we provided that
21 flexibility.

22 BOARD MEMBER SHAHEEN: Thank you so much, because
23 I just wanted to make sure that we were giving it a larger
24 radius, because I think that's going to be absolutely
25 essential in delivering the infrastructure we need for our

1 heavy-duty fleet vehicles.

2 And just -- I'd like to also focus on the equity
3 components of this regulation. I think it is so important
4 that we do focus on infrastructure for light-duty
5 vehicles, thinking about multi-family homes and access to
6 the EV infrastructure that's needed so that people can
7 benefit from this technology.

8 CHAIR RANDOLPH: Okay. All right. So I will
9 make a note of that when we come to the end. I'll make a
10 note of that discussion, so we can revise the resolution
11 accordingly. Okay. Our next topic is biofuel, SAF,
12 hydrogen, basically all those other fuels, you know,
13 whatever topic -- questions, comments folks want to raise
14 on that topic, so you can put your microphone up when you
15 are ready.

16 Board Member Rechtschaffen.

17 BOARD MEMBER RECHTSCHAFFEN: Thank you.

18 I want to focus on crop-based fuels. We've heard
19 today and throughout the regulatory process very serious
20 concerns that the rapid growth in renewable diesel,
21 renewable growth in crop-based fuel -- excuse me,
22 feedstocks used in renewable diesel pose risks of
23 deforestation and diverting farmland from food to energy
24 production.

25 The amendments do recognize these risks and the

1 importance of us providing a long-term signal that various
2 vegetable oils should be avoided for being sent to serve
3 California demand, soy, canola and sunflower oil. And as
4 you've heard, they adopt the 20 percent company-specific
5 cap on these fuels beginning in 2028. And it was all --
6 as we've also discussed, the regulations adopt new --
7 stronger sustainability requirements for biomass fuels and
8 give the Executive Officer the ability to stop accepting
9 biodiesel and renewable diesel pathways starting in 2031
10 if our medium- and heavy-duty ZEV targets are met. And
11 these are important measures. They're very important
12 starts.

13 I would have preferred strong safeguards, such as
14 the ones we've heard today, including providing that fuels
15 over the 20 percent limit are assigned a carbon intensity
16 of fossil diesel or gas, including other vegetable oils.
17 I think staff should consider in the next Scoping Plan
18 when we evaluate the performance of the LCFS whether the
19 safeguards need to be strengthened.

20 BOARD MEMBER BALMES: I'm sorry, this is --

21 BOARD MEMBER PEREZ: I didn't hear any of that.

22 BOARD MEMBER BALMES: Yeah, we had an echo during
23 Mr. Rechtschaffen's, you know, comments so we didn't
24 really hear them online here.

25 BOARD MEMBER RECHTSCHAFFEN: Okay. Most people

1 don't want to hear me more than once, Dr. Balmes, but --
2 (Laughter).

3 BOARD MEMBER BALMES: Can you give us the bullet
4 version?

5 BOARD MEMBER RECHTSCHAFFEN: Did you -- what --
6 Chair Randolph, would you like me to -- should I repeat
7 what I said or what would you like me to do.

8 AGP VIDEO: Just one moment, we had a garbling
9 issue on Zoom with one of our drivers. Is it cleaned up
10 on Zoom now, Dr. Balmes?

11 BOARD MEMBER BALMES: Yeah, it appears to be.
12 It's not just me, I think that Supervisor Perez felt the
13 same thing.

14 AGP VIDEO: Yeah, it was happening on all the
15 Zoom simultaneously. Give us just one moment. I think
16 we're good now. Thank you.

17 CHAIR RANDOLPH: Okay. My -- I think it's easier
18 if you just go ahead and say it again.

19 BOARD MEMBER RECHTSCHAFFEN: Okay. We've heard
20 throughout the regulatory process and today serious
21 concerns that the rapid growth in crop-based feedstocks
22 used in renewable diesel pose risks of deforestation and
23 diverting farmland from food to energy production. The
24 amendments recognize these risks and the importance of
25 sending a long-term signal for soy, canola, sunflower oil

1 being avoided to serve California demand. They adopt a 20
2 percent company specific cap on these fuels starting in
3 2028. The amendments also adopt stronger sustainability
4 requirements for biomass fuels and give the Executive
5 Officer discretion to stop accepting new biodiesel and
6 renewable diesel pathways starting in 2031 if our medium-
7 and heavy-duty ZEV targets are met.

8 I said those are important measures, very
9 important first steps. I would have preferred stronger
10 safeguards, such as providing that fuels over the 20
11 percent limit are assigned a carbon intensity of fossil
12 diesel or fossil gas, and including other vegetable oils
13 under the cap. I think staff, as part of the evaluation
14 of the LCFS in the next Scoping Plan, should consider
15 whether these safeguards need to be strengthened.

16 And I have a specific suggestion to add to our
17 resolution in just a moment. But I first have a question
18 for staff about the 20 percent limit and sustainable
19 aviation fuel. And my question is does this -- does the
20 limit apply to SAF that is produced by a facility with a
21 biomass-based diesel pathway that's also producing
22 renewable diesel or other fuels? Does that limit apply to
23 SAF from the -- from that facility?

24 ISD CHIEF BOTILL: Thanks for the question, Board
25 Member Rechtschaffen. Matt Botill -- broken mic.

1 The way in which we evaluate pathways, if a
2 biofuel production facility is producing both renewable
3 diesel and sustainable aviation fuel, the 20 percent soy,
4 canola, sunflower oil provision would apply to that
5 pathway as a whole, so in effect, it would apply to the
6 SAF as well.

7 BOARD MEMBER RECHTSCHAFFEN: Thank you. So SAF
8 would be covered in those instances. Do you have any
9 sense of how many companies there are now who currently
10 have pathway -- or facilities that have pathways solely
11 for SAF.

12 ISD CHIEF BOTILL: Solely for SAF, no I'd have to
13 check and get back to you on -- just one. Yeah.

14 BOARD MEMBER RECHTSCHAFFEN: Just one that we're
15 aware of. Thank you.

16 The resolution also -- this is where I have some
17 suggest language. The resolution also directs staff to
18 evaluate the latest science about land use change from
19 transportation fuels, including the most commonly used
20 models. And I think that's very important and critical.
21 We have heard some pretty persuasive arguments that we
22 need to update our framework, including the GTAP model on
23 which indirect land use impact values are derived. So
24 the -- I'm grateful for the language, but I think we need
25 to take it one step further and direct staff as part of

1 the process not simply to evaluate these models, but to
2 take appropriate action to mitigate any harms identified
3 in this evaluation.

4 And I have some suggested language that I'd like
5 to add to the resolution. It doesn't change the structure
6 of the LCFS. It doesn't require a 15-day process, and so
7 I'm going to turn to the resolution. So this is -- my
8 specific suggestion is that at the top of page nine of the
9 resolution, the first full paragraph beginning on page
10 nine, at the end of line five after the word -- after the
11 phrase, "Commonly used models," we would insert the
12 language, and I'll read it twice, "Such as GTAP, and to
13 consider how best to mitigate any risks of harmful land
14 use impacts or food market conflicts identified," and then
15 it would continue, "For consideration in a future LCFS
16 update."

17 So, to ready it again, the language at the top of
18 page nine would say -- would say, "The Board directs the
19 Executive Officer to convene a public forum in the next 12
20 months on the latest science on land use change related to
21 transportation fuels and the impact on greenhouse gas
22 emissions, including the most commonly used models," and
23 then we would add, "Such as GTAP and to consider how best
24 to mitigate any risks of harmful land use impacts or food
25 market conflicts identified for consideration in a future

1 LCFS update." This language would ensure that what we're
2 doing not only reflects the most current research that we
3 re-examine the models on which a lot of our assumptions
4 are based, and if we need to, we make appropriate changes
5 in the methodology we're using.

6 Thank you.

7 CHAIR RANDOLPH: Board Member Eisenhut.

8 BOARD MEMBER EISENHUT: Thank you, Chair. First,
9 I want to affiliate myself with the prior comments and I
10 had -- I have thought throughout this process that this
11 segment has the most potential for unintended consequences
12 of all the segments of this -- of this action. And I
13 think you addressed part of that in the -- my comments to
14 the Executive Officer for further review and report. And
15 this is more of -- Cliff's actions have essentially
16 handled this, but I think the issues of transference are
17 critical and I draw our attention to that threat. From an
18 agricultural perspective, I would -- of the 20 percent, my
19 observation is that to be congruent with our goals, our
20 Scoping Plan goals for sustainability that in all
21 likelihood North American products are going to be more
22 sustainable than product sourced from outside the North
23 American continent. And I don't know how to address
24 that -- I don't offer a -- any amendment, but I draw your
25 attention to that likelihood that that would be more

1 congruent with Scoping Plan and our goals at sustainable
2 agriculture. So I point that out. Those are my comments.
3 Thank you.

4 CHAIR RANDOLPH: Thank you. Board Member De La
5 Torre. Oh, oops.

6 BOARD MEMBER DE LA TORRE: Thank you. I'm
7 absolutely in support of Board Member Rechtschaffen's
8 proposal. I would just want to make it sooner rather than
9 later on the GTAP piece sometime in 2025 that convened the
10 stakeholders, have the discussions, all that kind of
11 stuff, and then we'll -- obviously we'll see what that
12 yields and where we're at on that. So I would ask that
13 time frame be part of it as well.

14 CHAIR RANDOLPH: Board Member De La Torre, it
15 says 12 months, is that okay?

16 BOARD MEMBER DE LA TORRE: So I guess it is 12
17 months.

18 CHAIR RANDOLPH: Okay.

19 BOARD MEMBER DE LA TORRE: All right. Thank you.
20 So no later than November of 2025. Is that for
21 the convening or the reporting back?

22 All right. Well, maybe --

23 CHAIR RANDOLPH: We want to be realistic in terms
24 of --

25 BOARD MEMBER DE LA TORRE: Sooner rather than --

1 CHAIR RANDOLPH: -- pulling together stakeholders
2 and making sure the process is robust.

3 BOARD MEMBER DE LA TORRE: Well, they're all
4 pretty convened right now.

5 (Laughter).

6 BOARD MEMBER DE LA TORRE: In terms of the fuels,
7 let me -- because I'm all over here. I'll start with
8 feedstock, because that's what we're talking about. I
9 want to highlight the certification of no deforestation
10 component that's already there. I think that's very
11 important. We talked about a year and a half ago when
12 this whole process started, the palm oil issue, and we
13 talked about deforestation from the dais. So that's very
14 important.

15 The 20 percent limit is an interesting thing I
16 heard all over the place. Some people said it was too
17 much. Some people said it wasn't enough. And the fact
18 that the USDA doesn't like it, the limit, not the cap --
19 the limit not the actual reg I thought was interesting.
20 The fact that we got a letter from the Attorney General of
21 Missouri telling us that he hated the cap was fascinating.
22 Not usually an ally of ours. So just it cuts both ways.
23 I think, you know, it's a start and we'll see. And like
24 Board Member Rechtschaffen, you know, I wish we were a
25 little -- did a little more in this space, but we're going

1 to go because the clock is ticking.

2 On hydrogen -- very important that it is
3 completely like I mentioned on the ZEV stuff, our hydrogen
4 components are absolutely in sync with ARCHES which
5 hopefully is still a thing that it's very, very important
6 that we're in sync on that, because that is the path
7 forward regardless of what happens in D.C. That is
8 California's path forward.

9 On biofuels, I want to be really clear on the
10 benefits of biofuels. They are absolutely good for us on
11 greenhouse gas emissions. Absolutely. In fact, in our
12 annual report on our -- on where we stand for GHGs across
13 all sectors, and I'm quoting, "The transportation sector
14 showed the largest decrease in emissions of 5.2 million
15 metric tons of CO2 compared to 2021. This is last year.
16 On-road transportation emissions -- on-road transportation
17 emissions decreased 5.7 million metric tons, 4.2 percent.
18 The decrease in on-road transportation was due in large
19 part to reduce use of fossil distillate and fossil
20 gasoline." That is directly connected to what we are
21 doing here today. That is directly connected to the LCFS.

22 So, is it zero? No, but it absolutely reduces
23 GHGs. In one of the sectors that we got zero GHG
24 reductions from when we started AB 32 in 2010-ish till
25 2020, we got zero then. I just -- I mean, we got 4.2

1 last -- or two years ago from this. Admittedly, and I
2 will put it out there, it isn't great on all criteria
3 pollutants. It is good on PM. It is a little bit good on
4 NOx, so it's not great. It's not zero, but it's a hell of
5 a lot better than fossil. And so I think that is very
6 important.

7 Also, these fuels will -- the biofuels will pay
8 more in deficits than they earn in credits in the next 20
9 years, also very important to note. So -- and then
10 finally on the biofuels, the -- again, the carbon
11 intensity is going to be reduced extra with the action we
12 take today from 1.25 percent a year to 1.45 percent a
13 year. That's a step down further in reducing the carbon
14 intensity of these fuels.

15 Marine fuels, first time, fantastic. SAF, we had
16 an agreement mostly driven by this process, by us - I'm
17 sorry that the SEIU folks aren't here anymore - by them
18 that brought the airlines to the table. On October 30th,
19 they agreed to a 40 percent of intrastate fuels switching
20 over to SAF -- I'm drawing a blank on what it stands for,
21 aviation fuel -- sustainable. Thank you. I was -- I kept
22 wanting to say special -- sustainable aviation fuel by
23 2035. Forty percent of our fuel in state by 2045 would be
24 SAF, with annual status reports, and we also got and are
25 committing to the ground operations at the airports. So

1 significant improvements for the airline industry and for
2 the airport communities next to it directly a result of
3 this process that we've undertaken for way too long.

4 That's it on the fuels. Thank you.

5 CHAIR RANDOLPH: Okay. Dr. Shaheen.

6 BOARD MEMBER SHAHEEN: Thanks so much, Chair. So
7 I'd like to just start by underscoring Board Member
8 Eisenhower's concern and notice of uncertainty in this area
9 of crop-based fuels. I support Board Member
10 Rechtschaffen's proposed resolution language, but would
11 also just really like to express my gratitude to staff.
12 I've been very focused on ILUC and GTAP and the models.
13 And I'm very delighted to see that we're going to have a
14 public forum to discuss this, in a 12-month time frame.

15 So I'd like to add something new to the
16 conversation which came through one of our stakeholder's
17 comments about credit tracking. And I have a question for
18 staff about whether or not you think we could look into
19 revisiting the LCF credit tracking system to allow for an
20 overall market-wide limit examination.

21 DEPUTY EXECUTIVE OFFICER SAHOTA: Board Member
22 Shaheen, do you mind extrapolating a little bit?

23 BOARD MEMBER SHAHEEN: Yeah. So essentially a
24 market-wide safeguard that would allow us to look at how
25 we administer the LCFS Program. So I believe the

1 suggestion was since things are not going to kick in until
2 2028, we have time to look at the accounting system and
3 see if we can look at a more system market-wide analysis
4 in terms of the system itself and the software that we're
5 using to administer it.

6 DEPUTY EXECUTIVE OFFICER SAHOTA: So this is
7 about the system that houses the data where it has the
8 users reporting.

9 BOARD MEMBER SHAHEEN: That is exactly what I'm
10 talking about, yes.

11 DEPUTY EXECUTIVE OFFICER SAHOTA: Yes. Yes. Of
12 course, yes. So the system we have right now has been in
13 place for over 10 years. It's aging. We were
14 appropriated money to upgrade the system, which will have
15 more transparency because we'll be able to build in more
16 data extraction, and accessible graphics, and data files
17 for all interested parties. I'm also happy to say that
18 our colleagues in Washington have an LCFS like program.
19 They call it the Clean Fuels Program, I believe, and so
20 does Oregon and New Mexico has an emerging program like
21 Dillon stated in his presentation. They currently use our
22 older system and we are hoping to partner with all of them
23 on the new one. And I know that the Washington
24 Legislature appropriated money to them as well to pull
25 together for such a up-to-date system.

1 BOARD MEMBER SHAHEEN: Fantastic. That
2 definitely makes me happy. I'm one of the big data
3 people.

4 And then I just have a question. I was reviewing
5 early, early this morning the virgin oil use increases,
6 you know, over time, that -- in some of the histograms you
7 presented. And I wanted to just double check in terms of
8 your thoughts on guardrails. Do you think that they're --
9 we're going to be in good shape if our regulations aren't
10 kicking in prior to 2028 or 2031, in terms of the
11 increased rate we're seeing, the step up.

12 ISD CHIEF BOTILL: Thanks for the question. So
13 we actually have been keeping an eye on feedstock trends
14 over the last few years to see how they've been
15 progressing in this space, and we have seen some
16 interesting trends over the last few years. We did see an
17 increase in 2021 and 2022 for demand for virgin oil
18 feedstock, like soy. And then more recently over the last
19 year, we've seen an increase in waste-based feedstock
20 demand for production. And so we included in the staff
21 proposal a phase-in on the 20 percent credit limit for
22 2028 to allow for time for biofuels producers to be able
23 to look at their feedstock sourcing, be able to procure
24 waste-based feedstocks if they needed to to be able to
25 meet their production levels, and also to potentially

1 allow for some of that reduction in virgin oil demand and
2 the continuation of the trends that we have seen over the
3 last year. So we're going to keep an eye on this. This
4 is part of the resolution as well and is something that
5 we're going to be monitoring closely.

6 CHAIR RANDOLPH: Okay. Thank you.

7 Dr. Balmes.

8 BOARD MEMBER BALMES: Thank you, Chair Randolph.

9 First off, I will try to be brief, because I a
10 hundred percent support Mr. Rechtschaffen's proposed
11 resolution change. And I just want to emphasize how
12 important I think we need to be more -- in the future more
13 intentional about crop-based biofuels. I mean, I think
14 it's a moral issues. And I think with no effective limits
15 on crop-based biofuels, other than the 20 percent limits
16 on the three oils, soy, canola, and sunflower.

17 Basically, as many people testified today, we're
18 funding our climate goals by encouraging harmful land use
19 transition, deforestation and food crop to biofuel crop
20 around the world. As, you know, several people said
21 today, you know, there's one global market on oil crops,
22 you know. And whether they're used for biofuel or food,
23 that's -- there's an equilibrium there. The more it's
24 used for biofuel, the less it's used for food. And that
25 increases the prices for the global poor. You know, and

1 so just conceptually, I think renewable electricity is a
2 more efficient way to produce transportation energy than
3 biofuels. I realize we need biofuels as a transition, but
4 I'm concerned that with no real effective limits that we
5 are causing more harm globally than we are gaining benefit
6 here in California.

7 So, again, I think Mr. Rechtschaffen's suggestion
8 is a very good one and I think we can go forward with
9 that, because I don't think it would require, as he said,
10 a 15-day change. I also want to support going to
11 reevaluate our models that we use for ILUC. You know, the
12 GTAP model, as multiple people have said, and I think I
13 have agreement from several Board members, it actually
14 doesn't give us what we need in terms of the CI of
15 crop-based biofuels.

16 You know, Rajinder, who I greatly ex -- respect
17 with regard to models, I think she agrees that our models
18 aren't as good as they could be. And I think Dr. Shaheen
19 and I agree that it's going to take awhile for us to come
20 up with new models that are really correct. So I think
21 starting the process sooner rather than later is
22 important, because it's going to take years to get it
23 right.

24 So I just -- you know, bottom line I think that
25 our policy to obtain GHG deductions by use of biofuels

1 means higher food prices for the global poor, with -- and
2 deforestation, neither of which I think we want. But I'm
3 glad that Mr. Rechtschaffen made a suggestion that I can
4 support. Thank you.

5 CHAIR RANDOLPH: Can I ask staff to respond to
6 that.

7 DEPUTY EXECUTIVE OFFICER SAHOTA: Thanks, Dr.
8 Balmes. And I just want to make sure that we are clear on
9 a couple points as the staff here that will be doing the
10 follow-up on the models. The models that we're using,
11 GTAP and ILUC, are commonly used by other governments and
12 by researchers globally. And so they're the best tools
13 that we have. That doesn't mean that they shouldn't be
14 evaluated periodically for the latest science, the latest
15 data, and other tools can't be brought in to augment any
16 findings to make sure that we have the best information
17 possible. And so the hope is by convening everybody,
18 including the folks that worked on those models, used
19 those models, or have alternatives to those models, or
20 concerns with those models, we can have a conversation
21 about what is the best available science and tool to make
22 sure that we're doing the best we can.

23 There's always room for improvement and that
24 means that we have to keep checking back periodically and
25 have that feedback loop. But in this process, we've heard

1 concerns about both ILUC and GTAP, but we've never heard
2 what alternatives we should use instead. And so that's
3 why that is an important part of the next step, which is
4 to convene everybody to make sure that not only do we hear
5 the concerns, we're aware of any alternatives and any
6 potential updates that can be put in place, and that
7 there's a broader discussion with other users of the
8 models, and any concerns they're seeing or patterns they
9 see. So we're looking forward to having that process,
10 because the work that we do here is informed by solid
11 science and it is informed by the best available data.

12 I do want to give Matt Botill a chance to speak
13 to the broader issue of food versus fuel, because I know
14 that there's some recent information that USDA put out and
15 that it actually helps inform that conversation a little
16 bit.

17 Matt.

18 ISD CHIEF BOTILL: Yeah, happy to.

19 Thanks, Rajinder. So --

20 BOARD MEMBER BALMES: Must, Matt.

21 ISD CHIEF BOTILL: Yeah.

22 BOARD MEMBER BALMES: Matt, before you -- I want
23 to hear you. I totally agree with what you said,
24 Rajinder, a hundred percent. Go ahead, Matt.

25 DEPUTY EXECUTIVE OFFICER SAHOTA: I love it when

1 you agree with me, Dr. Balmes.

2 (Laughter).

3 BOARD MEMBER BALMES: It happens every once in a
4 while. Come on.

5 (Laughter).

6 ISD CHIEF BOTILL: Record that for the record.

7 BOARD MEMBER BALMES: More often than not really.

8 ISD CHIEF BOTILL: So, just to add into this, we
9 did, as part of the public process here also conduct an
10 all-day workshop back in April, where we talked a lot
11 about trends in the feedstock markets. We also received
12 information from USDA. They did include a new analysis
13 over it this summer. And there are some kind of
14 countervailing aspects of the feedstock market. And by
15 that I mean we have seen soy production increase. We've
16 seen soy and other feedstocks increase in total
17 productivity per acre, without seeing land use change
18 happen in North America. And that's what USDA will point
19 out in many of its postings that overall per acre,
20 production has gone up without land use change occurring.
21 And we will hear that from many of the fuel producers as
22 well.

23 And there are also impacts or effects here from
24 increasing soil production where soy meal is produced,
25 which can be used for livestock feed, which reduces the

1 cost for livestock feed. So there are these
2 countervailing points that come up in this discussion.
3 And that's also one of the reasons why when we get into
4 this discussion about indirect land use effects and what
5 is going on within the GTAP model, we get a wide range of
6 input, and that's why we wanted to have this public
7 discussion, this convening, to get that type of input and
8 bring it forward.

9 It isn't quite as simple as one ton of crop
10 feedstock get's displaced as one ton of food feedstock,
11 so...

12 BOARD MEMBER BALMES: And again, Matt, I
13 appreciate both you and Rajinder. And I feel confident
14 that we can work over time to improve our models for ILUC.
15 So I have confidence in staff. I know you're busy with
16 other things, so it's going to take a while. But I agree
17 with Mr. De La Torre that we should start the process as
18 soon as we can.

19 CHAIR RANDOLPH: Thank you.

20 Board Member Guerra.

21 BOARD MEMBER GUERRA: Thank you very much, Chair.
22 One, I want to first start off again by, you know,
23 speaking from the point of view of representing a federal
24 non-attainment zone and an air district, and to what Board
25 Member Hector De La Torre mentioned about what biofuels

1 has been able to do, which is reduce the particulates in
2 the emissions that we're facing today. You know, these
3 real day impacts and real health costs that are occurring.

4 And, one, I will say that I agree with Board
5 Member Rechtschaffen on the GTAP model and the indirect
6 land use. The need to be able to have that data and those
7 convenient -- convening. So I'd like to support that
8 amendment to the language, and also too, knowing that, you
9 know, also say that I agree with Board Member Eisenhut on
10 his comments about the benefits of maybe looking at
11 something that focuses on the North American market.

12 And I think the comment that was just made by
13 staff about USDA's report in the benefits of soy, and at
14 least from what I've seen most recently in the
15 presentation, that even as Board Member Hector De La Torre
16 mentioned, that the benefits of -- on the PM side with
17 some of these products are much better. So I worry about
18 a random cap. And I think, you know, whether 20 is too
19 high or 20 is too low, or, you know, I don't know if it
20 makes sense for us to debate that here. But here is
21 where, as air district rep, I worry about in this scenario
22 in setting a cap.

23 And so, one, is none of this in LCFS changes
24 actually the fuel demand. Our ACT, you know, our other
25 efforts for hydrogen for electrification, that will change

1 fuel demand by creating alternative options. This next
2 federal administration is going to inherit a strong
3 economy, you know, one that is now moving forward,
4 which -- if we see in California, a strong economy is
5 going to result in more goods movement. More goods
6 movement is going to increase our demand on diesel fuel.

7 So, the concern that I have, and I appreciate the
8 time that staff has taken to walk me through this, but if
9 we cap our virgin feedstock and the alternative is waste
10 oils that are converted, then and right now -- who knows
11 what will happen with this next administration. And we
12 only have right now one sustainable aviation fuel
13 producer, but the economics are much more effective for
14 converting SAF on the waste oils, the metrics of -- for
15 those companies. And so the alternative is petroleum
16 diesel. And what we've done with LCFS is get to a point
17 where 70 percent plus of our petroleum diesel is not -- I
18 mean, our diesel is non-petroleum diesel.

19 So what I worry here is any deceleration, or
20 worse backsliding, on using petroleum diesel for the
21 increase in demand. And this maybe, you know, a doomsday
22 speculation, but the fact is, is that nothing in this
23 regulation right now changes that immediate demand. And
24 so my concern here is to be able to monitor that. So what
25 I'd like to see here is on page eight of the resolution,

1 when we're looking at the performance metrics, adding a
2 bullet point in there that acknowledges or tracks any
3 deceleration of the elimination of petroleum diesel.

4 So that if, in fact, that does happen where we
5 meet our cap and the other alternative is being used for
6 the production of SAF with -- which, one, I want to thank
7 staff and USWW for great work to come into a resolution on
8 a path forward, but I want to make sure that we're not
9 backsliding on the progress we have made. So that would
10 be my request, Chair, on that point, is that we add a
11 point in the performance metrics any -- a last bullet
12 point that says, "Any deceleration of elimination of
13 petroleum diesel," because by setting that cap, we're
14 already limiting our last bit of progress that we need to
15 make.

16 The other point I'd like to make here is I'm
17 concerned about the comments that were made regarding book
18 and claim, particularly when it comes to SAF. And I've
19 heard that in multiple parts. So I would like staff to
20 work with -- as this regulation is rolled out to work more
21 detail on the book and claim process. Particularly, I
22 think it was Mr. Arredondo who mentioned the challenges on
23 the hydrogen side and production side, if we're going to
24 meet the production of SAF, in that -- in that context.
25 So I want to make those points on that piece.

1 The last piece is on the definition side and this
2 is more dealing with biomass and forest -- deforestation.
3 This may be an unintended, you know, inadvertent
4 consequence. I don't think this was the direction of
5 where staff was going. But the issue on definition of
6 deforestation and forestry, and so maybe a clarification
7 here from staff would be helpful. On clear-cutting, I --
8 right now what we have heard from the folks up in the
9 Placer, El Dorado area that are doing the work to prevent
10 forest fires is that -- and doing clear -- some of the
11 fire breaks that any forestry waste removed for firewood
12 mitigation will be allowed as an eligible feedstock.

13 And that intends -- sometimes we might have a
14 mile long of a fire break that needs to occur, we want to
15 make sure that that -- as we're managing our -- both with
16 Cal Fire and the folks at the air district that that
17 feedstock is not -- is not restricted from the use there.

18 So maybe staff can talk a little bit about that
19 issue. I know the Biomass Association sent in a letter on
20 that, that's working with our air districts and Cal Fire
21 on that. Rajinder, I don't know if you have some thoughts
22 on that on how to clarify that.

23 ISD CHIEF BOTILL: Yeah. Board Member Guerra,
24 happy to talk through that one. So we have worked pretty
25 extensively with the Cal Fire staff and others to help

1 craft provisions in the LCFS reg on this. And let me just
2 say unequivocally, we do want to support utilizing forest
3 biomass waste that is coming from fuels reduction
4 treatment to be able to convert that into fuels for this
5 Program, and we wanted to make sure that there was an
6 avenue to do that to support the co-objectives that the
7 State has on both fuels reduction and wildfire risk
8 reduction. That was also a big part of the Scoping Plan.

9 So there's some language in the proposed
10 regulation that products a couple of different pathways
11 ways for that forest biomass to come in, one to be
12 considered a waste that is truly a waste product and
13 another for forest biomass. They may not necessarily be
14 considered a waste, if it's the result of some timber
15 harvesting, for instance. And if it's in that situation,
16 it requires more robust sustainability certification,
17 because we are concerned about the deforestation issue.
18 And we also need to think about global forestry biomass
19 markets. This is we get feedstock from all over the world
20 for this Program and so it has to also work globally.

21 So we are working with folks on this and we also
22 really want to encourage fuel pathway applications on
23 forest biomass. We actually don't have a fuel pathway for
24 forest biomass utilization in the Program now and we're
25 open to working with a applicant that would like to submit

1 one, particularly if they are looking at pulling forest
2 residue from our fuels reduction efforts here in
3 California.

4 BOARD MEMBER GUERRA: I appreciate that. I think
5 maybe what would be appropriate if the Executive Officer
6 could issue a letter clarifying at least that point,
7 because what we hope to do is be able to move as much of
8 that biomass as possible.

9 The last question on this point is some of the
10 tools to use -- this -- is to look at biochar as a
11 potential way of taking advantage of that. So, you know,
12 if -- and so it does the -- I guess here's the question
13 that I have. Does the definition in both the carbon
14 capture and sequestration include the use of biochar, if
15 it's produced as a co-product of bioenergy production?

16 ISD CHIEF BOTILL: So currently, in order to be
17 able to generate LCFS credits for a carbon capture related
18 activity, you need to first receive what's called
19 permanence certification through an approved
20 Board-approved protocol. We do not have a Board approved
21 protocol for biochar as a carbon storage medium. We did,
22 through work with the Resources Agency and through -- as
23 part of our 905 work, identify that as potential future
24 opportunity, we're still looking to get fully staffed up
25 on the SB 905 implementation, and that would require then

1 us moving into developing something around a biochar
2 protocol if we decide that that's a good use of our time.

3 BOARD MEMBER GUERRA: Well, I think then I would
4 probably be direct that I think we need to move in that
5 direction. I know UC Davis was already doing a lot of
6 work on biochar. But just having gone up to the
7 Sierras -- in fact, it was up in Colfax, right behind
8 Board Member Eisenhut's neck of the woods. The amount of
9 biomass that's up there is significant. And so I think
10 that we need to figure out how to move that forward, so
11 that there is a economic way to be able to move a lot of
12 that, you know, dangerous biomass that's sitting up there.

13 And I know we're having those same challenges in
14 the ag sector who are, you know, at the end of every
15 pruning are trying to be able to manage all that extra
16 woodiest waste, and doing something productive, other than
17 burning the ag burning.

18 So those are -- I think, those are my comments
19 right now on those points, Chair. I think the
20 clarification letter on forestry would be important and
21 further look at book and claim. Also, I'd like to -- I'd
22 like to see some language again in the resolution making
23 sure that we track any deceleration in the elimination of
24 petroleum diesel.

25 CHAIR RANDOLPH: Okay.

1 EXECUTIVE OFFICER CLIFF: Chair Randolph, can I
2 address this? Sorry.

3 CHAIR RANDOLPH: Oh, yeah.

4 EXECUTIVE OFFICER CLIFF: So Board Member Guerra,
5 I wanted to direct attention to the bullets on the bottom
6 of page seven of the resolution. So the very first bullet
7 talks about alternative fuel availability once the
8 sustainability guardrails are phased in, which we would
9 consider the credit cap part of. And so wanted to check
10 with you whether you think that encompasses your concern.

11 BOARD MEMBER GUERRA: If it was frame -- if it
12 was in comparison to where we are with petroleum diesel.
13 So if we could, you know, have that as a side-by-side or
14 to say, hey, you know, this is -- this is where we see
15 petroleum-based diesel. Is it -- do we see a deceleration
16 in the use or maybe -- or it eliminated quickly so. At
17 least my understanding with staff that we do see a
18 positive trajectory of getting to a hundred percent, which
19 is great, but I'd like to see if we could track that as we
20 move forward.

21 DEPUTY EXECUTIVE OFFICER SAHOTA: So Board Member
22 Guerra, that is -- that will be part of the data that's
23 posted to the website. So between the bullet that
24 Executive Officer Dr. Cliff is mentioning and then the
25 performance metrics on the next page, we will be able to

1 see that transition and see the growth or the slowing of
2 growth of the displacement of diesel.

3 BOARD MEMBER GUERRA: Very good. Then no need to
4 change and add another bullet if that's the intent of how
5 staff is going to present the data.

6 EXECUTIVE OFFICER CLIFF: And then -- thank you.
7 And then on page nine, we actually discuss the E-fuel
8 issue. It's the second paragraph on page nine says, "Be
9 it further resolved, that the Board directs the Executive
10 Officer to continue to monitor the development and
11 commercialization of electrofuels for inclusion in the
12 next Scoping Plan update and a potential future LCFS
13 update." Is that --

14 BOARD MEMBER GUERRA: That would be sufficient
15 with those points. Thank you.

16 EXECUTIVE OFFICER CLIFF: Thank you.

17 And then regarding the letter that you mentioned,
18 just to be clear, all the comments that we received, we
19 would respond to in the Final Statement of Reasons. So
20 there will be information in the Final Statement of
21 Reasons that can be pulled from -- you know, for those
22 stakeholders.

23 CHAIR RANDOLPH: Is it going to specifically
24 address the issue that Board Member Guerra raised?

25 EXECUTIVE OFFICER CLIFF: Yes, it will.

1 CHAIR RANDOLPH: Okay

2 BOARD MEMBER GUERRA: Thank you very much.

3 CHAIR RANDOLPH: Thank you.

4 Dr. Pacheco-Werner.

5 BOARD MEMBER PACHECO-WERNER: Thank you, Chair.

6 I want to start by applauding the Chair, the
7 staff, the industry, and union advocates for advancing
8 where we're going to be on sustainable aviation fuel and
9 overall emissions at the airport. I think that's a really
10 big win out of this process, before even any vote tonight.

11 I agree with Board Member Rechtschaffen -- sorry,
12 I always butcher your name. We need to direct staff to
13 evaluate and take action on mitigation strategies for
14 future LCFS updates, so I want to support that.

15 I also agree with Dr. Shaheen's comments that as
16 you upgrade your systems, you look for opportunities to
17 see what potential recommendations for future LCFS updates
18 that process might reveal.

19 I think we absolutely need to monitor and be
20 engaged in strengthening the outside feedstocks that come
21 in to ensure that imported tallow is not having the exact
22 opposite sustainability impact that we want to have,
23 especially as you mentioned that you see the trends
24 changing in terms of feedstocks. So, if you can, I would
25 like you to please talk about opportunities you are taking

1 or plan to take to engage on the federal level to help on
2 the prevention of tallow feedstock imports having
3 questionable sourcing.

4 Thank you.

5 ISD CHIEF BOTILL: Thank you, Board Member
6 Pacheco-Werner. So a couple of points on this. We do
7 have regular coordination with U.S. EPA as part of their
8 implementation of their renewable fuel standard. We have
9 been in discussions with the U.S. Department of
10 Agriculture. And those conversations have focused on how
11 do we look at potential concerns associated with waste
12 oils coming into our programs. Just last week or maybe
13 the week before I think it was, we also put out publicly a
14 Request For Information to see if we could generate more
15 information on analytical methods to detect potential used
16 cooking oil adulteration.

17 So we've initiated that process. We're looking
18 forward to the responses to that Request For Information.
19 Those are do, I think, later this month. An that would
20 allow us to potentially expand our implementation
21 resources focused on looking at concerns around used
22 cooking oil supplies coming into the Program.

23 And as part of that federal coordination as well,
24 we'll see where we go next year, but we are also looking
25 forward to having -- potentially having USDA and U.S. EPA

1 be part of those conversations on land use change. And I
2 know that from the conversations that we've had with our
3 stakeholders, there is a lot of interest in looking at
4 questions about impacts of waste oils as well, not just
5 land use change associated with virgin oil, so I expect
6 that will also be part of that public discussion.

7 BOARD MEMBER PACHECO-WERNER: Thank you.

8 And I urge the stakeholders that talked about
9 sustainability today to also be involved in this upcoming
10 process.

11 Thank you.

12 CHAIR RANDOLPH: Board Member Kracov.

13 BOARD MEMBER KRACOV: Thank you, Chair. Just a
14 quick question. I'm very pleased in the resolution to see
15 the references to future LCFS efforts having to do with
16 ocean-going vessels, as well as the one about airport
17 ground operations. Very important both of those sectors
18 in the South Coast. Like Board Member Guerra, we're in a
19 non-attainment zone, and increasingly as we crack down on
20 our stationary sources, trucks and light-duty. These
21 kinds of sources become increasingly important. I know CARB
22 has done so much on cleaner fuels, low diesel fuels in the
23 ocean-going sector within our jurisdictional waters and
24 the plug-ins. But you could just speak for a minute on
25 how are we going to breathe life into these statements in

1 the resolution and how do you see this work moving
2 forward?

3 One thing, for example, you've heard about
4 methanol today. It's probably going to be pretty
5 important as we try this interim period to clean up the
6 ocean going vessel sector. So things like that, how do
7 you see this work in these two sectors moving forward?

8 DEPUTY EXECUTIVE OFFICER CHANG: Board Member
9 Kracov, this is Edie Chang, Deputy Executive Officer. I
10 received some of the air quality programs, and so I can
11 start on this one. As you know, and as you mentioned,
12 emissions from ocean-going vessels and aviation are huge
13 contributors. They're federal sources that we don't have
14 as much control over. We spent the first part of this
15 year working with the South Coast Air District and with
16 U.S. EPA on ways that we can try to tackle those
17 emissions.

18 As part of those, we have a commitment to look at
19 how we can get to zero-emission ground operations in the
20 aviation sector. We're actually going to have a workshop
21 kicking off that process in December of this year. It's
22 going to be a long process. There's a lot to work
23 through, but it's something that we're very eager to get
24 started on. So on aviation, we are going to be
25 collaborating with the South Coast and with U.S. EPA on

1 moving those efforts forward.

2 On the ocean-going vessel side, we have a lot of
3 regulations that we're working on and we are also starting
4 to work on sort of what I would call the next generation
5 of ocean-going vessels. We're looking at in-transit
6 emissions. So right now, you know folks have to plug in
7 when they come into the port. And the biggest source of
8 remaining emissions from ocean-going vessels that affects
9 us are when they're coming into the port and when they're
10 leaving.

11 And so, our staff is looking at what we can do to
12 reduce emissions in those areas. Obviously, some of the
13 things that we've talked about today, including fuels,
14 could be part of those solutions. And we are looking at
15 kicking off workshops on that shortly as well.

16 BOARD MEMBER KRACOV: I know that we're just
17 trying to get through this today, but I saw that the draft
18 Mobile Source Strategy was published. And some of that
19 work is going to coincide with these efforts on the fuels
20 as well, right?

21 DEPUTY EXECUTIVE OFFICER CHANG: Absolutely.

22 BOARD MEMBER KRACOV: Thank yo.

23 DEPUTY EXECUTIVE OFFICER SAHOTA: And Board
24 Member Kracov, I'll just say that Deputy Executive Officer
25 Chang was very eloquent, and both of those sectors are

1 where we are collaborating and we've been meeting with
2 stakeholders together to make sure that, you know, the air
3 quality piece is sitting right next to anything on
4 greenhouse gases. The important thing for LCFS is to make
5 sure that any inclusion of marine fuels or any other
6 sectors does not somehow dilute the effort on the on-road
7 transportation, the terrestrial sources, because that's
8 where the front-line communities are located.

9 BOARD MEMBER KRACOV: Yeah, I saw that language
10 in the resolution.

11 CHAIR RANDOLPH: Board Member Hurt.

12 BOARD MEMBER HURT: Thank you, Chair.

13 So we're in this biofuels section and I think we
14 think a lot about global impact and we heard from Board
15 Member Rechtschaffen that GTAP and ILUC model really
16 should be closely looked at in a public forum. And I
17 completely agree. And I think as we listed out those
18 folks who should be in that public discussion, I think now
19 more than ever we should also engage with our
20 international community in that discussion, so not just an
21 internal review with partners like USDA and the Feds, but
22 also our international countries, exporting countries of
23 biofuel feedstocks. And, of course, we shouldn't be led
24 necessarily by their thoughts and their priorities, but
25 just get a better understanding as we think about better

1 models for the work that we're doing. And I think it's
2 also an opportunity to harmonize our assumptions and
3 influence global land use patterns and emissions with the
4 values of California.

5 I'm wondering if staff could discuss how they
6 imagine leveraging global data and capacity building for
7 international countries when it relates to biofuel and
8 feedstocks.

9 DEPUTY EXECUTIVE OFFICER SAHOTA: So I can start.
10 So California is part of the Pacific Coast Collaborative.
11 And as I mentioned earlier, there's similar programs in
12 Washington, Oregon, and emerging in New Mexico. And so we
13 will be meeting regularly to better understand what the
14 feedstock sources and sustainability requirements are
15 across the region and the western part of the U.S.

16 On the international side, because we have a lot
17 of fuels -- clean fuels that not only are produced in the
18 U.S., California, but are also brought in from other
19 places around the world, we will have the opportunity to
20 understand how to leverage some of the sustainability
21 pieces around those regions, which we actually have done
22 in the proposal already. And as new data and new efforts
23 emerge on ILUC and GTAP, we'll have an opportunity to make
24 sure that we include the international community that also
25 has seeded those models, but also uses those models.

1 BOARD MEMBER HURT: Are there particular
2 countries - this is just I think for everybody's
3 knowledge - that we partnered with that you can bring to
4 the forefront and we understand, so that when we do our
5 own research, we can look to them in different ways and
6 see what's happening in their countries as it relates to
7 this topic, because it is not just a California issue. It
8 is a global issue.

9 ISD CHIEF BOTILL: Yeah. So we have had
10 discussions with counterparts in the EU, who are also
11 looking at similar sustainability guardrails for their
12 program -- their biofuels program. And I know that in
13 looking at this question, we have utilized data from
14 Central and South America, from government agencies that
15 produce information about crop production and land use in
16 those countries. And we do have a number of international
17 agreements that we can also potentially tap into for this
18 discussion as we follow up on the convening for land use
19 change in GTAP.

20 BOARD MEMBER HURT: Well, I hope we can -- when
21 we have our first public discussion, in the next 12
22 months, that we invite some of those folks to be in the
23 room with us.

24 ISD CHIEF BOTILL: And I will say just to add to
25 that, I know a number of our biofuel producers are also

1 located in different countries. And I'm sure we can also
2 have some engagement through them and through government
3 agencies as well.

4 BOARD MEMBER HURT: Thank you.

5 CHAIR RANDOLPH: Board Member Takvorian.

6 BOARD MEMBER TAKVORIAN: Thank you, Chair. Just
7 really briefly, I just wanted to add my voice to
8 congratulations on the aviation agreement on SAF. I
9 really appreciate staff's responsiveness to what I think
10 was a very strong advocacy effort on the part of airport
11 workers and look forward to hearing about and
12 participating in those workshops. I think it's an
13 exciting and really great demonstration of collaboration
14 and ability for us to be responsive.

15 I also support Board Member Rechtschaffen's
16 proposal and all of the concerns that have been raised by
17 Board Member Shaheen, Balmes, and Hurt calling into
18 question the ILUC modeling and support the reevaluation.
19 I do think that that is responsive to some of the concerns
20 that were raised by the EJAC. So I wanted to acknowledge
21 that.

22 What I am -- you know, what's too bad is there
23 are clearly significant concerns that have been raised
24 about the rapid growth in crop-based feedstocks, and a
25 more stringent cap in this LCFS, I think would have better

1 acknowledged those concerns and moved more rapidly towards
2 sustainable global strategy. I recognize that that's not
3 on the table at this point, but I want to recognize that
4 that was the solution that was being sought and requested.
5 And so we've got the longer term strategy that's baked in,
6 which I think it's really important and I support that.
7 But I think we fell down a bit on the shorter term
8 strategy. And I don't see a way to -- beyond what's
9 already happened in some of the provisions in the
10 resolution, which I think are good, but want to
11 acknowledge that that's where I think -- I hope -- I would
12 have hoped that we could have done better in that regard,
13 but just wanted to note that and congratulate on the SAF.

14 Thank you.

15 CHAIR RANDOLPH: Okay. Two more topics and then
16 we'll do any final wrap-up questions or comments.

17 Okay. I wanted to talk a little bit about, one
18 of the issues that's been, you know, discussed quite a lot
19 in the media, which is the question of gas prices and the
20 question of transparency. I think we do need to be
21 extremely mindful of the effects of our programs on
22 residents in California. The resolution I do appreciate
23 has extensive proposals around making more information
24 available, making sure that the public understands what's
25 being produced, you know, the credits, ensuring that there

1 is a place to go. We currently have an LCFS dashboard,
2 but that dashboard could be much more useful and could
3 provide much more information. So I'm looking forward to
4 staff really improving that as much as possible, because
5 affordability is just such a critical issue as we go
6 through this transition.

7 It is a critical issue on the energy side as
8 well. The Governor recently issued an affordability
9 energy executive order and we need to continue to be
10 mindful of that and think about ways that we can mitigate
11 the effects of these programs on residents. So I just
12 wanted to elevate that issue and make sure that we took a
13 moment to talk about it and really think about what are
14 the best next steps to keep an eye on this issue.

15 Dr. Pacheco-Werner.

16 BOARD MEMBER PACHECO-WERNER: Thank you, Chair.
17 I want to start -- before my questions, I want to
18 emphasize that there is a public health benefit to the
19 low-carbon fuels as compared to fossil fuels, period,
20 right? And I think we can't say that enough.

21 We also need to be able to distinguish for the
22 public because of the confusion even locally in some of my
23 local decision-makers in terms of what the difference is
24 between the pass-through cost and what people pay at the
25 pump, right?

1 So, I think if you can help walk us through --
2 walk us through that again, that distinction between what
3 is the pass-through cost versus what is the fuel price
4 influencing factors that are -- that influence what people
5 pay at the pump. I think that would be a helpful place to
6 start and I'm sure my colleagues will have more to say.

7 EXECUTIVE OFFICER CLIFF: Sure. I'm happy to
8 start and we may have some more to fill in. So regarding
9 the analysis that we do for the regulation and to support
10 regulatory development, we look at the impacts to energy
11 prices. And because this is a clean fuels policy, we're
12 looking at the potential impacts to fuels. And so our
13 analysis specifically looks at the carbon content of those
14 fuels and how the policy might affect the fuel from a
15 compliance cost perspective.

16 That, what we've established in the regulation,
17 also looks at the full suite of potential benefits
18 associated with the regulation. So that includes fuel
19 substitution in the case of diesel. You have petroleum
20 diesel and then you have renewable substitutes. In the
21 case of gasoline, you have gasoline itself, which is
22 currently E10 and then potential substitutes which could
23 include E15, if we were to adopt an E15 fuel specification
24 and other types of substitutes, such as electricity in the
25 case of electric vehicles, or hydrogen in the case of

1 hydrogen fuel cell vehicles.

2 So those are all substitutable products. By
3 creating more competition in the marketplace, this
4 actually has the benefit of overall driving down the
5 price, because you have more supply of clean fuels to
6 compete with dirty fuels. And so we always put this in
7 the context of what we would otherwise have to do to
8 achieve the goals that have been laid out by the
9 Legislature for us? And so AB 1279, as we've noted,
10 requires that we get to carbon neutrality by 2045. And we
11 know that transportation is roughly half of our greenhouse
12 gas emissions. So there's no path to that carbon
13 neutrality that doesn't impact the transportation sector.
14 We absolutely have to do that.

15 Furthermore, what we've done is looked at the
16 overall benefits relative to the costs. And what we show
17 is that the overall benefits of the Program drive down
18 costs for drivers in California, including fuel costs.
19 And that's because, as I mentioned, we have various
20 competition in the marketplace. And because those
21 competing fuels are actually less costly than gasoline,
22 the overall benefit to drivers is a remarkable decline in
23 cost of driving. And if I understand correctly -- or if I
24 can remember correctly, it goes from about \$0.20 per mile
25 today, to \$0.12 per mile in 2040.

1 So those are kind of laying out all of the
2 various costs. With regard to continuing to track that,
3 we did lay out in the resolution on page eight that we
4 have ongoing tracking on the website to ensure that we
5 have transparency and that we can follow, not only the
6 fuels that are continuing to come into the marketplace,
7 those substitutes for gasoline, and that we'll continue to
8 report on those. And then on the last page of the
9 resolution, we included an additional -- it's -- I think
10 it's the very last directive to, "Be it further resolved,
11 that the Board directs the Executive Officer to assess any
12 impacts of these regulation amendments on retail gasoline
13 prices every year beginning one year from the effective
14 date of these regulation amendments and to collaborate
15 with the California Energy Commission in that effort."

16 That's just a way for us to kind of continue our
17 ongoing work to ensure, as the Chair said, that these
18 regulations don't have unexpected or undue harms on
19 Californians.

20 And then just lastly, I will say we absolutely
21 understand that there will be compliance costs associated
22 with the regulation. We are requiring the carbon
23 intensity of fuels to decline and that means that those
24 who are regulated by this Program, the oil companies, will
25 have cost of compliance. Now, some will choose to make

1 those cleaner fuels and may be able to do so at costs
2 lower than the credit price, and they can have an
3 advantage in the marketplace by doing so, and some will
4 choose to simply purchase credits from others who can
5 produce lower cost fuels.

6 In any event, they choose what they pass through
7 at the pump. So drivers in California are subject to the
8 whims of the oil industry today. And this policy tries to
9 create new alternatives that are clean in order to reduce
10 those impacts and ensure that California drivers are not
11 subject to those whims going forward.

12 BOARD MEMBER PACHECO-WERNER: Point of
13 clarification on that one year. Is -- will that data be
14 available immediately on the dashboard as well or on that
15 webpage where the dashboard lives?

16 EXECUTIVE OFFICER CLIFF: We'll continue to track
17 as we have data available.

18 BOARD MEMBER PACHECO-WERNER: Yeah.

19 EXECUTIVE OFFICER CLIFF: The frequency of those
20 data depends on the -- on the various pieces of data that
21 we collect. It won't always be immediate, but whenever we
22 have information that we can verify, we'll -- we will put
23 it on the website. So it won't necessarily -- it won't
24 take a year for all of the data to be on the website.

25 BOARD MEMBER PACHECO-WERNER: Right.

1 EXECUTIVE OFFICER CLIFF: This is really more
2 about doing a more in-depth look --

3 BOARD MEMBER PACHECO-WERNER: Right.

4 EXECUTIVE OFFICER CLIFF: -- at any potential
5 impacts.

6 BOARD MEMBER PACHECO-WERNER: And once we have
7 the in-depth look, that will be available to the public.

8 EXECUTIVE OFFICER CLIFF: Absolutely, yes.

9 BOARD MEMBER PACHECO-WERNER: Thank you. I just
10 wanted to make that clear for folks.

11 CHAIR RANDOLPH: Board Member Guerra.

12 BOARD MEMBER GUERRA: Thank you very much, Chair.
13 Well, first -- number one, we have a duty to the public to
14 focus on public health and there is the direct cost to
15 that. For all those families who have kids who are
16 developing asthma and for those who currently suffer with
17 it, there is a direct cost. And so I want to, you know,
18 level set that. But we also have a duty to support
19 working families cost of living as well. I think
20 that's -- that is significant. So the concerns for
21 fossil -- for fuel cost is one that I'm glad the Chair
22 brought up for us to discuss here.

23 And as I understand the regulation, and I
24 appreciate Director -- Dr. Cliff here mentioning this, the
25 regulation creates a more competitive market. And we know

1 that when we have more competition, and more supply for
2 energy sources for transportation, that puts downward
3 pressure. You know, and that's not just a, as you
4 mentioned, on the -- on the types of biodiesel or
5 petroleum diesel, but also electric vehicle, you know,
6 plug-in hybrids, and, you know, the hydrogen option as
7 well. All those put downward pressure on this. And I --
8 you know, I want to appreciate staff for really, you know,
9 honing in and talking about that in the presentation.

10 And even during the testimony, I think it's an
11 important -- at least for those who are in SMUD territory,
12 I heard SMUD talk about the -- how this utility provider
13 will also -- and this Program will help -- this regulation
14 will help put downward pressure on utility rates. So it
15 isn't just on the -- on the transportation side, but it's
16 also on the utility rate side. And so, I always take an
17 opportunity to tout SMUD on that.

18 So I think that's an important context here.
19 That doesn't mean that as we transition, we don't monitor
20 the fuel costs. So -- and, you know -- and taking an
21 understanding, you know, on a Friday today, I think about
22 my child care costs, the housing costs, the food costs.
23 So transportation costs are a real impact to families. So
24 what -- not to diminish what's in the language already at
25 the -- at the end of this, but what I would like to see

1 is -- in this language is -- in the resolution is stronger
2 monitoring of fuel prices. And a year I think is too
3 long. I think we need to be nimble. And so what I'd like
4 to see is language in that last paragraph that says that
5 after six months of the regulation starting -- I know from
6 now to six months is -- we won't even have the regulation.
7 But once the regulation begins within six months, every
8 six months for the next three years, so we're monitoring
9 this.

10 And I think this is part of the transparency and
11 clarity for the public that we monitor the changes in gas
12 prices. And that if the Executive Officer sees that
13 there's a significant and consistent change in the gas
14 price or the retail price that within 120 days, because I
15 know it takes staff to put the information for the Board
16 together, that we come back to the Board for amendments to
17 the regulation. But we want to make sure that there's
18 enough time and data, but I don't want to wait a year and
19 then say, hey, this -- we saw this happening and then
20 we're wading back.

21 So I'd like to put that for our Board to
22 consider, that we look at strengthening that last
23 paragraph. Thank you for putting that in the resolution.
24 I think it's important, but that we limit -- we bring that
25 down to three year -- to six months over a -- and for a

1 three-year period. And then if the Executive Officer sees
2 that, in a hundred and twenty days come back to this
3 Board, so we can take any appropriate action.

4 So those are my comments on that, Chair. Again,
5 I want to, you know, at least remind our folks that this
6 effort helps us address that -- those cost pressures, and
7 in a way that also respects our public health.

8 EXECUTIVE OFFICER CLIFF: Can I just address that
9 quickly, Chair?

10 Thank you. Thank you for that, Board Member
11 Guerra. I just wanted to point out on page eight of the
12 resolution, in the list of bullets of things that we will
13 track, the third from the bottom does indicate that we
14 would link to data that is collected by the California
15 Energy Commission. They're the agency that's charged with
16 that responsibility.

17 Regarding your suggestion, you know, I wanted to
18 just note first, and we did show this on slide 19, that we
19 don't observe any correlation between the Low Carbon Fuel
20 Standard Program and fuel prices, let alone any causal
21 relationship. So no relationship, no causal relationship.
22 That said, of course, we are concerned as well, and we
23 want to make sure that we're tracking this. I take your
24 point. We will look at the appropriateness of how
25 frequently we can track this, and actually would not

1 necessarily want to be limited to three years. We are
2 committed to continuing to track this over time.

3 That was -- the very final bullet was just
4 intended to be a very specific report, so that we would
5 have sufficient data to come back and provide a report to
6 the Board. But the ongoing tracking is part of our
7 commitment in -- you know, in the bullets that we have on
8 page eight of the resolution.

9 BOARD MEMBER GUERRA: No, I understand. Thank
10 you, Dr. Cliff. And your last paragraph already included
11 the collaboration with the Energy Commission, because they
12 are the entity that's doing that. And again, I appreciate
13 your concern in that, but I do think that given how
14 people -- how families are feeling these cost pressures,
15 that -- even if in the first six months you came and said
16 to the Board or put out a report that in this time frame
17 we haven't seen anything. But it's being able to
18 manage -- monitor that in a much more regular time frame.
19 I think that's important, but also giving you the
20 directive, at least for this Board member to say, that if
21 you saw a trend, I think it's important for us to come
22 back and at least discuss it.

23 And if it is not because of the regulation,
24 because I agree, I think the data has shown, that the LCFS
25 credits have no correlation with retail gas prices. They

1 don't. But if there is any changes, we need to be aware
2 of what that is and be able to react quickly.

3 CHAIR RANDOLPH: I just wanted to express, you
4 know, I think Board Member Guerra makes a good point in
5 the sense that I think it's very clear that we can't just
6 set it and forget it, and just sort of let it go along.
7 We really need to be proactive in keeping an eye on things
8 and if the Executive Officer identifies an issue, that you
9 would then consider what possible strategies to deal with
10 that would be and come back to the board with 120 days.

11 So, I think that ensures that there will be close
12 monitoring of the process. And I think to Board Member
13 Guerra's point, you know, perhaps thinking of it in terms
14 of if you have sufficient data to do a written report
15 every 12 months, but also every six months taking a look
16 internally, and if you identify impacts, then you would
17 come to the Board.

18 Board Member De La Torre.

19 No I said Board Member De La Torre.

20 BOARD MEMBER HURT: I'm like I know my name and
21 that is not it.

22 CHAIR RANDOLPH: Oh, no, no, no. I'm doing a --
23 I'm trying to do it in order of when people -- when I see
24 people's mics.

25 BOARD MEMBER DE LA TORRE: Okay. Okay. All

1 right. Thank you. Sorry.

2 Gas prices. So first of all, these are two of
3 about a half dozen mailers that I got in the last several
4 months from an organization called Californians for
5 Affordable and Reliable Energy CARE is because they care.
6 This is WSPS. This is Business Roundtable. These are
7 making -- blaming government for gas prices.

8 So, when people are concerned and they naturally
9 are. Obviously, we're not idiots. You go to the pump and
10 you see differences in the prices, you react to that. You
11 know, you notice when it's higher or lower. But then
12 also, when you get this kind of stuff, this propaganda,
13 that makes you more worried, more scared, more angry.
14 That's part of the problem too.

15 So let's look at the facts on gas prices. If you
16 can pull up the first --

17 (Slide presentation).

18 BOARD MEMBER DE LA TORRE: Thank you. So these
19 are gas price spikes in California from '22 and '23. You
20 can see taxes and fees and environmental costs would be in
21 that blue line. It doesn't change. It's just fairly
22 flat, all the way across. This isn't LCFS. This isn't
23 CARB cost. This is everything, taxes and fees. Flat,
24 roughly.

25 Crude oil prices, the red line. You can see it

1 kind of goes up and down. It's -- you know, it's a \$1
2 range roughly over that two-year period. Then you see
3 industry margin, which is refinery costs and retail cost
4 of the oil companies, much more divergent, much wilder
5 swings. So, when oil companies are blaming this body for
6 price swings, price fluctuations, this chart puts the lie
7 to that, because it is a flat input. Anyone who's in the
8 private sector, and I've worked for Fortune 500 companies,
9 knows that you just know what your costs are and you
10 account for that.

11 Well, we're not wildly fluctuating what we're
12 doing. We project out for many years. We let them know
13 what we're going to do. We let them know how it's going
14 to play out. We have a 20-year chart for what we're doing
15 here today. There is no wild fluctuation there. It is
16 programmed steadily, basic. And yet, they're pointing the
17 finger at us. So, again let's start with the facts, and
18 those are the facts. This is real data, not from us, from
19 the California Energy Commission.

20 Next slide.

21 [SLIDE CHANGE]

22 BOARD MEMBER DE LA TORRE: This is the margin,
23 which is again the average for refineries and retail
24 costs. Look at the United States cost, that's the red
25 line in the middle from about \$1 to about \$1.75, roughly

1 over that time period. Actually, a little less than \$1.

2 But look at the California fluctuations, much
3 higher, first of all, and wildly fluctuating, even more so
4 than the rest of the United States.

5 So what's the difference is that blue line. Does
6 that blue line look anything like the blue line on the
7 previous chart that was flat across the bottom? No, it
8 does not. So let us be clear about why we have the wild
9 fluctuations in California on gas prices. It is not us.
10 It is not the Legislature. It's pretty clear.

11 So, we have these price spikes. It's not about
12 the oil price either. The oil price is only part of the
13 equation. It's a flatter curve for oil prices, as I
14 showed on the previous chart. Oil is only about 35
15 percent. The price of crude oil is only about 35 percent
16 of the cost of the gasoline price that we pay. And again,
17 that could fluctuate, but it fluctuates much less than
18 what we're seeing in California, much less. And so, if
19 it's not the oil, and it's not us, that only leaves the
20 oil companies. That only leaves the oil companies.

21 So, wonderful that they tried to deflect their
22 responsibility on others, but it's wrong. It is flat out
23 wrong. And that the media and some electeds have followed
24 this is too bad, is too bad, because it is a false
25 narrative period. What we know about LCFS -- actually,

1 all of our environmental costs in California is that it's
2 only about six percent of the price that we pay at the
3 pump over the last few years, six percent. I mentioned
4 the 35 percent for the crude oil price, and then the
5 balance is the oil companies themselves. And I'm not a
6 math major, but that seems to be \$0.59 -- 59 percent. So,
7 they are responsible for 59 percent and they're blaming it
8 on the six.

9 Finally, on these studies that have been done,
10 the one we did, some of the others that are floating
11 around out there, everyone fixates on the top of amount,
12 \$0.45 on ours, \$0.65 on that other one. Nobody ever says
13 it's a range and the range starts at zero. And everyone
14 fixates on the top end of the range. They never even
15 mention -- I've seen a bunch of the reporting on this,
16 they never even mention the zero part of this. Now, I'm
17 not saying it is zero, but that is part of the study.
18 That is part of the result, zero to.

19 So what we do know, based on actual data, is that
20 this Program, the one we're voting on today, the one that
21 exists for January 13 years is that the average is around
22 8 to 10 cents. That's it. That's fact. That's not made
23 up. That's not hypothetical. That's not some study.
24 That's real-world examples. And so I think that this is
25 important for all of us as we sit here today to answer the

1 charge, the wrong charge, the inaccurate charge, the false
2 charge, that this Program, or for that matter any of our
3 other programs that we do around here, are the reason why
4 we have these price spikes. The data proves it out.

5 Thank you.

6 CHAIR RANDOLPH: Dr. Shaheen.

7 BOARD MEMBER SHAHEEN: Thanks so much, Chair
8 Randolph. And I really appreciate the fact that you've
9 raised this as a discussion item, because it is such an
10 important component in people's daily lives. And costs of
11 fuels are something that we all have to be very careful
12 of. I wanted to just raise a key point from that FAQ that
13 staff prepared, that was really helpful to me in thinking
14 about this, as I prepared for today, and that is that
15 there's no model currently available to accurately predict
16 future credit prices for LCFS, future transportation fuel
17 prices, or pass-through costs for retail gasoline and
18 diesel costs.

19 So that leads me to a question, which is just to
20 confirm what Board Member Hurt said is how far can we look
21 when we're talking about pass-through costs? Like what's
22 that window and what are we able to monitor essentially
23 like real-time.

24 DEPUTY EXECUTIVE OFFICER SAHOTA: So real-time is
25 relative. It could be quarterly reports, which is what

1 CEC collects, and quarterly reports, which is what we
2 collect. We do get transactional data that we publish on
3 the price of credits, and we can go back and do analyses
4 to compare those to the prices that we see on the
5 quarterly reporting to CEC. The complexity is always
6 going to be that what you see today for a credit price may
7 not be what you're paying for compliance, because you can
8 do forwards contracts on the secondary markets. You can
9 bank. And one of the things that we were careful to do
10 here was to make sure that in the step-down to help get
11 the balance back for the deficits and credits, we didn't
12 wipe out the entire bank, because we knew that that would
13 have an unintended cons -- outcome of elevating prices
14 quickly.

15 And so we very mindful and careful in how we
16 designed that step-down and the timing for it. And so for
17 us it's going to be looking at some of the correlation
18 data and charts that we already have in that FAQ. It's
19 going to continue to be looking at what happens in Point A
20 versus Point B, also continuing to work with the folks at
21 CEC, because they have a charge and they have authority to
22 collect more data. And they have more insight into
23 imports. And if they see an issue, they can also ask for
24 more supply reserves, because they've identified some key
25 things that precipitate when you see some of these price

1 spikes.

2 And so we'll be part of that, because they have
3 the price in and understand our rules and regulations just
4 as they have to for local State and federal taxes. But we
5 also are the ones that have to turn around and say are we
6 making progress? What's the volume? And so, time is --
7 like I said, it's going to be relative what real-time
8 looks like, but it's going to be a lot of data, and it's
9 going to be a lot of review of data, posting of data, and
10 we want to make sure that we do it transparently.

11 I'll just add that the one part that's going to
12 be probably more difficult, which is always the difficult
13 with these analyses is the causality. And so even if you
14 did see credit prices start to go up and you did see
15 prices for crude go up, to tease out that it's due to one
16 factor versus another is going to be very difficult. And
17 that's why it's the longer term trends that also matter,
18 the year to year, the multi-year, not just a week, or two
19 weeks, or three weeks. And so all of that has -- all the
20 context has to be there.

21 BOARD MEMBER SHAHEEN: Thank you so much and
22 thank you for raising the issue of causality, because I am
23 a scientist and causality is a very difficult thing to pin
24 down, because of moving parts. Matt, did you want to say
25 something. You look --

1 ISD CHIEF BOTTIL: (Shake head).

2 BOARD MEMBER SHAHEEN: Okay. You look like
3 you -- okay. So I have one burning question. And it's
4 sort of scientific or hypothetical. But on page eight of
5 the resolution, last bullet talks about if CARB adopts a
6 regulation associated with E15. So, if we were to bring
7 E15 into the marketplace, how might that factor into gas
8 prices? I know it's a hypothetical, but...

9 EXECUTIVE OFFICER CLIFF: Well, I don't know
10 exactly. There have been some studies that were -- that
11 have been cited recently. In fact, I think UC Berkeley
12 did a study that suggested it could reduce fuel prices by
13 up to \$0.20 per gallon. Because we're talking about
14 volumetric blending of ethanol into gasoline, it would
15 increase the amount of ethanol by five percent, and
16 therefore reduce the amount of blend stock by five
17 percent. So the blend stock is that which is produced by
18 refineries and then you add in the ethanol.

19 So by reducing the amount of gasoline that is
20 made by the refineries, such that which you put in your
21 tank would have more ethanol, you kind of reduce that
22 compliance obligation by the refineries as well as the
23 amount of fuel that they are refining. So it would put
24 downward pressure on prices. The exact amount, as I say,
25 uncertain, but some studies have suggested up to \$0.20 per

1 gallon.

2 BOARD MEMBER SHAHEEN: Well, thank you for that
3 answer. That's exciting news. I don't want to commit us
4 to anything, because it's not written as a commitment, but
5 I think it would take pressure off. That's significant.
6 Thank you.

7 CHAIR RANDOLPH: Board Member Hurt.

8 BOARD MEMBER HURT: I think on this topic, we
9 have to recognize that we can hold multiple truths at
10 once. Yes, American families are feeling the economic
11 squeeze. I'm feeling the economic squeeze, but I also
12 find myself asking how is it that fossil fuel companies
13 and their executives continue to post record-breaking
14 profits, yet turn to the government to place blame of gas
15 costs on what are life-saving regulations, especially when
16 it comes to a free market program like this one that is
17 often supported by industries.

18 Economic considerations are definitely vital when
19 discussing the clean energy transition that is well
20 underway. It's not free. It's happening all over the
21 world. But ignoring the expert consensus that human
22 activity is driving climate change will have long-term
23 damaging effects on both of our families and the economy.

24 And I want to remind folks, we had the wildfire
25 in California that can cost billions in damages. 2018

1 Camp Fire, one of the deadliest and most destructive
2 wildfires. It costs us an estimated 16.5 billion in
3 damages. That affects us as well.

4 And these costs are a direct result of the
5 climate crisis, and they will continue to grow if we fail
6 to act on reducing our impacts in transportation. This
7 isn't just for today. It's for future generations. It's
8 for my daughter. It's for all of your children as well.

9 And I think this is one of the many reasons why
10 we have to take thoughtful and critical action now, not
11 only to reduce the economic risk, but also to create many
12 more new opportunities for competition in this space. And
13 I want to speak many of the community advocates that I'm
14 often in sync with, that we really have a hard task of
15 transforming a free market program that was focused on
16 carbon emission and climate change mitigation. And it was
17 not initially designed with environmental justice in front
18 and center in 2009.

19 We have evolved over time knowing that this is a
20 thousand percent, a hundred percent important to do,
21 focusing on our vulnerable and marginalized communities,
22 while also supporting the shift towards cleaner fuels.
23 And as staff has noted, and other states have recognized
24 this as well, and have adopted our framework, or in the
25 process of doing so. And this means that we need to amend

1 sooner than later again to continue uplifting and
2 supporting the people most impacted and most vulnerable to
3 the changing climate.

4 And I would add for years we've been rocked
5 asleep by fossil fuel's vested interests in staying hooked
6 on its use. And they're influence has been pervasive.
7 And I think staff aptly stated that there's legacy fleets
8 among other reasons that require us to continue to use
9 fossil fuel, but that doesn't mean we should simply accept
10 the status quo, and that we must continue to wean
11 ourselves off an industry that states, yes, we agree with
12 climate change, sort of, but we're going to fight at every
13 turn to be cleaner and safer for workers and consumers
14 alike.

15 And I recently said in the Bay Area, the health
16 of our communities are not negotiable and it's time for us
17 to wake up and truly collaborate as we transition versus
18 just providing lip service. We have got to transition
19 away from fossil fuels.

20 I want to ask these questions and I want to, I
21 guess, be really clear that I think we're all committed up
22 here and promise to put forward health protective and
23 guide the state to cleaner fuels, but I'm wondering, if we
24 take no action today, if we don't amend this rule, can oil
25 and gas companies still increase fuel costs?

1 EXECUTIVE OFFICER CLIFF: Yes. There's nothing
2 that would prevent them from doing so. We certainly do
3 not regulate that.

4 BOARD MEMBER HURT: Will oil and gas companies
5 continue to make profits regardless of whether this
6 amendment is made?

7 EXECUTIVE OFFICER CLIFF: I suppose that's their
8 imperative, and yes, they would continue to do so.

9 BOARD MEMBER HURT: Can oil and gas companies
10 choose not to increase gas prices, given their record
11 profits?

12 EXECUTIVE OFFICER CLIFF: They certainly could.

13 BOARD MEMBER HURT: Regardless of the amendment,
14 can we still increase the impact of this Program is what
15 I'm thinking a lot about? And if we don't make this
16 amendment, are we losing critical time to update and
17 continue to move forward effectively?

18 BOARD MEMBER HURT: Yes. We would be losing
19 critical time, as well as the very significant public
20 health benefits associated with the Program.

21 BOARD MEMBER HURT: I think the work of this
22 Board is extremely hard and challenging at times and we
23 have to make really hard decisions. This is a hard
24 decision, but voting no, voting not to improve, voting not
25 to put more guardrails for environmental justice and risk,

1 continuing to push towards zero emission, I think is more
2 harm than good. However, we have put in here that we're
3 going to continue to monitor ongoing impacts. We're going
4 to continue to regulate. We're going to continue to look
5 at retail gasoline prices. And I will continue to look at
6 oil and gas companies and say what are you going to do for
7 America?

8 CHAIR RANDOLPH: Board Member Florez.

9 BOARD MEMBER FLOREZ: Thank you. I thank you for
10 putting this section on the agenda. Regardless of how we
11 are going to view and vote on this -- obviously, I'm a no,
12 mostly about the environmental issues that were brought
13 up, but also the -- this whole discussion about gas. And
14 I just want to make sure I understand it, listening to the
15 debate. First and foremost, I just want to give my
16 thought on this.

17 First, you know, to Davina's point. You know,
18 what oil and gas can do what they will do with or without
19 it, it's -- as I listen to the testimony today, I kind of
20 have a little cheat sheet. It seemed like all of these
21 oil companies support the LCFS. And it seems like their
22 cousins in these other states also support the LCFS. So I
23 mean, if we're worried about the oil companies, I'd be
24 more worried about why they support this particular
25 policy. I just saw a Tweet by WSPA during the hearing

1 saying, you know, this is the greatest thing. So, I would
2 be a little worried.

3 Kind of to Hector's point about all the mailers
4 that they got about gas prices, I mean that I -- that I do
5 know raises concerns. But, you know, I -- you know, you
6 kind of are who you hang out with. And I think just where
7 they're going and what they're supporting should give the
8 Board a little bit of pause. They're supporting this, the
9 very companies -- the whole questioning that just went on
10 about the oil companies, these are the same folks that are
11 supporting this particular LCFS vote.

12 Secondly, I'd like to just ask staff a question,
13 and that has to do with why we were not able to give bands
14 of -- you know, some sense of what this will do to gas
15 prices? And I know it's very complex and it kind of
16 got -- Hector I think hit it right, when he said, you
17 know, most of what we've seen starts about 8 to 10 cents,
18 but that's a static number at this point in time. That's
19 what was reported to the Energy Commission. But I think
20 we're going to go to a CI reduction of 12.5 and then we're
21 going to go to another one of 22.7, and then 30 percent in
22 '30 -- in 2030, another 52 percent, very aggressive
23 schedule on CI reduction. And that kind of ties in with
24 the credit, so it's kind of a balancing thing.

25 Do we -- do we not think that by increasing the

1 stringency of the CI, which I think is the whole goal
2 here, that that is not going to raise gas prices and it's
3 not going to either do it significantly or through a band?
4 And how do we think about that? I guess that's my first
5 question. And the only reason I ask that is that is the
6 one mechanism that we're going to supposedly come back to
7 the Board. To Eric Guerra's point, you know, we're going
8 to see these signs. We're going to come back to the
9 Board. We're going to be able to do what, once it gets
10 back to the Board. What strategies do we have, if indeed,
11 for whatever reason, the CI reduction targets are so
12 aggressive that gas gets -- gas costs get out of control?

13 If it gets reporter and we're watching it and we
14 have a six month lag and another 12 month lag, you know,
15 when it comes back to the Board, what's the Board going to
16 do? It's very simple question. I think that's what
17 anybody would ask. So can somebody tell me what the Board
18 would do in that case? And I'd like to know about the
19 CI -- our own you goals that are in this -- you know, the
20 goals of increasing the CI is -- do we not think that's
21 going to increase the cost of gas? I mean, I don't think
22 it's fair to say that we're not causal, when indeed, we're
23 creating a mechanism that on its face causality is
24 truly -- will stem from some of this. It really will.
25 It's not going to be a static number, because the 8 to 10

1 cents is a static number, because we haven't started doing
2 the things that we're going to do in this resolution,
3 which is raising the CI reduction targets and then credit
4 is going to get more expensive.

5 So I'm just kind of trying to -- I'm wondering
6 how we can, in all good conscience, say that it's all
7 these other factors and somehow we're not a cause of that.
8 And then more importantly, that we have an opportunity to
9 come back to the Board with strategies that I don't know
10 how we would reverse that. So maybe I'm -- maybe some
11 folks can put that together for me.

12 EXECUTIVE OFFICER CLIFF: Thank you, Senator.
13 I'll start and then maybe turn to my colleagues.

14 BOARD MEMBER FLOREZ: Sure.

15 EXECUTIVE OFFICER CLIFF: Regarding your first
16 assertion about support for the Low Carbon Fuel Standard,
17 the way that I have thought about this - and I certainly
18 can't pretend to speak for the various companies that
19 offered support, and I would not say that was universal
20 among oil companies - they, I guess I would say generally
21 speaking, may not be in support of the climate action that
22 the Legislature has directed, but are in support of more
23 flexible policies for achieving the goals that the
24 Legislature has laid out for us. And so, because of AB
25 1279 and prior legislation, AB 32, SB 32, that has

1 required of us to achieve targets toward carbon neutrality
2 in 2045, the policies that we've laid out can do so in a
3 flexible fashion, provide opportunities for compliance
4 that is not simply direct regulation or a carbon pricing
5 policy such as a carbon tax, that might have less
6 flexibility built into it. And so, industries are more
7 supportive of those types of flexible policies than those
8 which might be more directive.

9 BOARD MEMBER FLOREZ: Let me just interrupt. Do
10 you think --

11 EXECUTIVE OFFICER CLIFF: Yes.

12 BOARD MEMBER FLOREZ: Do you think they'd be
13 supportive if we were moving more of these credits to
14 ZEVs, to zero absolutely? In other words, they weren't
15 getting the credits, you know, they weren't going to Iowa
16 or they weren't going to Louisiana, or they weren't going
17 to other places that are making blends out of state, do
18 you think they would be as supportive if somehow we
19 recreated the Program from a low-carbon standard to a zero
20 carbon standard? I mean, I guess my -- I'm wondering -- I
21 know they don't like the stringency of a carbon tax, but
22 I'm also wondering why they seem particularly happy -- and
23 I listened to the testimony today and I've been watching
24 most of the industry Tweets and they all seem very giddy
25 about the current program. And that -- I mean, maybe to

1 Hector's point that kind of worries me, you know, because
2 they kind of get to play both sides in some sense. But go
3 ahead. I just wondered how -- is it the money, do you
4 think that entices them or is it the fact they really want
5 to do clean up their -- the environment. And that's an
6 open question. Yeah, that's fine.

7 EXECUTIVE OFFICER CLIFF: Thanks, Senator. So I
8 just want to put this in the context of the broad suite of
9 policies that this Board has undertaken, including the
10 Advanced Clean Trucks, Advanced Clean Fleets, ACC II, the
11 Advanced Clean Cars Program that all are increasing the
12 number of zero-emission vehicles on our roadways. This
13 policy helps support those at the same time that it
14 provides options for replacement drop-in fuels, such as
15 renewable diesel to help reduce --

16 BOARD MEMBER FLOREZ: Yep.

17 EXECUTIVE OFFICER CLIFF: -- compliance burdens
18 and to support the decarbonization of these sectors as
19 the -- as the -- as the electrification policies take
20 hold. So the kind of -- the reason I lay out that context
21 is it's important to note that we're continuing to drive
22 towards zero emissions and that does provide an
23 opportunity for -- or provides sort of an overall limit on
24 the amount of these other fuels that can be part of the
25 Program.

1 BOARD MEMBER FLOREZ: Okay. I get you.

2 EXECUTIVE OFFICER CLIFF: So it is part of the
3 overall context as we move forward.

4 BOARD MEMBER FLOREZ: Okay. Let's -- I don't
5 want to take too much time, but let's -- I'm really
6 interested in the causality issue, because I mean I think
7 there is some sense -- I mean, I think we all want to know
8 on the Board what we're voting for, what we're starting,
9 what snowball we're pushing down the hill. And tell me
10 about the CI reductions and please tell me about the
11 credits, and tell me as the reductions -- the CI
12 reductions get much more aggressive, how that doesn't
13 relate to some impact on the cost of gasoline, or diesel.
14 How is it supposed to work?

15 EXECUTIVE OFFICER CLIFF: Fundamentally, it's
16 driven -- the carbon intensity reduction will drive
17 investment in various things that innovate cleaner fuels.
18 So what we've seen to date, in fact, one reason that we've
19 been doing these updates is that the market has
20 overperformed. We've seen that it's actually easier to
21 produce credits than we anticipated when we set those
22 original carbon intensity targets. And so, moving the
23 carbon intensity down will ensure that we keep the
24 stringency up and support all of those cleaner fuels,
25 including the replacement fuels, such as renewable diesel,

1 as well as electricity and hydrogen.

2 CHAIR RANDOLPH: Okay. Are we ready to move on
3 to --

4 BOARD MEMBER FLOREZ: No, I'm actually just
5 with -- no one has really answered the question. As
6 these -- as the targets get tougher, they go from 22
7 percent in 2025, 30 percent in '30, 52.5 percent in '35,
8 and 90 percent in 2045, what is that going to do to the
9 cost of gasoline? That's on -- and that's my last
10 question.

11 DEPUTY EXECUTIVE OFFICER SAHOTA: So Senator
12 Florez, this is Rajinder.

13 BOARD MEMBER FLOREZ: Hi.

14 DEPUTY EXECUTIVE OFFICER SAHOTA: There's a
15 couple points there. Hi. The first is that, yes, we have
16 targets that go out past 2030, past 2035, and out to 2045
17 as markers. As I believe the Chair said earlier, these
18 are not set it and forget it programs. And so,
19 periodically, especially as part of the Scoping Plan, we
20 get to update the programs and our strategy portfolio in
21 the context of any new legislation, new information, new
22 data. And so we can revisit all of this as that periodic
23 check in, and that's important.

24 On the 20 percent versus the 30 percent, 30
25 percent was something that had already been floated as

1 part of the 2017, '16 Scoping Plan.

2 BOARD MEMBER FLOREZ: Uh-huh.

3 DEPUTY EXECUTIVE OFFICER SAHOTA: And we chose
4 not to do that, because we didn't believe the market would
5 be ready for it, or that the credits wouldn't be there, or
6 the innovation wouldn't be there. And we were wrong --

7 BOARD MEMBER FLOREZ: Yeah, they're starting the
8 program.

9 DEPUTY EXECUTIVE OFFICER SAHOTA: -- the
10 innovation showed up, the production showed up, and credit
11 prices became less and less costly for compliance, because
12 of the supply of credits and the bank that it's building.
13 And so we can't always forecast all of those pieces. What
14 we know is with AB 1279 and with the 2202 Scoping Plan,
15 and with the ZEV regulations that are modeled into that,
16 we need to increase the infrastructure --

17 BOARD MEMBER FLOREZ: Yep.

18 DEPUTY EXECUTIVE OFFICER SAHOTA: -- for
19 zero-emission fuels and zero-emission vehicle
20 infrastructure. And going from 20 to 30 right now is
21 possible, because of the overperformance of the Program
22 and because we can leverage some of the federal
23 incentives, hopefully, such as ARCHES, and we can make
24 sure that we align with the costs that are already
25 anticipated to drive the regulations that have been

1 adopted by the Board. So this package is fully aligned
2 with the regulations that have already come before the
3 Board on ACC --

4 BOARD MEMBER FLOREZ: Yep.

5 DEPUTY EXECUTIVE OFFICER SAHOTA: -- ACF, ACT.

6 BOARD MEMBER FLOREZ: Yeah. Okay. And I just --
7 one last -- I did ask one more question, and that is when
8 we do -- to Counsel Member Guerra's point, you know, when
9 we do see this and we have a reporting back to the Board,
10 I think I heard it said earlier, we're going to have some
11 strat -- what are some of those strategies, if indeed the
12 gas prices start to, you know, be so unaffordable to all
13 those folks that testified today that, you know, clearly
14 going to have an impact on really poor communities, et
15 cetera? But if that does happen, what -- can you just --
16 I know they're not in the resolution, but could you at
17 least give us a little indication of what some of those
18 strategies could be in order to pull back, so that it
19 isn't a economic burden to folks out there.

20 EXECUTIVE OFFICER CLIFF: So I guess what's
21 important is that we want to make sure that we have
22 options -- or we fully employ the existing options under
23 the regulation that would help alleviate costs. And those
24 include a ceiling price that's already in the regulation.
25 And then, of course, we would work with our colleagues at

1 Energy Commission who have significant authority to better
2 understand where -- what might be driving those gas price
3 impacts. To the extent that we found that these programs
4 were impacting fuel prices in a way that was completely
5 unintended, then we have many options, including -- up to
6 and including suspending regulations, if that were
7 appropriate.

8 As I've said previously, there is no current
9 correlation between this program, and fuel price spikes.
10 And looking at those publicly available data suggests
11 that -- and our analysis shows that less than six percent
12 of those fuel price changes are actually the result of
13 these programs. So, going into it, our expectation is
14 that this Program will not have those impacts. It's
15 important that we continue to evaluate and, as you say,
16 bring back to the Board, if necessary, such that any
17 adjustments can be made.

18 CHAIR RANDOLPH: Okay. We are now on to the next
19 topic, which is dairies and avoided methane. And then
20 after that we'll give folks an opportunity to raise any
21 issues that they did not raise in this previous
22 discussion.

23 All right. Board Member Takvorian.

24 BOARD MEMBER TAKVORIAN: Thank you, Chair. I
25 guess what I would start with is to say that the -- what

1 I've heard from many Board members and the public is that
2 this LCFS is incredibly complex. It's massive. It's
3 complex. It's complicated. It's probably too complex and
4 multi-layered, and it isn't the answer for everything that
5 it touches. And so I think one of the things that -- one
6 of the areas that's the best -- one of the best examples
7 of this is livestock methane. And so as we all know,
8 methane is an incredibly powerful climate pollutant and
9 the pollution from livestock waste results in premature
10 deaths and illnesses, and it's impacting the most already
11 impacted communities.

12 So SB 1383 requires meaningful regulation of
13 manure methane by 2024. And so towards that end, there's
14 been a series of discussions around the development and
15 consideration of a livestock methane rule through public
16 comment, through petitions, EJAC recommendations, and
17 Board discussion. I want to give gratitude to the
18 Environmental justice advocates and community members who
19 have been vigilant and persistent in insisting that CARB
20 move forward with rulemaking for many years, not just
21 during this most recent rulemaking period for at least
22 five years that I'm aware of and that I've been on this
23 Board.

24 So at the EJAC meeting in September, I proposed
25 some language to initiate rulemaking, which was supported

1 by several of the Board members that were present, and
2 staff has incorporated that into the resolution and it's
3 on page seven. And I wanted to point that out and say
4 that I support the language in the resolution that
5 requires the development of a livestock methane rule. And
6 I appreciate staff responding to the Board's
7 recommendations to add this based on the extensive
8 stakeholder input from residents and dairy communities,
9 the EJAC, EJ and enviro organizations. I think it's one
10 of the most important actions we can take to truly reduce
11 pollution and public health impacts. And I also want to
12 say that the resolution is purposefully neutral on the
13 outcome of the rulemaking, as I believe it should be.

14 My expectation is that CARB will build on the
15 work done to date, which is extensive, to gather
16 information about the sources of livestock methane, the
17 alternative technologies that are available to reduce and
18 capture methane, the effectiveness of the technologies,
19 including dairy digesters, related to their ability to
20 reduce or eliminate emissions and not just on their
21 ability to produce a fuel sources. And so that's the
22 beauty of separating this from the LCFS process, because
23 that's what we should be pro -- focused on as a public
24 health and climate rule.

25 Unfortunately, the livestock methane resolution I

1 believe is undermined by the last minute change to the
2 current rule. On October 1, CARB staff released the
3 second 15-day change, which included a provision to amend
4 the existing rule. The existing rule requires that should
5 a new law, regulation, or rule come into effect, existing
6 projects should only receive LCFS credits for the
7 remainder of the crediting period they are in. The
8 October 1 change would allow projects breaking ground by
9 the end of 2019 to receive up to three crediting periods,
10 contrary to -- excuse me -- to the existing rule.

11 So there's currently as I understand it in my
12 conversations with staff about 150 projects currently in
13 operation and 60 more are in the pipeline that could be
14 approved by the effective date allowing more than 200 to
15 receive up to three crediting periods. So, in my view,
16 this amendment really significantly challenges CARB's
17 ability to actually do fair, and equitable, and
18 science-based rulemaking.

19 I believe we should be evaluating all of the
20 manure methane management strategies in an unbiased
21 manner, and this provision really puts a thumb on the
22 scale towards the larger dairies that already have
23 digesters. I don't think it's equitable for smaller
24 dairies who might be better off with less expensive, but
25 just as effective an approach. And it could undermine

1 CARB's ability to use crediting systems for other
2 technologies that could be hampered by this commitment to
3 provision that allows excessive crediting periods.

4 So, I think that the rulemaking should be
5 evaluating the efficacy of digesters as well as other
6 technologies, but this provision I think really excludes
7 fair and unbiased assessment. The jury is still out as to
8 whether digesters promote and encourage dairy expansion.
9 I expect that the rulemaking process would provide an
10 arena for answering that question. And studies have also
11 shown that anaerobic digestion can increase ammonia,
12 particulate matter and other emissions. Having said that,
13 there's no doubt in my mind that digesters have served a
14 useful purpose and have captured dangerous methane,
15 keeping it from harming the community and planetary
16 health.

17 The question is whether or not that technology
18 has had unintended consequences. And the Board should be
19 clear about our expectation to resolve that question, and
20 create a rule to provide a healthy path forward. And that
21 just can't happen if it's already predetermined and kind
22 of a rigged process. So in my view, this is a significant
23 and unnecessary change, and therefore, I would like to
24 have it be eliminated. Unfortunately, in response to my
25 asking how that could happen to everyone that's in front

1 of me here, and lost of people who are out there, the
2 answer is it requires a 15-day change.

3 So, at this early hour in this hearing, a
4 delightful time to be introducing this -- I'm sure
5 everyone is going to welcome it. I would like to suggest
6 and move, if that's appropriate, that we issue a 15-day
7 change removing the clause in Section 95488.9, subsection
8 (f)(3)(B) that says, the part not to remove is -- not
9 withstanding (a) above, the part that needs to be removed
10 is, "For pathways associated with projects that break
11 ground after December 31, 2029." And it's not even a full
12 sentence that needs to be removed. I've heard that the
13 justification for this change is that it provides
14 certainty, but I don't think that's a viable argument,
15 because given that the provision -- this provision has
16 been in the Rule for at least five years.

17 So everybody knows it's there. We're certain
18 that if livestock methane rule is adopted then the
19 crediting period ends with the crediting period that the
20 projects are in. So that's certain. It may not be what
21 folks want, but it is what is in the current rule. And I
22 think that that -- the analysis -- should the 15-day
23 change be approved, this provision was not included in the
24 initial environmental analysis. So it doesn't seem to me
25 that it would require much additional analysis, if any.

1 And then I also want to say I understand that
2 this is work and that the timeline is very tight and I'm
3 sorry about that. It's not of my making. As a
4 policymaker, I think it's important for us to look at what
5 is the best path forward from a policy perspective. And I
6 honestly do not think that having that provision in is in
7 the best interests of California or of the communities
8 that are in the -- in the dairy areas.

9 So while I understand that it's problematic, I
10 would like to move this action forward at the point that
11 it's acceptable to do that and I'd like to hear my
12 colleagues responses to it, but I would like to make the
13 15-day change to remove that provision.

14 CHAIR RANDOLPH: All right.

15 Board Member Eisenhut.

16 BOARD MEMBER EISENHUT: Thank you, Chair. I'll
17 defer to someone who wishes to make a second and then I'll
18 offer my comments.

19 CHAIR RANDOLPH: Okay. Why don't we do this, is
20 there anyone that wants to make a second?

21 BOARD MEMBER FLOREZ: I will second it.

22 CHAIR RANDOLPH: Okay.

23 Board Member Eisenhut.

24 BOARD MEMBER EISENHUT: I think I'm going to -- I
25 don't think. I will keep this very straightforward. I

1 believe the information is out there. We've heard the
2 arguments for and against that motion. I support the
3 staff's original condition and I would request that we
4 vote on this amendment separately from the main motion.

5 CHAIR RANDOLPH: Okay. Board Member De La Torre.

6 BOARD MEMBER DE LA TORRE: Thank you. And I
7 support Board Member Eisenhut's request. So, there was
8 something that kept coming up during the course of today
9 that I want to address, which is that the Board resolution
10 to pursue a subsequent regulation of dairy methane is not
11 preempted in any way.

12 CARB regulations regularly have a threshold for
13 who must comply and small, or small and medium, businesses
14 are usually exempted. Did it on ACF. We've done it on
15 other areas. So that would also apply to some threshold
16 of dairies with a dairy methane regulation.

17 So just wanted to clarify that. It was clear
18 going back to last September that the consensus on this
19 Board was to pursue a regulatory path for dairy methane.
20 It's here. We're going to do it and I support it.

21 CHAIR RANDOLPH: Dr. Pacheco-Werner.

22 BOARD MEMBER PACHECO-WERNER: Yeah. Thank you,
23 Chair. I want to thank all the commenters today on this
24 item that is very close to home on both sides of the
25 argument. I think that we are now so much further than we

1 were two years ago on livestock methane regulate -- you
2 know, and for many reasons, including the advance in other
3 areas, which I'll talk about. So I want to start by
4 saying to the residents that came, that it is my full
5 intention to have a robust, transparent methane regulation
6 process. We are in no way ignoring the impact that
7 dairies may have on communities.

8 To some of the public health impacts that we
9 heard today here from commenters, I'm actually encouraged
10 by new technologies in feed additives to reduce enteric
11 emissions and new developments on the waterfront where
12 there will be new mitigation that we didn't know was
13 happening when we started this process.

14 I support Member Takvorian's motion, and I want
15 to say that while I support it, I also support the
16 regulation tonight, whether this motion on the 15-day
17 change passes or not. The reason why I am supporting this
18 15-day change motion is because when I envision moving
19 forward with a livestock methane regulation, I envisioned,
20 as she noted, a fact-based process, where we could use all
21 of the mechanisms necessary to do that to the full extent
22 possible.

23 However, again, I want to note that I look
24 forward to the many ways that we can improve public health
25 outcomes to those residents most affected by these

1 projects, which are so necessary to meeting our climate
2 goals. So, there is -- there are two things happening at
3 the same time and I want to -- I want to note that.

4 I think a helpful point of clarification for the
5 rest of my fellow Board members from staff, who have maybe
6 not followed this process as closely, would be if you
7 could, as you did in my briefing, walk me through how
8 these crediting periods appeared in the regulation and how
9 they moved through our regulatory language versus our
10 analysis. Thank you so much.

11 ISD CHIEF BOTILL: Happy to. Thank you for the
12 question. So right now under the current LCFS Regulation,
13 a project, a dairy swine manure project, that comes into
14 the Program receives approval for its biomethane pathway
15 can receive up to three 10-year crediting periods. So
16 that is up to 30 years of avoided methane crediting
17 associated with that project. It does not have any
18 deliverability associated with it as well. So it can be
19 any biomethane product injected into the North American
20 gas pipeline.

21 Staff's proposal that's in front of the Board
22 today changes that dynamic. It includes provisions that
23 would step down the avoided methane crediting based off of
24 when that project comes into the program. So those that
25 are currently in and certified in our Program or that are

1 certified before the effective date of the Regulation
2 would be able to retain those three 10-year crediting
3 periods for 30 years. Projects that break ground before
4 the end of this decade would be able to have two 10-year
5 crediting periods for 20 years. And then finally projects
6 that come in after the end of this decade, so beginning in
7 2030 would then have only one 10-year crediting period.

8 The hope here and the rationale for this is that
9 those methane reductions that we are trying to accomplish
10 that we need for our SB 1383 goals that are in statute,
11 the 40 percent reduction by 2030 and that are so important
12 for the climate because of the short-lived climate
13 pollutant and the global warming forcing of methane, that
14 we get those reductions as soon as possible. We get those
15 this decade.

16 And also to provide some certainty to those that
17 are investing in these large projects, these multi-million
18 dollar projects that we can show, that there will be the
19 ability to recover the costs associated with those
20 projects and get that return on investment.

21 As we consider a potential regulation, and as we
22 have this discussion as part of implementing what's in the
23 resolution, assume that it -- assuming that it would be
24 approved by the Board, we can have a conversation about
25 what does a regulation look like, and just because a dairy

1 is receiving LCFS credits and incentives doesn't mean that
2 it couldn't also be regulated under a potential
3 regulation. They're not mutually exclusive. That would
4 be part of this open public process that we would discuss
5 the potential for a rulemaking as Board Member Takvorian
6 mentioned.

7 CHAIR RANDOLPH: Board Member Guerra.

8 BOARD MEMBER GUERRA: Thank you, Chair. You
9 know, one, I've been around agriculture, you know, all my
10 life and raised livestock myself, and seen the -- both
11 challenges of both sides. And even in my county here, we
12 have an old dairy and a new dairy. And I see -- I've seen
13 the advancements and appreciate where staff has gone on
14 this to thread the needle about the real cost of
15 investments, the time horizon for some of these
16 investments. And the reality if you lived out there and I
17 have, and I have friends folks who have been, that without
18 any type of capture now, then there is exposure.

19 So from a public health standpoint, from an air
20 district standpoint, from the immediate stand -- effects
21 that are happening today, I have to oppose that motion.
22 And I appreciate where staff was. I'm actually, you know,
23 very -- appreciate the clarity that my fellow colleague
24 mentioned that it purposefully neutral on the outcome, the
25 current language on page seven, because when I read it,

1 the tone that I read here it was that it was
2 predetermining a resa -- a regulation. And probably the
3 one that stood out the most was the last bullet point to
4 that point.

5 And so, again, I think, you know, to staff's
6 comments here, the signals of investment in time horizon
7 on the advancement of where we are today versus where we
8 were 20 years ago. And my understanding now of those
9 projects, the low-hanging fruit is gone. It's now the
10 smaller dairies that the investors are working. And those
11 -- and that is where you the market is moving. When I
12 asked in April and I'll ask this again to Rajinder, I
13 asked if whether this Program was consolidating and
14 creating the consolidation of dairies. And correct me if
15 I'm wrong, what you said then was that there was no
16 evidence that that was the case. Is that still the case?

17 DEPUTY EXECUTIVE OFFICER SAHOTA: That is still
18 the case. But to follow up and show that we took the
19 concerns of the residents that live adjacent to these
20 installations seriously, we went back and had our Research
21 Division, entirely different group, mine data from PDF
22 permits that are with the water Board and do a workshop in
23 Fresno during the summer. That process is concluding.
24 They're summarizing the comments that they received, and
25 then we'll be putting out any next steps on looking at the

1 data sets, any missing gaps that people have identified,
2 and that will be feed into this resolution and the work we
3 need to do to determine if we need to bring back a
4 regulation.

5 BOARD MEMBER GUERRA: Here is the fear that I
6 think what would happen, if the motion was to pass to
7 reopen this, I clearly see that there will be a thought
8 process to move outside the state. And in the next four
9 years, I could see that there in that -- there's going to
10 be no investment from the federal government. This will
11 be the only tool for us to be able to support in-state
12 support. And if dairies do move to other states, they're
13 going to do it without any type of capture of methane
14 capture.

15 So there's also the ethical question of, well,
16 are we also putting a pressure on other communities during
17 an administration that isn't going to be as supportive.
18 So in my approach here on this is I think staff has moved
19 forward in a thoughtful way and I would oppose the motion
20 on the table.

21 CHAIR RANDOLPH: Board Member De La Torre.
22 Board Member Kracov.

23 BOARD MEMBER KRACOV: So I've been working on
24 this issue quite a bit and want to thank you for the
25 motion. I think it's health to have motion practice

1 sometimes. At the Air Board, we've spent a lot of time on
2 this issue. And what we're talking about is, you know, a
3 clause on page 167 of the -- of the document. So, from a
4 legal perspective, and I want to ask a legal question and
5 also sort of a practical type of question. So let me
6 first say that we're very supportive of the language in
7 the resolution on regulating the dairies.

8 And there's a clause in there that's very
9 important. It says that we recognize that a dairy with a
10 digester installed prior to 2030 is not automatically
11 exempt from any regulations. So basically, it says that
12 no matter when you installed your dairy, if we have
13 regulations, you're going to be subject to those
14 regulations. And that's a very important clause. We're
15 not going to be exempting anybody from regulation just
16 because they happen to install a dairy before 2030.

17 So that's that part.

18 Then we go to 1383 itself. Now, 1383 puts a lot
19 of guardrails in on this sector, okay. And what it says
20 is that if we do regulations -- if I can find it here.
21 Just give me a minute. Oh, gosh where is it.

22 What 1383 says is that if we do adopt
23 regulations, this is -- good lord, 39730.7 -- I just had
24 it -- (e), it says that if we do regulations that projects
25 developed before their implementation receive credit for

1 at least 100 years. Okay. So we have to guarantee those
2 10 years. And then it says projects shall be eligible for
3 an extension beyond the 10 years to the extent allowed by
4 regulations. Okay.

5 And then the language that is the subject of the
6 motion basically makes clear that the only ones that are
7 going to be limited to the 10 years are for projects after
8 2029. I think this is what all this says. So the legal
9 question I have is if we get rid of this language, is it
10 compliant with 1383 and do we treat any other pathway that
11 way where we are limiting their credits for a certain
12 period of time, and if not, why are we doing that before
13 we have the regulations here, is one question?

14 And I guess the second question is, and maybe
15 this is all appropriate and makes sense integrating all
16 these things together. What is going to be the practical
17 effect if we are telling folks that they are not going to
18 get more than 10 years of crediting? What is that going
19 to do to the digesters and the people that are paying for
20 the installation of these digesters, noting that I clearly
21 support regulations in this sector, but 1383 is pretty
22 clear it is the policy of the State to encourage the
23 digesters. So I think the motion is an important motion.
24 It's an important discussion to have, but 1383 puts
25 guardrails on this legally and from a policy perspective.

1 And before we vote on this, I think we should be clear on
2 how all this interacts.

3 DEPUTY EXECUTIVE OFFICER SAHOTA: Thank you,
4 Board Member Kracov. You're right, there are various
5 places where this topic is touched. It's in statute.
6 It's in the regulation. And then there's also the broader
7 question of crediting periods. The only crediting source
8 in the LCFS that has this notion of crediting periods
9 avoided methane. And that's because it relies on a
10 methodology from voluntary standards for offsets for --
11 and -- which was also integrated into the compliance
12 Cap-and-Trade Program. And so no other -- no other
13 pathway says you can only get 10 years, and after this,
14 you have to review for two more periods of 10 years. This
15 is the only place.

16 When 1383 was crafted, it directs us to look at
17 incentives. And at the time, we had the Short-Lived
18 Climate Pollutant Strategy, we wanted to make sure that
19 what we did in strategy reflected how we would be in the
20 spirit and compliance with 1383, but also what incentives
21 could we make available. At the time, the LCFS was one of
22 those incentives, because RNG was one of the things that
23 we thought was important to actually have as part of our
24 strategy to move away from fossil fuel combustion.

25 The financing such on these projects that that

1 10-year period allows for a guaranteed return on
2 investment. But then, what happens when that return on
3 investment is gone and you still have maintenance and
4 operations? What if you're a smaller dairy that you have
5 less credits that come in every year for 10 years and you
6 can't -- you need a longer period for the return on the
7 initial investment. And that's where you can look at the
8 language that we have now, which is two crediting periods,
9 because we are starting to look at not the large dairies,
10 but the medium-sized dairies and maybe the smaller sized
11 dairies.

12 This offers them a chance to keep those dairies
13 in operation. And I understand that there are water
14 quality concerns. There are ammonia concerns. There are
15 odor concerns. There are fly concerns. I understand all
16 of those, but if we are going to have these dairies
17 persist, and we're going to capture that methane, this is
18 one way to do it and give them a finance stream to do it
19 without having them relocate outside the state of
20 California.

21 There are going to be dairies that maybe they
22 choose not to do this, but if we do a regulation, and
23 there's other ways to get at reductions at very small
24 dairies, organic dairies, or, I guess, what you would see
25 as happy cow dairies, there are other technologies, other

1 ways to manage those dairies that could help with those
2 reductions. And we want to explore those and see what
3 those are.

4 If we start with an investment for 10 year and
5 then we walk away from it, it sends a signal that anything
6 else in the future we may do, where we want to attract
7 private investment, could risk us moving away from it, and
8 like have a chilling effect on investment and other things
9 that are important to the State, not just dairies. It
10 could also lead to backsliding, where those projects could
11 be abandoned or they're not maintained. And then you see
12 methane come back into the atmosphere, or we could do a
13 regulation and then the readily available technology for
14 many of these is a digester right now and the cost is so
15 prohibitive or they have to seek other incentives and
16 those may not be there to help them actually run those
17 dairies, keep them here without relocating production
18 outside the state of California.

19 And so these are the kinds of things that the
20 staff have to grapple with when we think about the various
21 size of dairies, the technologies that are available, the
22 language in 1383, and the way the financing would work.
23 And some of the experience that we've seen on things like
24 landfills and on the electricity side, where we saw some
25 stranded assets and we saw some backsliding on methane

1 capture.

2 BOARD MEMBER KRACOV: So looking at 1383, if --
3 and again this is a legal question. If somebody installs
4 one of these digesters in 2029, don't we have to give them
5 until 2039 under 1383? It says we have to give them 10
6 years, right?

7 DEPUTY EXECUTIVE OFFICER SAHOTA: That's correct.

8 BOARD MEMBER KRACOV: So isn't what we're really
9 debating about now is this 2040 to 2050 time period? I
10 mean, that's really what we're debating about, right?

11 DEPUTY EXECUTIVE OFFICER SAHOTA: That's right.
12 It's the last 10 years of that.

13 BOARD MEMBER KRACOV: And staff's analysis of
14 this is that we if take that away, that people are not
15 going to invest in these is that your conclusion?

16 DEPUTY EXECUTIVE OFFICER SAHOTA: So, the return
17 on investment is the size of the dairy, how much methane
18 you have, how many credits you generate, and how you can
19 sell those credits into the market. If you have medium to
20 smaller sized dairies, you're going to generate less
21 credits on an annual basis, so you need longer to be able
22 to finance and pay for that capital cost up front. That's
23 the issue when you start to look at the smaller scales.

24 CHAIR RANDOLPH: Okay. Dr. Balmes.

25 BOARD MEMBER BALMES: Thank you, Chair.

1 I know it's late. And so first of all, I agree
2 that this resolution that Ms. Takvorian put forward should
3 be voted on. I agree with Dr. Pacheco-Werner that however
4 that vote goes, I will probably vote for it, but I would
5 also vote for, if it doesn't pass, the LCFS as is.

6 But I want to add one thing and Rajinder should
7 be happy about this. You know, I learned from Rajinder
8 and Chanell -- you know, first of all, I accepted -- I
9 accept that the dairy digester program is necessary to
10 capture the methane that industrial dairies generate. I
11 use'd the word industrial on purpose, as opposed to
12 factory, but -- but the biomethane that is produced is
13 making good money for the project developers, not
14 necessarily the farmers. They may do okay, but the big
15 money is in the developers. And the fence-line
16 communities that we've heard from time and time again over
17 the years, you know, suffer the poor quality of life and
18 environmental degradation of these industrial dairies.

19 So, something that Chanell and Rajinder suggested
20 to me, which I think is a great idea. And it's nothing we
21 have to put into the resolution today, but I want it to be
22 considered down the road, is that project developers that
23 are making pretty good money, especially if they have the
24 long-term avoided methane credit periods. May be they
25 should be compelled, maybe we should have a piece of

1 regulation that requires a community benefits fund, so
2 that we can mitigate the harms to communities, to some
3 extent. So I'd like to throw that into the mix for future
4 discussion.

5 Thank you.

6 DEPUTY EXECUTIVE OFFICER SAHOTA: So, Dr. Balmes,
7 this is Rajinder. I appreciate you remembering that. And
8 I'm just going to say that that is -- that feature for
9 using federal fund does require, in most cases, that you
10 have a community benefits plan. And we are actually
11 looking at that, and how to structure those, and what
12 kinds of models and examples are out there. And we will
13 be working with the community colleges to go into
14 communities to work with some of the community groups to
15 figure out, you know, what is the best way to engage to
16 actually develop such a plan, because we don't want to
17 just say go into a community and buy them backpacks for
18 their school children, or go into a community and buy a
19 bus and call it a day.

20 We want to have it to be a process where a
21 project developer actually engages the community,
22 understands what's most important to them, and invests in
23 those things, so that they can be seen as a good neighbor.

24 So thank you for flagging that and reminding me
25 that we had that conversation. It's going to come up

1 again in the context of some future regulations that will
2 be in front of the board, but it is an important area
3 where we can start to make inroads and so can project
4 developers in showing that they want to invest in the
5 people as much as just the project.

6 BOARD MEMBER BALMES: I just want to note,
7 Rajinder, this is the second time I totally agreed with
8 you today.

9 (Laughter).

10 CHAIR RANDOLPH: Okay. Staff could we -- oh, did
11 you have your -- okay. Go ahead, Commission -- Board
12 Member Rechtschaffen.

13 BOARD MEMBER RECHTSCHAFFEN: Thank you,
14 Commissioner Randolph.

15 (Laughter).

16 BOARD MEMBER RECHTSCHAFFEN: I have a couple of
17 questions first, and the first is for staff and it's just
18 about the logistics of doing a 15-day amendment at this
19 point in time.

20 EXECUTIVE OFFICER CLIFF: So as you note, it
21 is -- it would -- any amendment would need to go out for
22 15 days for public comment. In advance of that, we would
23 need to prepare said amendment and analyze it with respect
24 to the regulation that we've already put forth. That
25 would mean we'd have to look it in the context of our

1 current environmental analysis, to make sure that it
2 comports with the California Environmental Quality Act,
3 and to the extent that it has any other economic impacts,
4 or emissions impacts, we would have to evaluate that. So
5 prior to putting out any amendment, we would have to do
6 some analysis.

7 In addition, we would need to respond to any
8 comments that we received on that amendment and finalize
9 this regulation within the one year time frame that's
10 provided under the Administrative Procedure Act. That
11 one-year time frame means we have to wrap this regulation
12 up no later than January 3rd. So if you kind of look at
13 what it takes to do that, comments that we received today,
14 roughly 180 commenters, and in each of those comments --
15 you know, they might have multiple comments that we would
16 have to parse out. By the time we would get the
17 transcript, if we were to evaluate the amount of -- the
18 number of work days between now and the -- that one year
19 clock expiring, there's approximately 28 work days between
20 now and then. So four -- you know, four weeks worth of
21 work days.

22 In addition, to the extent that any amendments
23 would result in impacts, we might have to look at whether
24 there would be additional notice that's provided, or if it
25 required coming back to the Board for the Board to further

1 approve those environmental amendments. So those would
2 all be analyses that we would have to undertake before --
3 before following any amendment that we might make. So
4 it's analysis, preparation of the amendment, actually, you
5 know, putting that amendment out for 15 days, collecting
6 comments, and then as a result determining whether we had
7 any additional work that we would have to do to bring it
8 back to the Board.

9 Our normal time frame for finalizing a regulation
10 from the Board consideration and approval to the end of
11 that one-year clock is about three and a half months for a
12 normal regulation. This one is a little more complicated.
13 So we're already kind of pushing up against what we would
14 normally be comfortable with in finalizing a regulation at
15 this date. So we have tried to be clear that any future
16 amendments would risk not meeting that one-year time
17 frame, and it's our assessment that we simply would not be
18 able to make it within the one-year clock, if the Board
19 were to direct amendments today.

20 BOARD MEMBER RECHTSCHAFFEN: Is there anything,
21 Ellen, you would want to add about CEQA analysis of CEQA
22 time frame.

23 CHIEF COUNSEL PETER: As a practical matter, when
24 we have a 15-day notice, people don't stay within the
25 scope of the 15-day notice and we get all sorts of other

1 comments. So that's the one other thing I wanted to throw
2 in in terms of the staff work, which is done primarily by
3 the Program staff. So I would defer to Matt, and
4 Rajinder, and their staff on that part.

5 In terms of CEQA, it's -- you know, it's
6 complicated, because there has been two different
7 recirculated drafts. There's comments on the -- you've
8 got to document on the email to all Board members and
9 provided to -- hard copies to you. So even today, there
10 was a lot of comments that came in that had -- needed to
11 be responded to. So it is -- it's -- it depends on how
12 complex the issue is. It depends on how controversial it
13 is, in terms of the number of comments that come in.

14 And you can just see based on today, this is
15 fairly controversial. So this is -- it's difficult, but
16 in terms of specific CEQA issues, it depends what people
17 write. So we don't know that right now. So nothing more
18 to do. I hope that helps respond to that, Mr.

19 Rechtschaffen

20 BOARD MEMBER RECHTSCHAFFEN: I'm sorry?

21 CHIEF COUNSEL PETER: I hope that helps response.

22 BOARD MEMBER RECHTSCHAFFEN: Yes, thank you.

23 Chair Randolph, I'm interested in your opinion,
24 but do you want me to -- are you ready to say what your
25 recommendation is or --

1 CHAIR RANDOLPH: Board Member Hurt hasn't spoken
2 yet.

3 BOARD MEMBER RECHTSCHAFFEN: Because then I do
4 want to speak after I hear you or unless you --

5 CHAIR RANDOLPH: Okay. Absolutely.

6 BOARD MEMBER RECHTSCHAFFEN: -- unless you insist
7 I go first.

8 CHAIR RANDOLPH: No. No. No. I'm happy to go
9 first. I do want to make sure Board Member Hurt has a
10 chance to speak.

11 BOARD MEMBER HURT: Thanks. I figured I'd add my
12 two cents since everyone is speaking to Board Member
13 Takvorian's motion. I think the resolution in this
14 section before us is really an improved step to reduce
15 methane emissions. We know that they -- it's a greenhouse
16 gas that's 25 times more potent than carbon dioxide and
17 has profound implications for the average resident in the
18 U.S. and for the world at large.

19 And like Takvorian, I don't believe it's perfect.
20 And I appreciate and understand the motion that's on the
21 table, but this is a program and a tool that's improved
22 since its inception in 2009. And I it's going to continue
23 to improve. And as we look to that part, Board Member
24 Takvorian, that you would like to improve, I look forward
25 to working with you on that. But as far as voting for the

1 motion, although typically I'm in strong agreement with
2 you on many of these issues, I think there's an urgency to
3 act and will more than likely not support the motion.

4 CHAIR RANDOLPH: Sure.

5 BOARD MEMBER TAKVORIAN: Okay. So I guess a
6 question that doesn't just apply to this, but is one that
7 I've heard from other Board members, and that is when is
8 LCFS coming back for amendments again?

9 (Laughter).

10 BOARD MEMBER TAKVORIAN: Sorry. I think it's
11 relevant here because obviously this is an issue that -- I
12 mean we're being boxed in in a certain way, all of us, in
13 regards to this timeline, so there doesn't seem to be a
14 way out, unless someone has a bright idea that they
15 haven't expressed yet, not -- nothing coming from that,
16 but -- so the next opportunity would be when is it coming
17 back and when could we revisit this issue and debate it
18 more fully.

19 Thank you.

20 DEPUTY EXECUTIVE OFFICER SAHOTA: So I think the
21 first place that we would look at this issue is again part
22 of the resolution text to look at the plan for what we do
23 and when we come back and what the recommendation is. But
24 it's specific about not regulating before 20Typically on a
25 rule this large, we would not come back until after the

1 next Scoping Plan.

2 BOARD MEMBER TAKVORIAN: So that's going to be in
3 the midst of the livestock methane regulation rulemaking.

4 DEPUTY EXECUTIVE OFFICER SAHOTA: Potentially

5 BOARD MEMBER TAKVORIAN: Yeah.

6 DEPUTY EXECUTIVE OFFICER SAHOTA: Yep.

7 BOARD MEMBER TAKVORIAN: Okay.

8 DEPUTY EXECUTIVE OFFICER SAHOTA: And I think
9 it's important to recognize that even though this
10 regulation is -- if it's approved, it would go into effect
11 in 2025, not Jan 1, 2025, but hopefully in the first half
12 of 2025. Many of the provisions on several parts of the
13 regulation don't even start until 2026/2027. And so when
14 you look at the sustainability criteria, those don't kick
15 in until later, and some of the cap provisions have some
16 time before they can be analyzed.

17 And so they -- we would come back with a package,
18 because every time we do a rulemaking, it's the same
19 amount analyses, the same amount of time, the same care
20 and resources that we devote to it. So we try to tend to
21 package them up together and that's why they're tied to
22 some of those major planning efforts like a Scoping Plan.

23 CHAIR RANDOLPH: Thank you.

24 Okay. So my thoughts are as follows. First, I
25 do not -- I appreciate the motion, Board Member Takvorian,

1 and I appreciate the discussion, but I don't support it
2 both for process and policy reasons.

3 The process that would need to be achieved to do
4 this 15-day change I think puts the entire regulation at
5 risk. You know, staff has indicated it would be very
6 challenging to -- well, it would basically be impossible
7 to do this work, and if they tried to do this work, to me,
8 mistakes would be inevitable and it would really put the
9 whole Program and the progress at risk.

10 On the policy piece, we -- for the first time,
11 this Board has said, we are ready to move forward to work
12 through the 1383 process, figure out the regulatory
13 strategy around avoided methane. That is a big step.
14 That is a step that is going to take time. If we were to
15 take action to cut off crediting periods now, the
16 investment that needs to happen right away would not
17 happen, and we would not get the reductions that we need
18 to see between now and 2030 when we have made clear, you
19 know, we are evaluating our full methane strategy.

20 So I think it is very important that we continue
21 to encourage that work. That is what brings the financing
22 to do these projects. They are expensive projects. They
23 are expensive to install and operate. And I think it's
24 important that we take advantage of that time period
25 between now and whatever the next step is structured to be

1 to capture as much of this short-lived climate pollutant
2 as possible.

3 So for both of those reasons, I would not support
4 this motion. Board Member Eisenhut, then Board Member
5 Rechtschaffen.

6 BOARD MEMBER EISENHUT: So I had hoped for a
7 robust discussion and that's what we got. And I
8 appreciate -- I have a couple -- a couple observations.
9 One is in the intervening, and I'll call it a data search,
10 period, I -- well, I really appreciate the model that was
11 rolled out in this Fresno, CAD, I believe is the acronym.
12 I encourage an examination, because I think there's some
13 tests that need to be run on that model to ensure its
14 validity. So I encourage that as part of this process. I
15 very much value the fact -- the issue that I see
16 continuing forward is that I don't these projects can be
17 scaled down enough to be economic for small dairies, and
18 that there's a substantial fixed cost that's probably not
19 well borne by a smaller dairy and makes it unattractive to
20 a project developer. And even with a 30-year period -- a
21 20- or 30-year period, those, given the value of credits,
22 may not be economic.

23 And so -- and I'm going to go on a limb here and
24 say this smaller dairies may be smaller by choice. They
25 may be smaller because they're older and don't have some

1 of the technology that makes them a cleaner operation in
2 today's environment. So, I would encourage us to continue
3 to look at what is possible to encourage development of
4 technology - I won't use the term digester -- at smaller
5 dairies, and I would encourage a report back to this issue
6 in less than five years. I think we could do that more
7 quickly. Thank you.

8 BOARD MEMBER RECHTSCHAFFEN: Thank you. This is
9 an extremely hard decision for me, the pending motion.
10 For context, I agree how meaningful it is that we're
11 committing to a path for regulating livestock. It's
12 time -- and, in fact, it's past time. Livestock is the
13 largest source of methane emissions in the state. Over
14 half of our methane emissions it's -- and agriculture is
15 the largest sector in the economy where there are no GHG
16 regulations. We regulate economy-wide, but we haven't
17 regulated the ag sector.

18 And we need to be thinking not just about our
19 1383 goals. We need to be thinking about our carbon
20 neutrality goals of 2045 and it's going to be essential
21 that we address these emissions. As Dr. Pacheco-Werner
22 said there's lots of promising control technologies,
23 alternative management practices, source controls, enteric
24 emissions, leak controls and others. And I will reiterate
25 what many have said that the regulations are explicit that

1 we can consider additional controls on facilities with
2 dairy digesters. They're not exempt from further
3 regulation. And to John's point, one of the things we can
4 consider is the size and economic feasibility as
5 appropriate on dairies as we tailor the regulations.

6 The avoided methane crediting question, it's
7 very, very difficult. I agree digesters have benefits,
8 but as I said in September, I don't think we need two or
9 three crediting periods. I would have strongly preferred
10 that the crediting periods only -- provided only so long
11 as there's not a mandatory livestock methane rule. I
12 recognize the contrary argument from Chair Randolph and
13 others, but that's not how we treat other fuels like
14 methane from landfills. But we -- unfortunately, we are
15 very, very late in the regulatory process, and I take very
16 seriously staff's explanation that if we were to have a
17 15-day amendment we risk missing our regulatory deadline.
18 And I just don't think we can afford that risk.

19 I think our climate leadership is more important
20 now than ever. I don't think pushing this to next year
21 would be a good thing. There's a lot of potential
22 messiness, and complexity, and delay. So reluctantly,
23 I'll be voting no Board Member Takvorian's amendment.

24 CHAIR RANDOLPH: Okay. I am going to go ahead
25 and call for a vote on the motion that Board Member

1 Takvorian made and that -- oh, I'm sorry, Supervisor
2 Perez, did you want to make a comment?

3 BOARD MEMBER PEREZ: You know, I heard enough
4 already. I appreciate it. Not necessarily. I'm going to
5 vote no. Thank you.

6 CHAIR RANDOLPH: All right. Thank you.

7 Okay. The motion that Board Member Takvorian
8 made and that Board Member Florez seconded.

9 Clerk, would you please call the roll.

10 BOARD CLERK JENSEN: I'm stepping in for Katie
11 Estabrook. So give me a moment.

12 Dr. Balmes?

13 BOARD MEMBER BALMES: Yes.

14 BOARD CLERK JENSEN: Mr. De La Torre?

15 BOARD MEMBER DE LA TORRE: No.

16 BOARD CLERK JENSEN: Mr. Eisenhut?

17 BOARD MEMBER EISENHUT: No.

18 BOARD CLERK JENSEN: Senator Florez?

19 BOARD MEMBER FLOREZ: Yes.

20 BOARD CLERK JENSEN: Mr. Guerra?

21 BOARD MEMBER GUERRA: No.

22 BOARD CLERK JENSEN: Ms. Hurt?

23 BOARD MEMBER HURT: Respectfully, no.

24 BOARD CLERK JENSEN: Mr. Kracov?

25 BOARD MEMBER KRACOV: No.

1 BOARD CLERK JENSEN: Dr. Pacheco-Werner?

2 BOARD MEMBER PACHECO-WERNER: Yes.

3 BOARD CLERK JENSEN: Supervisor Perez?

4 BOARD MEMBER PEREZ: Respectfully, no.

5 BOARD CLERK JENSEN: Mr. Rechtschaffen?

6 BOARD MEMBER RECHTSCHAFFEN: No.

7 BOARD CLERK JENSEN: Dr. Shaheen?

8 BOARD MEMBER SHAHEEN: Respectfully, no.

9 BOARD CLERK JENSEN: Ms. Takvorian?

10 BOARD MEMBER TAKVORIAN: Yes.

11 BOARD CLERK JENSEN: Supervisor Vargas?

12 BOARD MEMBER VARGAS: Respectfully, no.

13 BOARD CLERK JENSEN: Chair Randolph?

14 CHAIR RANDOLPH: You forgot Board Member
15 Rechtschaffen?

16 BOARD CLERK JENSEN: No, I said -- I said him.

17 BOARD MEMBER RECHTSCHAFFEN: No, I don't -- it's
18 not Chicago, I don't get to vote twice.

19 (Laughter).

20 CHAIR RANDOLPH: Oh, sorry. I missed that. I
21 apologize.

22 BOARD CLERK JENSEN: Thank you. I got him.
23 Okay.

24 CHAIR RANDOLPH: Okay. So am I the last one?

25 BOARD CLERK JENSEN: Yes.

1 CHAIR RANDOLPH: Okay. No.

2 BOARD CLERK JENSEN: The motion does not pass.

3 CHAIR RANDOLPH: All right. Thank you. I don't
4 know how I missed that. Okay. Now, for our last topic.
5 I am going to open it up to Board members to say anything
6 that they didn't get a chance to say in their previous
7 discussion.

8 All right. Board Member Kracov.

9 BOARD MEMBER KRACOV: Yeah. So I want to thank
10 you for that, a great discussion, and for the motion Board
11 Member Takvorian. I want to thank all the stakeholders
12 all through this process to help for years to refine our
13 decision-making. It's interesting that there's such
14 different opinions, and facts, and rhetoric on this same
15 topic.

16 I think what we can all agree on is that
17 transportation electrification, decarbonizing the
18 transportation sector, this has been the focus of our
19 work. This is our mission. It's our vision as
20 Californians for the future. So to me, it's highly
21 persuasive that the people that actually do this work, not
22 like me sitting in a chair typing on a computer and giving
23 speeches, but the truckers down at the ports, the ZE
24 equipment manufacturers, the dealers, the ports, public
25 transit, our utilities, Edison, SMUD, DWP, the waste

1 haulers and their thousands of trash trucks, the
2 infrastructure installers, the folks that actually will
3 make our zero-emission future who will take us on this
4 journey.

5 They've come today, all those jobs, for our green
6 economy. The folks that are going to make this future
7 actually come true, they're pleading with us to vote yes
8 today. They're pleased with the proposal, pleased with
9 the electrification dollars in the proposal today. I
10 heard a minimum of \$10 billion, especially in light of
11 funding uncertainty at the State and federal level, an
12 emerging uncertainty about federal policy support. We've
13 been working on this for years, dozens and dozens of
14 briefings, sitting as a liaison in EJAC meetings.

15 You know, when we spoke about this, there were
16 sort of three issues that last year we talked about. It
17 was over a year ago. I just want to touch on those very
18 briefly, Chair.

19 You know, on the biofuels, we've seen the charts
20 and models. Despite our best efforts, all the advocates,
21 like Clean Cars Coalition tirelessly do, all that the ZE
22 industry does, there's going to be pervasive diesel use
23 into the 2440s, especially in off-road. Now, folks used
24 to like LCFS and biodiesel, now want to pull that out of
25 the Program. But to me, that means petroleum diesel, even

1 under the most ambitious modeling, zero emissions will not
2 fill that gap. And I think if we vote no today, we're
3 going to harm that even further.

4 LCFS is designed to fill that gap. It's supposed
5 to be cost effective. It's market based, encourages
6 competition and innovation. And I appreciate Senator
7 Florez's questions on the impacts on gasoline and diesel
8 prices. We heard it from Assemblymember Lackey today and
9 I heard from my good friend Senator Ochoa Bogh yesterday
10 on a very long tough phone call. There's fear an
11 uncertainty from their constituents and ours, but we
12 covered that today. Thank you for the charts, Hector.
13 The use of biofuels will help manage these costs by
14 assuring we have adequate credits in the system and other
15 cleaner fuels that can be used in ICE engines and provide
16 subsidy for those cleaner fuels, subsidies for our
17 utilities and electric companies to make them cheaper for
18 Californians with domestic fuels.

19 Supporting American jobs, and steel workers, and
20 building trades, LCFS means cleaner, greener jobs while
21 also meeting our state's goals and getting rid of that
22 pervasive polluting diesel.

23 Use of biofuels can't be unlimited. We know
24 that. These are crops. EJAC asked for a biofuels cap to
25 address indirect land use impacts. Even though we're just

1 one state, it is a real concern. So staff did put a cap
2 in there. It may not be exactly the cap EJAC wanted, but
3 it is real. I mean, listen to the other side of the
4 comments today. And it calls out the crop-based lipids.
5 It send signals to the whole world from California that we
6 are concerned about land use impacts across -- of
7 crop-based lipids. This is the signal that EJAC wanted.
8 We are sending it. USDA already is noticing, plus we have
9 the, certification and traceability requirements. We
10 added Sunflower, and now we as a Board have promised to
11 study ILUC factors, GTAP with real science, real data, to
12 reconcile what I think is wildly different opinions, and
13 rhetoric, and data on this topic.

14 And as Board Member De La Torre noted, the carbon
15 intensity of the biofuels will make them deficit
16 generators in the 2030s. And that's all going to be
17 informed by this study. On the dairy digesters, that was
18 a very difficult vote. I just want to say a few words
19 about that.

20 I mean, the dairy folks are terrific to meet and
21 visit with. You know, I here you treat your workers very
22 well too and you certainly have some very effective
23 advocates in Dairy Cares. But there is no doubt that
24 these CAFOs creat serious methane and ammonia issues.

25 We talked about this in the valley PM2.5 approval

1 a few months ago. Now, I believe we are very hemmed in by
2 1383. It is the main strategy for this sector, which is
3 our biggest emitter. It does not allow us to cancel
4 credits just because we regulate. And it's not the role
5 of this Board or the current public policy of this state
6 to discourage investments in digesters.

7 We talked about what 1383 says. What it does
8 allow us to do is regulate, record keeping, monitoring,
9 mitigation, satellites, enteric emissions, co-benefits
10 hopefully for ammonia and PH. Dairies are now going to
11 have to show their work just like all other sectors that
12 we regulate for GHG, big and small from leaf blowers to
13 landfills. And there's not going to be freezing of
14 digester carbon intensity for all time. The dairies
15 should not get avoided methane credits if they can't show
16 their work. Okay. And the resolution makes clear that
17 all the dairies that have these digesters are going to
18 have to show their work.

19 I told -- I spoke on the record about this a year
20 ago that I couldn't vote the item without it. It's in
21 there. It's in the resolution. The exception for the
22 dairies is going to come to and end. We listened to EJAC.
23 This is an enormous step forward. No more denial of
24 rulemaking petitions. This is a piece of unfinished
25 business that we finally can cross off the list.

1 The third thing we heard from EJAC was jet fuel.
2 This is not an easy issue either legally. But we agreed
3 last week to that partnership. The airport workers,
4 janitors union, they're the key stakeholder and they
5 celebrated this effort. That's their word not mine. And
6 the language of the resolution only adds momentum and
7 direction into this work.

8 We've worked tirelessly, colleagues, on
9 zero-emissions, decarbonizing transportation. That's our
10 work. That's our legacy. It's painful to hear that many
11 of our brilliant friends on this journey and many
12 community members who joined us today do not support
13 today's action, but I know we can still be friends.

14 The trucking firms, the ZE manufacturers, the
15 dealers, the ports, public transit, utilities, electric
16 companies, infrastructure installers, the folks that are
17 actually going to make our zero-emission future happen,
18 they've come here today, all those jobs, the partners that
19 are going to make the future we imagine come true, they're
20 imploring us to vote yes today and they have my vote.

21 Thank you.

22 CHAIR RANDOLPH: Board Member De La Torre.

23 BOARD MEMBER DE LA TORRE: Thank you. I wanted
24 to talk just generically about the LCFS. It's in the
25 Scoping Plan. It's been round for 13 years. It is a key

1 component of our climate strategies. This is not
2 something new. This is not today showing up and saying
3 this is what we want to do. We have this history with it.
4 In fact, this is the third time we've been visiting it and
5 I've been here for all three. So, I have a sense of how
6 we got here. The market place is not functioning well.
7 That was my number one goal coming into this process two
8 years ago, or however long it's been. Too long. That was
9 my number one goal then, is that this Program incentivizes
10 the right things, and -- meaning EVs, transition on fuels
11 away from diesel. Everybody knows I hate diesel.

12 So, it pushes us in that direction with no State
13 dollars. No State dollars. We don't have a whole lot of
14 them. And after Tuesday, we're not going to have a whole
15 lot federal dollars, if any. So this Program carries a
16 lot of weight. And what has it done with that weight?
17 It's reduced transportation fuel carbon intensity by 15.3
18 percent over time, 560 million metric tons of greenhouse
19 gases reduced. Earlier today, I talked about the 4.2
20 percent just in the one year of transportation GHGs
21 reduced, attributable to this Program.

22 So from a climate perspective, it's absolutely
23 necessary. So when I was in the Legislature, I had some
24 colleagues who used to talk from the left and vote from
25 the right. That's the way I described it. And so

1 sometimes I think that happens. I think some
2 organizations, some individuals - I'm not talking about
3 elected officials now - use the arguments that are for the
4 people, progressive, populist, but then they vote no in
5 order to kill the progress that's out there.

6 And so, I'm always aware of that, because I've
7 seen it so many times over decades. So here we are. We
8 have a measure that is either going to move us or we're
9 going to stay where we are. It isn't you vote no and this
10 dies. There is an underlying program that, as I said
11 earlier, has problems, has issues. And we are trying to
12 make this program, specially right now, carry a lot of
13 weight for us on climate and on air quality.

14 So what are we doing? We're proposing to
15 increase the stringency, as I said earlier, from 20
16 percent in 2030, which is the current program, to 30
17 percent by 2030. Again, an increase of -- from 1.25
18 percent per year to 1.45 percent per year. It has an
19 automatic acceleration mechanism, if it -- if there's
20 overperformance. So there is built in an adjustment that
21 can be made. There's cost containment for high credit
22 prices. And important to note here, we have 13 years of
23 history on this program, so we know what it's done. Fifty
24 to 200 dollars has been the range over the 13 per credit.
25 That's been the range. So again, we know those pieces.

1 I also want to share something that I received
2 from a trucking firm, which made a big difference to me is
3 I'm really proud that we're able -- well, hoping we're
4 going to be able to include the medium- and heavy-duty for
5 the 45 percent hold-back provision.

6 So here's the quote from this trucking firm. "We
7 need long-term certainty on revenue from credits. There
8 is not a lot of tools to help level the playing field with
9 diesel. This helps close the gap. One hundred dollar per
10 credit translates to upwards of \$1,000 a month in lower
11 fueling costs for Class 8 battery electric trucks and
12 their drivers, depending on the distances that they
13 drive." That's what this means in the real world. We've
14 got all these charts. We've got all this data. That's
15 real difference-making money that gets us to zero emission
16 goods movement, real money for those folks.

17 A no vote today means that the current Program
18 would remain as is, as is, not functional without all the
19 good stuff that we're putting in here today for at least a
20 couple year, at least a couple years, cause we'd have to
21 start all over again. Add as was said earlier, Steve said
22 28 working days, I know our team, it's 55 days, period.
23 They're not going to be limited. Other folks will be
24 limited by the week. I know our team would not be.
25 Fifty-five days to get to the finish line on this project.

1 And that is why I was not supportive of that measure.

2 I had other things -- staff knows for the last
3 two months, I've been peppering them with things that I
4 wanted to do and came up against that very same wall and
5 made my peace with it.

6 It's unfortunate that we came this close. This
7 is the first time in 13 years that we've come this close
8 to a deadline. And there's a whole lot of reasons why
9 that happened, but we are where we are. And for that
10 reason I'm supporting this -- these amendments, these
11 resolutions, these commitments to regulate on the vote
12 today. Thank you.

13 CHAIR RANDOLPH: Dr. Shaheen.

14 BOARD MEMBER SHAHEEN: Thank you.

15 I just wanted to take a moment to just breathe.
16 That was really hard -- I think hard for all of us to have
17 that conversation, but what I'd would like to do is just
18 state my deep appreciation and gratitude to everyone who's
19 been involved in this policy discussion, including the
20 tremendous hard work of staff and all of the stakeholders
21 who I've engaged with in this and leaning in heavily and
22 sharing all of your experiences and perspectives.

23 I took everything you shared into consideration.
24 This is an incredibly complicated policy and I'm an
25 academic and appreciate that academics were at the

1 forefront of envisioning this policy and had a vision for
2 decarbonization and innovation. And while, what we have
3 before us, is not perfect, it has driven notable
4 investments into cleaner alternative -- cleaner
5 alternatives to fossil fuels. There will be further
6 opportunities for us to consider adjustments as we move
7 forward. And I want to reiterate that this policy is key
8 to the EV transition and EV infrastructure that we really
9 need.

10 There's much potential to foster innovation as we
11 move forward with this policy. And I want to just take a
12 moment to note some wins, public transit has already
13 directed 700 million to California public transit
14 agencies, and that is anticipated to grow. The transit
15 industry is suffering and this provides many
16 opportunities.

17 I want to share my congratulations to the team to
18 Rajinder, who led the SAF Partnership, that's huge. I
19 really know because I work in transportation and I'm
20 really excited about the ground operations regulation
21 landside. As we move forward, there's still a lot of
22 urgency, but also uncertainty. So that's why those
23 guardrails are so critical, along with the monitoring.

24 And I look forward to engaging in the ILUC and
25 GTAP conversations and careful tracking. I wanted to end

1 my comments on a note regarding innovation. And again, I
2 think this policy was really inspired by academic visions
3 and hopes for innovation. I've been really excited about
4 conversations around cover crops and camelina, satellite
5 data for monitoring dairies and potential methane leaks.
6 I'm very delighted to see us moving forward with a
7 livestock methane rule, new smart ag innovations that
8 we're learning about to help prevent enteric emissions
9 with new feed additives that have just been approved at a
10 very low cost point. I'm super excited about the notion
11 that we could be looking at E15, future rulemaking on
12 ocean-going vessels, electrofuels.

13 There's so much here that we can work together
14 on. And I'm very cognizant of what happened on Tuesday
15 night and the importance of moving forward. And so I will
16 be supporting this resolution. And I am very, very
17 delighted that we took the time that we did today to have
18 the conversation.

19 CHAIR RANDOLPH: Okay. Dr. Pacheco-Werner.

20 BOARD MEMBER PACHECO-WERNER: Thank you, Chair.
21 I just -- you know, this is the first vote in a new
22 reality that commits to maintaining our path to zero
23 emissions, our path to transition away from fossil fuels,
24 and our commitment that we will do what we can.

25 Thank you, staff for setting us up to be part of

1 this historic moment and setting us up with a robust
2 program that will also encourage similar programs to stay
3 the course and move forward no matter what and you had to
4 sit here and listen to us, and you are brave for doing
5 this.

6 We are not walking away. We are not just voting
7 yes and walking away. We are not faceless in our
8 communities. We are committing today to transparency and
9 we are taking the lessons learned here to ensure even more
10 transparency on the Program, so that we don't end up with
11 some of the rhetoric that was let loose here.

12 I also invite local decision-makers that stood in
13 opposition to engage with me personally, to engage with
14 staff moving forward, and to continue holding fossil fuel
15 companies accountable for punishing our residents for our
16 new bold decisions, and actually work with them to
17 encourage a new way of investment in our state in a
18 sustainable way without further negative impact to
19 fence-line communities.

20 Chair, it has been a pleasure to walk with you
21 through this process. Your leadership is beyond admirable
22 and it is my privilege to serve with you.

23 Thank you.

24 CHAIR RANDOLPH: Thank you.

25 Lets see. I think Board Member Hurt was next.

1 BOARD MEMBER HURT: Yeah. I think I will
2 definitely echo Dr. Pacheco-Werner's thanks to the Chair.
3 She's had a lot of very difficult conversations. People
4 have come at you in many different ways and you've stayed
5 graceful and looking at science in your decision-making
6 and policy that really supports California and we
7 appreciate it.

8 The actions that we take today. They're not
9 being made lightly. They're a result of months of
10 extensive research, stakeholder meetings and careful
11 thought on how we continue moving California in the right
12 direction, specifically towards a healthier, health
13 protective air quality and safer cleaner transportation
14 system for all people.

15 It's been more than 30 months, not just a few
16 weeks or so ago when I know some individuals started
17 asking questions and seeking clarity on this issue. In
18 fact, the Low Carbon Fuel Standard began long before 2009
19 and we continued to improve and evolve. So regardless of
20 when you come to this conversation, I want you all to know
21 that the Board hears and we're working really hard to
22 support all.

23 I definitely want to thank the staff who've been
24 navigating really difficult policy creation and various
25 stakeholders, and working really tirelessly over this

1 regulation, whereas someone said earlier, nobody is happy,
2 but everybody understands that you're trying to do your
3 best to support all sectors and individuals. And I just
4 want to uplift that I think the work is really critical
5 and it's invaluable, and I, too, thank all of you.

6 And I also want the public to know that we are
7 really trying to use science, not popularity in making
8 these decisions. Accountability is not about thinking do
9 they agree with me, but it's about doing what's right for
10 everyone, especially the least among us who are going to
11 be greatly impacted with the change in climate. And so I
12 want to thank my fellow colleagues on their dedication and
13 their discussion to this topic, and lifting up the voices
14 from all your communities.

15 I align a lot of my thoughts with Board Member
16 Kracov and Dr. Shaheen, especially when it relates to
17 innovative technologies as still being an important tool
18 in our fight for cleaner air and climate change. I think
19 it's crucial that our regulations do not favor one
20 technology over another, but instead foster a competitive
21 and dynamic market, because we must keep those doors open
22 for innovation to thrive. And we're going to need again
23 every tool for efficiency and sustainability to truly
24 drive us closer to what are very difficult climate goals.

25 And I actually am very happy that this also

1 supports mass public transit, which is an important issue
2 for me. I think a great equalizer is the ability to move
3 around the state. And there are some people who can only
4 do that by their cars. So I truly do hear the pressures
5 that they receive on -- when gas prices are as they are.
6 I think you all heard my comments earlier and I will just
7 reiterate that there are others who are in powerful places
8 that can make decisions to support American drivers. And
9 I hope that besides just saying that they support this
10 transition, they really do dig deep into their profits to
11 support Americans. And I will be voting yes for this
12 regulation.

13 CHAIR RANDOLPH: Board Member Guerra.

14 BOARD MEMBER GUERRA: Thank you, Chair.

15 You know, I think for the work that we do here,
16 and my fundamental focus is the public health. We --
17 we're a public health agency. The immediate air quality
18 issues are what concern me. And the reality is we're
19 going to need everyone, all our Californians, innovators,
20 community folks to pull together to achieve that, because
21 there's going to be no new federal sources of money. I
22 think it's going to be come tougher. And this rule, this
23 regulation, I know, is going to help with electrification.
24 I know I've spoken with SMUD and a lot of the focus that
25 they're doing, and the work that we're doing, and again a

1 federal non-attainment zone, this is going to help move us
2 forward in that area.

3 Where I wish we could do more, and where I see
4 there's opportunities, is on the municipal biomethane to
5 hydrogen. I think all of our municipalities can, who are
6 looking at how they can provide new fuel sources. You
7 know, I think that's an area where I think we want -- I'd
8 like to explore more. How do we help municipalities move
9 forward in addressing this solution? I'm very proud of
10 the work that we've started in our region with our new
11 hydrogen buses and the attempt to electrify our municipal
12 garbage trucks. We're seeing that with challenges. And
13 without new sources of money, and this is one, we're going
14 to have that challenge for us to be able to all pull
15 together, State, county, city, all pulling together with
16 the industry.

17 And that's, I think, the -- my final point here
18 is that we're going to need to be working industry at this
19 point to find many of those solutions. A final
20 conversation point I will make on the issue of agriculture
21 and particularly on the dairies is in our Scoping Plan.
22 The State policy in our Scoping Plan recognizes, you know,
23 digesters as a solution. But the reality is, and what I
24 hope we take to heart in this regulation, is that it's the
25 technology-neutral nature of it. The more that we produce

1 outcomes is how it will create innovation.

2 So -- and that is an ingenious thing that we've
3 been able to do so much with a policy that focuses on
4 what's producing the best outcome. So I will say -- end
5 with that by saying that we've gotten this far because of
6 industry and our experts here at CARB working together to
7 find what is those unthought -- or unthought of yet ideas
8 and solutions, and hope that we do more actually working
9 with municipalities to help them achieve the goals locally
10 as well.

11 So I'll end there, and thank you, and I'll be
12 voting aye, Chair.

13 CHAIR RANDOLPH: Board Member Rechtschaffen.

14 BOARD MEMBER RECHTSCHAFFEN: I have one-ish --
15 one specific issue and then a couple of general comments.
16 The issue that didn't come up so far is deliverability.
17 And I would have much preferred in earlier date for
18 deliverability of -- for biomethane fuels than 2041 or
19 potentially 2037. As I said before, all of the fuel
20 pathways require deliverability to California. Without
21 deliverability, we don't gain any local air quality
22 benefits from digesters. The biomethane doesn't help meet
23 our SB 1383 goals for in-State reductions of methane
24 reductions.

25 I appreciate that the resolution provides we'll

1 look at this in the next Scoping Plan. It says staff
2 should evaluate our progress toward meeting our medium-
3 and heavy-duty ZEV goals, and whether any adjustments are
4 necessary to deliverability requirements, because if at
5 that point, or soon thereafter we're making progress
6 toward full implementation, we'd have a resulting decrease
7 need for combustion vehicle fuels, such as compressed
8 natural gas. So I'm hopeful that we can look at that and
9 have a different outcome in the future.

10 I want to echo the appreciation for staff.
11 You're dealing with an extremely complex rule, a multitude
12 of issues, doze -- many dozens of stakeholders. You
13 answered a lot of questions from me. I want to thank the
14 Chair for her patients, for her leadership on this,
15 dealing with lots of conflicting pressures, always being
16 the point person on this, personally hearing out my many
17 ideas. Most of them were great, but, you know, she still
18 had to hear all of them. And I want to thank our many,
19 many extremely engaged stakeholders.

20 I support the rule. It does not -- I don't like
21 every aspect of it, but that's inevitable with a rule that
22 this is broad and complex. There are going to be some
23 things you just don't agree with. We've got to keep in
24 mind the big picture everyone has been talking about.
25 Transportation is by far the most significant source of

1 greenhouse gas emissions and criteria pollutants. We need
2 to pursue our three-legged strategy of controlling engines
3 and emissions from engines, VMT reductions and fuels. And
4 the LCFS has become an increasingly important part of that
5 strategy.

6 As I was sitting here through the day, I was
7 reflecting on my experience with Governor Brown. I was in
8 Governor Brown's office in 2013 or 2014, when critics in
9 the fossil industry spent hours and hours telling him that
10 it was impossible to get more than one percent, maybe two
11 percent reductions in carbon intensity, and that this
12 program wasn't worth pursuing. And look where we've come
13 now. We've made a lot of progress as we've heard. We've
14 spurred the adoption of many low-carbon fuels, supported
15 transportation electrification. We've also provided
16 diversity and some competition some modicum of competition
17 in a very concentrated sector that should have some price
18 benefits.

19 And by the way, I'm not going to repeat, unless
20 you want me to, because I repeated for Dr. Balmes one
21 thing when the sound went off, but I'm not going to repeat
22 all the concerns about the impact on gas prices, which I
23 agree with. We should remember as people pointed out
24 today that renewable diesel is actually cheaper than
25 conventional diesel right now. So that is a-- that is a

1 benefit for consumers.

2 And then finally I agree with the large context
3 that my colleagues have pointed out. Of what we're doing
4 here, the goal of all of our transportation rules is to
5 electrify all parts of our transportation system, off-road
6 vehicles, on-road vehicles, light-duty, medium-,
7 heavy-duty, other transport -- other parts of the
8 transportation sector, airplanes, vessels, and railroads
9 and so forth. And the amendments will provide billions of
10 dollars to help with the transition. We heard how it will
11 help with the most challenging sector right now, the
12 medium- and heavy-duty sector. And I think it's really
13 significant that we commend the resolution to
14 decarbonizing more sectors, ocean-going, or to look at how
15 we can do that, which few, if any other jurisdictions,
16 have done ocean-going vessels, airport ground vessels --
17 ground vessel, in addition to our voluntary agreement on
18 SAF to help decarbonize that sector.

19 So for these reasons, I'll be voting yes on the
20 amendments.

21 CHAIR RANDOLPH: Okay. Dr. Balmes, then Board
22 Member Takvorian, and then we need to wrap this up.

23 (Laughter).

24 BOARD MEMBER BALMES: Yes. I'm going there,
25 Chair. And seriously, I would -- I'll keep my comments

1 short. I would add to my appreciation of your leadership.
2 You have, you know, steered this Board towards the vote
3 we're about to take I think in a very skilled way. And I
4 also would add my appreciation to staff. I think all the
5 staff that I've worked with on LCFS has helped me
6 understand the complexity. And while I agree with Mr.
7 Rechtschaffen, you know, it's not perfect. I don't love
8 it. I'm going to vote for it.

9 I would like to add my appreciation for what the
10 Chair brought up about zero-emission motorcycles. I don't
11 want to slow us up here, because I'd actually like to move
12 that we vote on the resolution, but I thought that was a
13 good idea, given yesterday. And I don't know, can I ask
14 if we can add that at this point or does that gum up the
15 works?

16 CHAIR RANDOLPH: It's on my wrap-up list.

17 BOARD MEMBER BALMES: Okay. Great. So before
18 you do the wrap-up, I would make a motion that we vote
19 on -- that we vote for the current LCFS Regulation.

20 CHAIR RANDOLPH: Okay. Board Member Takvorian.

21 BOARD MEMBER HURT: Second.

22 CHAIR RANDOLPH: Oh, wait. Wait. Wait. Wait.
23 Let's finish talking and then we'll do a second.

24 Okay. Board Member Takvorian.

25 BOARD MEMBER TAKVORIAN: Okay. Thank you, Chair.

1 So, I agree with many of the comments that have been made
2 by my colleagues. I think there's a lot to like in this
3 rule. And in some very important ways, it moves our work
4 forward. I really want to speak to staff and say that I
5 really respect your work. I know that you have put your
6 all into it. Many improvements have been made to the rule
7 that I think reflect your enormous knowledge, and skill,
8 and your integration of stakeholder comments. You've
9 answered every question I've asked. I haven't always
10 liked the answer, but I really appreciate it, and I know
11 you've worked incredibly hard.

12 Chair Randolph, I think your leadership is really
13 unsurpassed. I appreciate your collegial, cooperative,
14 and inclusive approach. One of kind really. Thank you
15 for that.

16 I want to speak to the community advocates and
17 community residents that have been here so many times.
18 There's such an amazing amount of work that's been done.
19 From an organizing perspective, I know what it's about to
20 be in people's homes late at night talking about these
21 importance issues that affect their lives, their families,
22 their ability to have families, their abilities to go to
23 work, their ability to drink the water that's in their
24 home, their ability to sit on their own porch and breathe
25 air that is healthy for them.

1 It's multi-layered and you've all done an
2 incredibly job -- incredibly important job and good job
3 with it. I think that you're on the side of the angels
4 always and it's an enormous privilege to have the
5 opportunity to continue to work with you in this way.

6 So it's a really tough decision. I've been
7 struggling with a lot, but on balance and very
8 respectfully back at you all, I'll be voting no for this
9 rule. On balance, for me, my best judgment is that we
10 could have done better. And I'm not arguing with all of
11 the important points I think that you've made, but I do
12 think that we could have done better in a number of ways
13 that I'm not going to list here. But I do look forward --
14 I don't think this is an end. I think this is a beginning
15 to continue to work together to achieve the zero-emission
16 and environmental justice future that we all envision,
17 even if we disagree about how to get there. So thank you.

18 CHAIR RANDOLPH: Thank you.

19 Oh, Board Member De La Torre.

20 BOARD MEMBER DE LA TORRE: I'm not doing seconds.
21 I am -- yes, I am -- Henry Stern -- Senator Henry Stern
22 was here earlier. He had to go home and he couldn't be
23 here to read out his statement, so he sent it to me to
24 read it into the record. This is again from Senator Henry
25 Stern.

1 "While I could not be present any longer for
2 today's Board vote on the Low Carbon Fuel Standard, due to
3 religious obligations, based on the hundreds of public
4 comments and the staff presentation, I want to make my
5 position clear to my fellow Board members and my Senate
6 colleagues who have entrusted me as their watchdog on this
7 Board. The world is watching California to see if we will
8 maintain our leadership or fracture under internal
9 pressure for perfectionism. California has a long history
10 and enacting -- of enacting visionary and affordable
11 climate policies that are durable enough to endure major
12 shifts in national politics like we just witnessed.

13 "The reforms proposed by CARB in this final rule
14 are responsive and promising, but will require ongoing
15 oversight, and I am committed to providing it. Delaying
16 or undermining this rule today wouldn't just disrupt
17 billions of dollars in low carbon investments heading to
18 California, it would play right into big oil's multi-state
19 propaganda campaign, misleading drivers that clean air
20 regulations like this rule will cause pain at the pump.
21 We cannot afford to take big oil's bait and divert
22 attention away from their record profit margins and the
23 burdens of their pollution on hard working Californians.
24 We must move forward."

25 Again, that is Senator Henry Stern's statement on

1 the LCFS.

2 CHAIR RANDOLPH: Thank you, Board Member De La
3 Torre.

4 Okay. We need to do a couple things. I need to
5 just summarize the resolution amendments really quickly
6 and then I need to turn it over to staff for a brief
7 comment about CEQA, and then we're done.

8 Before I do that, I just wanted to provide one --
9 first of all, express my appreciation to staff and to all
10 the stakeholders who spent so much work and time, and
11 express appreciation for my colleagues, all of whom are
12 incredibly thoughtful, incredibly hard working, and
13 really, really, really spent a lot of time making sure
14 that we are getting this right. And so I feel very
15 privileged to serve on this Board with all of you.

16 My one substantive comment is I very much
17 appreciate the provision in the resolution about taking a
18 look at ILUC and thinking about next steps, and how we
19 unpack that. A very, very wise stakeholder in this
20 process said to me, if industry hates the sustainability
21 requirements and advocates hate the sustainability
22 requirements, maybe we haven't gotten them right yet. So
23 maybe we should use that process to really engage more
24 fully and think about how we set ourselves up for the next
25 iteration, and make sure, as we analyze the effect of

1 the -- what we are adopting today, that we really think
2 deeply about what those conversations and that analysis of
3 the effect of the sustainability requirements can lead us
4 to.

5 On summarizing the resolution changes, we have
6 three. We made the base credit change to go back to the
7 original -- the base credits going back to the medium- and
8 heavy-duty sector with -- we will include the discretion
9 for the Executive Officer to consider up to three percent
10 of those credits for zero-emission motorcycles.

11 Commissioner Rechtschaffen had a few edits on
12 section -- on the top of page nine, where he provided
13 specific language around other issues raised by
14 stakeholders, including risks of land use change and food
15 insecurity, and set -- and added the phrase, "Such as
16 GTAP," after the word, "Models."

17 And then lastly, Board Member Guerra modified
18 that last paragraph. And I made a few little tweaks to
19 that. So it will say, "Be it further resolved, that the
20 Board directs the Executive Officer to assess any impacts
21 of these regulation amendments on retail gas prices every
22 six months, with a written assessment every 12 months,
23 beginning six months from the effective date of these
24 regulations amendments, and to collaborate with the
25 California Energy Commission in that effort. And if the

1 Executive Officer determines that the regulation has
2 caused consistent retail gasoline price increases that
3 impact consumers, then the Executive Officer shall, within
4 120 days, propose to the Board measures to mitigate those
5 economic effects on consumers."

6 So with -- oh, staff actually had a request.

7 DEPUTY EXECUTIVE OFFICER SAHOTA: Thank you,
8 Chair Randolph. We needed to clean up one provision at
9 the top of page eight. They're very minor, but they're
10 important in terms of potential investment. And so it
11 would be helpful to have that read as, "Hydrogen,
12 refueling, or electricity fast charging," and then strike
13 out, "Fueling infrastructure." "Availability supported by
14 the updated LCFS hydrogen refueling infrastructure or
15 direct current fast charging infrastructure crediting
16 provisions, including any station limits" -- "Station
17 capacity limits or insert caps on credit limits."

18 CHAIR RANDOLPH: Okay.

19 Board Member Rechtschaffen.

20 BOARD MEMBER RECHTSCHAFFEN: Well, I don't know
21 if you -- the language that you read that I had suggested
22 wasn't the exact language. I don't know if you were
23 summarizing it, or if the exact language was captured, of
24 if we need to have you -- if it was already captured and
25 we -- do we need to reread the exact language or do you

1 already have it?

2 It's in the transcript. Okay. Fine. Apologies.

3 CHAIR RANDOLPH: Thank you.

4 Okay. One last thing is our General Counsel
5 needed to make a statement.

6 CHIEF COUNSEL PETER: Thank you, Chair. As I
7 mentioned already, the CARB Legal office prepared
8 additional responses to comments about environmental
9 impacts made in connection with today's public hearing.
10 But first I'd like to introduce two of the Legal Office
11 staff who worked on these responses and are sitting behind
12 me. This is Rebecca Maddox, one of our Senior Attorneys.
13 And this is Rebecca Fancher, who is the lead staff on CEQA
14 environmental analysis. They're generally in the back.

15 The additional responses were emailed to all
16 Board members earlier this evening. Hard copies were
17 distributed to the Board members here in the auditorium
18 and the responses were posted to the CARB website, so they
19 have been available to the public. I'd like to ask Senior
20 Attorney Gabriel Monroe to add just a few more points.

21 Gabriel.

22 SENIOR ATTORNEY MONROE: Thank you, Ellen.

23 Nearly all of the comments provided today raise
24 issues that have previously been submitted and considered
25 by staff. We previously provided you and the public with

1 comprehensive responses to these comments in our response
2 to comments on the environmental analysis. Staff has
3 prepared initial -- additional responses to the comment
4 letters submitted today by Earthjustice and a Shute,
5 Mihaly and Weinberger, LLP on behalf of the Leadership
6 Counsel for Justice and Accountability. Most of the
7 comments raise issues that have previously been submitted
8 by commenters and addressed in the response to comments.

9 For transparency and full disclosure, as Ellen
10 mentioned, staff provided responses to these comments
11 fresh off the printer to the Board members and transmitted
12 to the Board members electronically and also posted those
13 supplemental responses online almost two and a half hours
14 ago.

15 CHAIR RANDOLPH: Thank you.

16 Okay. So I will now close the record on this
17 item. The board has before them Resolution number 24-14,
18 which has been moved by Dr. Balmes.

19 Do I have a second?

20 BOARD MEMBER PACHECO-WERNER: Second.

21 CHAIR RANDOLPH: All right. Seconded by Dr.
22 Pacheco-Werner.

23 Clerk, would you please call the roll.

24 Patch second billion a

25 BOARD CLERK ESTABROOK: Dr. Balmes?

1 BOARD MEMBER BALMES: Yes.

2 BOARD CLERK ESTABROOK: Mr. De La Torre?

3 BOARD MEMBER DE LA TORRE: Yes.

4 BOARD CLERK ESTABROOK: Mr. Eisenhut?

5 BOARD MEMBER EISENHUT: Yes.

6 BOARD CLERK ESTABROOK: Senator Florez?

7 BOARD MEMBER FLOREZ: Florez, no.

8 BOARD CLERK ESTABROOK: Mr. Guerra?

9 BOARD MEMBER GUERRA: Guerra, aye.

10 BOARD CLERK ESTABROOK: Ms. Hurt?

11 BOARD MEMBER HURT: Aye.

12 BOARD CLERK ESTABROOK: Mr. Kracov?

13 BOARD MEMBER KRACOV: Yes.

14 BOARD CLERK ESTABROOK. Dr. Pacheco-Werner?

15 BOARD MEMBER PACHECO-WERNER: Yes.

16 BOARD CLERK ESTABROOK: Supervisor Perez?

17 BOARD MEMBER PEREZ: Yes.

18 BOARD CLERK ESTABROOK: Mr. Rechtschaffen?

19 BOARD MEMBER RECHTSCHAFFEN: Yes.

20 BOARD CLERK ESTABROOK: Dr. Shaheen?

21 BOARD MEMBER SHAHEEN: Aye.

22 BOARD CLERK ESTABROOK: Ms. Takvorian?

23 BOARD MEMBER TAKVORIAN: No.

24 BOARD CLERK ESTABROOK: Supervisor Vargas?

25 BOARD MEMBER VARGAS: Vargas, yes.

1 BOARD CLERK ESTABROOK: Chair Randolph?

2 CHAIR RANDOLPH: Yes.

3 BOARD CLERK ESTABROOK: Madam Chair, the motion
4 passes.

5 CHAIR RANDOLPH: All right. Thank you.

6 (Applause).

7 CHAIR RANDOLPH: I am sorry to say this, but we
8 have open public comment next.

9 Clerk, are there -- is there anyone signed up for
10 open public comment.

11 BOARD CLERK ESTABROOK: No, there is not.

12 CHAIR RANDOLPH: Oh, yay. All right. Thank you
13 all for sticking with us. This meeting is now adjourned.

14 (Thereupon the California Air Resources Board
15 meeting adjourned at 9:13 p.m.)
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CERTIFICATE OF REPORTER

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Air Resources Board meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of November, 2024.



JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063