MEETING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

CALEPA HEADQUARTERS

BYRON SHER AUDITORIUM

SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, SEPTEMBER 22, 2016

9:04 A.M.

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

A P P E A R A N C E S

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Senator Dean Florez

Supervisor John Gioia

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supervisor Ron Roberts

Supervisor Phil Serna

Dr. Alex Sherriffs

Professor Daniel Sperling

Ms. Diane Takvorian

STAFF:

Mr. Richard Corey, Executive Officer

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Mr. Edward Wong, Ombudsman

Ms. Emily Wimberger, Chief Economist

A P P E A R A N C E S   C O N T I N U E D

STAFF:

Ms. Brieanne Aguila, Manager, Climate Change Reporting Section, ISD

Mr. Jim Aguila, Chief, Climate Change Program Planning and Management Branch, ISD

Ms. Kirsten King Cayabyab, Air Pollution Specialist, Air Quality Planning and Science Division(AQPSD)

Ms. Mary Jane Coombs, Manager, Program Development Section, ISD

Mr. Chris Gallenstein, Staff Air Pollution Specialist, Project Assessment Branch, ISD

Mr. Michael Gibbs, Assistant Executive Officer, Executive Office

Mr. Jason Gray, Chief, Climate Change Program Evaluation Branch, ISD

Mr. David Hults, Senior Attorney, Legal Office

Mr. Larry Hunsaker, Staff Air Pollution Specialist, Greenhouse Gas Emission Inventory Branch, Air Quality Planning and Science Division

Ms. Karen Magliano, Division Chief, AQPSD

Ms. Rajinder Sahota, Assistant Division Chief, ISD

Mr. Craig Segall, Senior Attorney, Legal Office

Mr. Mark Sippola, Air Resources Engineer, Program Development Section, ISD

Ms. Carol Sutkus, Manager, South Coast Air Quality Planning Section, AQPSD

Mr. John Swanson, Air Pollution Specialist, Climate Change Reporting Section, Industrial Strategies Division(ISD)

Mr. Jonathan Taylor, Assistant Division Chief, AQPSD

A P P E A R A N C E S C O N T I N U E D

STAFF:

Ms. Sylvia Vanderspek, Branch Manager, Air Quality Planning Branch, AQPSD

Mr. Floyd Vergara, Division Chief, ISD

ALSO PRESENT:

Ms. Fariya Ali, Pacific, Gas & Electric

Mr. Ivan Altamura, Global Automakers

Mr. Andrew Antwih, Los Angeles County Metropolitan Transportation Authority

Mr. Steven Arita, Chevron Corp

Mr. Nathan Bengtsson, Pacific, Gas & Electric

Ms. Susie Berlin, Northern California Power Agency/MSR Public Power

Mr. Brian Biering, Turlock Irrigation District

Mr. Neil Black, California Bioenergy, LLC

Mr. Louis Blumberg, Nature Conservancy

Ms. Leslie Bryan, Redding Electric Utility

Ms. Julia Bussey, Chevron U.S.A

Mr. Todd Campbell, Clean Energy

Mr. Tim Carmichael, Southern California Gas

Ms. Rebecca Claassen, Food & Water Watch

Ms. Jan Dietrich, Rincon-Vitova Inspectaries, Inc.

Mr. Steven Douglas, Alliance of Automobile Manufacturers, Inc.

Ms. Deb Emerson, Sonoma Clean Power

APPEARANCES CONTINUED

ALSO PRESENT:

Mr. Nick Facciola, Origin Climate Inc.

Ms. Caroline Farrell, Center for Race, Poverty and the Environment

Ms. Eloisa Fernandez

Mr. Juan Florez, Center for Race, Poverty and the Environment

Ms. Estela Garcia

Ms. Hannah Goldsmith, California Electric Transportation Coalition

Ms. Valerie Gorospe, Center for Race, Poverty and the Environment

Ms. Laura Gracia, Communities for a Better Environment

Mr. Dan Griffiths, California Municipal Utilities Association

Ms. Erin Grizard, Bloom Energy

Ms. Michele Hasson, Center for Community Action and Environmental Justice

Ms. Emily Heffling, Union of Concerned Scientists

Ms. Gloria Herrera

Mr. Lenny Hochschild, Evolution Markets, International Emissions Trading Association

Mr. Henry Hogo, South Coast Air Quality Management District

Ms. Bonnie Holmes-Gen, American Lung Association

Mr. Jack Horowitz, Earth Innovation Institute

Ms. Kathleen Hughes, Silicon Valley Power

A P P E A R A N C E S   C O N T I N U E D

ALSO PRESENT:

Mr. Jason Ikerd, Glass Packaging Institute

Mr. Paul Jablonski, California Transit Association, San Diego Metropolitan Transit System

Mr. Alex Jackson, Natural Resources Defense Council

Mr. Shrayas Jatkar, Coalition for Clean Air

Ms. Adrianna Kripke, San Diego Gas & Electric

Mr. John Larrea, California League of Food Processors

Mr. Thomas Lawson, California Natural Gas Vehicle Coalition

Ms. Shana Lazerow, Communities for a Better Environment

Mr. Ludovino Lopes

Ms. Yvette Lopez-Ledesma, Pacoima Beautiful

Mr. Bill Magavern, Coalition for Clean Air

Mr. Adrian Martinez, Earthjustice

Ms. Lupe Martinez, Center for Race, Poverty, and the Environment

Ms. Anabel Marquez

Ms. Julia May, Communities for a Better Environment

Mr. Francisco Mendez

Ms. Erica Morehouse, Environmental Defense Fund

Ms. Amy Mmagu, Cal Chamber

Mr. Sean Neal, Modesto Irrigation District

Mr. Brent Newell, Center for Race, Poverty and the Environment

A P P E A R A N C E S   C O N T I N U E D

ALSO PRESENT:

Mr. Ken Nold, Turlock Irrigation District

Mr. Graham Noyes, Low Carbon Fuels Coalition

Ms. Rachael O'Brien, Agricultural Council

Mr. Francisca Oliveira de Lima Costa

Ms. Sofia Parino, Center for Race, Poverty and the EnvironmentCenter,

Ms. Cindy Parsons, Los Angeles Department of Water and Power

Gema Perez

Mr. Michael Pimentel, California Transit Association

Ms. Kristin Power, Consumer Specialty Products Association

Mr. Bruce Ray, Johns Manville

Ms. Tiffany Roberts, Western States Petroleum Association

Ms. Rosalva Ruiz

Ms. Phoebe Seaton, Leadership Counsel for Justice and Accountability

Mr. Michael Shaw, California Manufacturers & Technology Association

Mr. Samir Sheikh, San Joaquin Valley Air Pollution Control District

Mr. Chris Shimoda, California Trucking Association

Ms. Robin Shropshire, Panoche Energy Center

Mr. Todd Shuman, Wasteful Unreasonable Methane Uprising

Mr. Mikhael Skvarla, California Council for Environmental and Economic Balance

A P P E A R A N C E S   C O N T I N U E D

ALSO PRESENT:

Mr. Adam Smith, Souther California Edison

Mr. Paul Spitzer, Avan Gold Renewables

Ms. Madeline Stano

Ms. Janet Stromberg

Ms. Shelly Sullivan, Climate Change Policy Coalition

Ms. Nancy Sutley, Los Angeles Department of Water and Power

Ms. Sarah Taheri, Southern California Public Power Authority

Ms. Mari Rose Taruc, Air Resources Board Environmental Justice Advisory Committee

Mr. Andre Templeton, Carbon Market Compliance Association

Ms. Felipa Trujillo

Mr. Michael Tunnell, American Trucking Association

Mr. Tim Tutt, Sacramento Municipal Utility District

Mr. Nicholas W. van Aelstyn, Sealaska Corporation

Ms. Amy Vanderwarker, California Environmental Justice Alliance

Ms. Kathleen Van Oston, United Airlines

Ms. Sandra Vasquez, Leadership Counsel

Ms. Diana Vazquez, Sierra Club

Mr. Ron Whitehurst

Ms. Monica Wilson, Global Alliance for Incinerator Alternatives

A P P E A R A N C E S   C O N T I N U E D

ALSO PRESENT:

Mr. Jay Wintergreen, First Environment

Mr. Vincent Wiraatmadja, BYD Motors

INDEX

I N D E X   C O N T I N U E D

I N D E X   C O N T I N U E D

I N D E X   C O N T I N U E D

P R O C E E D I N G S

VICE CHAIR BERG: Good morning, everyone, I'll encourage everyone to take their seats. Our Chair Mary Nichols is on her way here. And so we thought we would get started with our morning. And she will be here very shortly coming over from the airport.

The September 22nd 2016 public meeting of the Air Resources Board will come to order. If you'll please stand with me well do the Pledge of Allegiance.

(Thereupon the Pledge of Allegiance was recited in unison.)

VICE CHAIR BERG: Clerk, if you'll please do the roll call.

BOARD CLERK JENSEN: Dr. Balmes?

BOARD MEMBER BALMES: Here.

BOARD CLERK JENSEN: Mr. De La Torre? Mr. Eisenhut?

BOARD MEMBER EISENHUT: Here.

BOARD CLERK JENSEN: Senator Florez? Supervisor Gioia?

BOARD MEMBER GIOIA: Here.

BOARD CLERK JENSEN: Ms. Mitchell?

BOARD MEMBER MITCHELL: Here.

BOARD CLERK JENSEN: Mrs. Riordan?

BOARD MEMBER RIORDAN: Here.

BOARD CLERK JENSEN: Supervisor Roberts?
Supervisor Serna?

BOARD MEMBER SERNA: Here.

BOARD CLERK JENSEN: Dr. Sherriffs?

BOARD MEMBER SHERRIFFS: Here.

BOARD CLERK JENSEN: Professor Sperling?

BOARD MEMBER SPERLING: Here.

BOARD CLERK JENSEN: Ms. Takvorian?

BOARD MEMBER TAKVORIAN: Here.

BOARD CLERK JENSEN: Vice Chair Berg?

VICE CHAIR BERG: Here.

BOARD CLERK JENSEN: Chair Nichols?
Madam Vice Chair we have a quorum.

VICE CHAIR BERG: Thank you very much.
It's looking a little bit lopsided.

(Laughter.)

VICE CHAIR BERG: I'm not sure how this is shaping up for the day, but -- yes, please. I'm going to scoot over a little.

(Laughter.)

BOARD MEMBER SPERLING: It's the left wing taking over.

(Laughter.)

VICE CHAIR BERG: Yes.
So our fellow Board members will be joining us

and we'll look forward to that.

I do have a few announcements before we get started this morning. Interpretation services are available in Spanish for 3 of our items today, which are the proposed amendments for the mandatory reporting, the Cap-and-Trade Regulation, and the proposed compliance plan for the federal Clean Power Plan.

Headsets are available at the commencement of each of those items outside the hearing room, and the attendant you can sign up with. And we have a translator here, and if you would please relay that information.

(Thereupon the translation occurred.)

VICE CHAIR BERG: Thank you very much. Anyone willing to testify today should fill out a request to speak card. And they're available outside the lobby of our Board room here. Please turn them in to the Board Assistant or the Clerk of the Board prior to the commencement of the item. We'd like to remind the speakers that we do impose a 3 minute limit, and we really want to encourage you to give your testimony in your own words. If you have written testimony, that will be provided to us. And it's often easier for us to understand what your concerns are if you give your testimony in your own words.

For safety reasons, I'd like to note the emergency exits are at the rear of the room. In the event of a fire alarm, we are required to evacuate the room immediately, go downstairs, and out of the building. When an all-clear signal is given, we will return to the hearing room and reserve -- resume the hearing.

So with that, we're ready to start. However, this morning, I would like to take Vice Chair prerogative, and just insert that in front of my fellow Board members is a program, Superior Accomplishments Award 2015. Annually, ARB asks that each one of the key managers submit a outstanding individual within their departments to be recognized.

And I had the pleasure to be able to be one of the hosts of this wonderful award ceremony earlier this month in September. Both Richard and Alberto were busy at UC Davis with a ZEV workshop that they were needed for, and I was asked -- oh, and Mary -- it was a great day, because Mary was participating in the signing of AB -- SB 32. And so it was wonderful to be able to participate in this really, really fine event.

And the number of people, the number of projects, the things that often go behind the scenes that we don't have absolute -- it was -- that you got to really see. It was really terrific. The award ceremony was held in this room, and it was packed, not only with employees but family members. And it was a really, really touching.

I would really recommend that, Mr. Corey, that you let the Board know the dates for next year, and anybody -- any of the Board members that could participate, it's a great event. Two hours of truly recognizing fine, fine accomplishments. And, Mr. Corey, I'd really love it if you would just give us a little bit of background on the awards and -- for our Board members.

EXECUTIVE OFFICER COREY: Yes. Thanks, Vice Chair Berg. And your recommendation, in terms of Board member participation going forward, is really excellent. The impact your participation had was -- staff are still talking about it. It was very much appreciated. So going forward, this is something I will be seeking out Board members.

But to your point, as many of you noted over the -- over the years, our staff is amazing. Their creativity, drive, passion for what they do really is foundational to the success and the history of this organization. And what we try and do annually -- or what we do annually is recognize the staff, their contributions. We reflect on the year that has past, look back on those accomplishments before we, you know, continue for the year ahead, which will always be really, really challenging.

And in thinking about that for both Sacramento and El Monte, we have the same recognition in both our key locations. And what that entails is recognizing a range of staff for a broad diversity of accomplishments. In fact, if you look the announcement or the program, you'll see accounting streamlining, IT-related work, the Advanced Clean Car effort, the monitoring work that was done on Aliso Canyon, the hydrogen fueling station effort, the Sustainable Freight Strategy work, and many, many others that it's, from our perspective, do good to just pause and look back and reflect a bit.

And as part of the wards, we also recognize -- we have a Sustained Superior Accomplishment Award. Those staff that have really performed really on a sustained basis for the last several years and recognize them.

In addition to that, we also have our Global Award. Now, we refer to that as our lifetime achievement award for ARB. And they're actually quite rare. We've given out about 2 dozen over the last many, many years. And this year there were two, and -- in El Monte, we recognized Jackie Lourenco. She started with ARB as a student assistant engineer in 1981. 1981. She's with ARB for 35 years, and has been instrumental in on-road, off-road, mobile source control.

If you added up the emission reductions that she has had a direct hand in and looked at the public health benefits, you'd be blown away. Amazing work. Someone that's really truly worthy of that recognition and that award.

In Sacramento, it was Ajith Kaduwela, a premier atmospheric chemist, recognized nationally -- ARB is recognized nationally for the modeling, particularly PM2.5 particulate modeling. He teaches nationally. He's recognized around the world, and has truly put ARB on the map with respect to that work. And not only that, the role he plays in mentoring and bringing staff along, which is a key element.

We have these just stellar talent, but also the investment that is being put in to the next generation of scientists, and those that are going to continue to move us forward on our mission. So it was a great experience, great opportunity, and I'm taking to heart Vice Chair Berg your recommendation in terms of Board member participation, which I think will be mutually beneficial. So thank you.

VICE CHAIR BERG: Well, thank you. Mary had always said that this was one of her favorite events. And after participating, and the enthusiasm, it is very obvious as to why. So please get this on our calendar for next year, and I, for one, will be very enthusiastic to be there. So thank you. And congratulations. I think on behalf of the Board, we would absolutely say congratulations to everyone at ARB that was recognized during September. So thank you.

Well, this morning we do have a consent item, but the consent item has come off of the consent agenda, because we do have two people that would like to speak on this item.

So I will go to my off-consent Chair statement.

(Laughter.)

VICE CHAIR BERG: This, I'm still learning --

(Laughter.)

VICE CHAIR BERG: -- but I'm on the right page.

Okay. So our first item is Item number 16-8-1. And it is a item to consider the ozone designation recommendation for the revised National Ozone Standard at 70 parts per million. We do have two people requesting to speak. And so I will turn it over to Mr. Corey to summarize this item.

Except now, I'm getting -- stay tuned, I'll be right back with you.

(Laughter.)

VICE CHAIR BERG: You know sometimes it's just a test --

(Laughter.)

VICE CHAIR BERG: -- but I'm up for it.

I'll be speaking to these two people that I personally know -- no, actually, their comments apply to a different item. And so they're going to reserve their comments for an item that's not on the consent agenda.

So back to my previous page where I will now state that we have a consent item, and the Board Clerk has just informed me that nobody has signed up to testify.

And so now I'd like to ask my fellow Board members if anybody would like it to be removed from the consent item.

Seeing none.

I will close the record on this agenda item. And given that we've had an opportunity to review this resolution, can I have a motion and a second to adopt.

BOARD MEMBER SHERRIFFS: Move the item.

BOARD MEMBER BALMES: Second.

CHAIR NICHOLS: All in favor?

(Unanimous aye vote.)

VICE CHAIR BERG: Opposed?

Anybody abstaining?

Wonderful.

So our second Item is 16-8-6. And it is the proposed 2016 State strategy for the State Implementation Plan or the State SIP Strategy, which staff released for public comment in May.

Statewide, about 12 million Californians live in communities that exceed the federal ozone and PM2.5 standards, and the health and economic impacts of exposures to elevated levels of ozone and PM2.5 in California are considerable. Over the next 15 years, to address these concerns, California will need to build upon its successful efforts in order to meet critical air quality and climate goals.

This is the first of two hearings on the State Sip Strategy. There will not be of a vote. However, we will be looking for direction from our Board. Today is an informational briefing, and an opportunity for public comment and to give staff direction on how to proceed.

I look forward to the Board discussion here today, and its important effort to provide a foundation of much of ARB's work over the coming years.

Mr. Corey, will you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks, Vice Chair Berg. Given the significance of mobile source emissions in California, the State Sip Strategy is a critical element of California's State Implementation Plan, or SIP.

(Thereupon an overhead presentation was presented as follows.)

EXECUTIVE OFFICER COREY: SIPs consist of a combination of State and local air quality planning documents that together must demonstrate how California will meet federal air quality standards.

Given the severity of the challenge in the South Coast, and the San Joaquin Valley, substantial reductions from both mobile and stationary sources will be necessary to meet ozone and PM2.5 standards in these regions.

The State Sip Strategy represents the State's action to achieve the emission reductions from mobile sources and consumer products that are needed over the next 15 years. Meeting the standards will pay substantial dividends in terms of reducing costs associated with emergency room visits and hospitalizations, lost work and school days, and most critically premature mortality.

This year's SIPs are therefore an important step in bringing healthy air quality to all Californians. Today's presentation will be the first, as noted, of 2 hearings on the State SIP Strategy.

Today, staff will present the proposed strategy and solicit comments from the Board and the public. In January of 2017, staff will present for Board's consideration the State SIP Strategy, and final Environmental Analysis.

I'll now ask Kirsten Cayabyab of the Air Quality

Planning and Science Division to begin the staff presentation.

Kirsten.

AIR POLLUTION SPECIALIST CAYABYAB: Thank you, Mr. Corey. Good morning, Vice Chair Berg and members of the Board.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: In today's presentation, I'll provide an overview of the proposed State Sip -- State strategy for the State Implementation Plan released on May 17th.

The strategy is a key component of SIPs for the South Coast and San Joaquin Valley, the areas of the State with the greatest air quality challenges. Today's item will provide an opportunity for continued stakeholder input and Board direction on development and revisions to the strategy. Based on that feedback, we will bring back a final strategy for the Board's consideration in January.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: I'd like to start by framing the importance of the strategy. Mobile sources and the fossil fuels that power them are the largest contributors to the formation of ozone, PM2.5, diesel particulate matter, and greenhouse gas emissions in California. They are responsible for over 80 percent of smog-forming oxides of nitrogen emissions, nearly 50 percent of greenhouse gas emissions, and over 90 percent of diesel particulate matter emissions.

Given these contributions, we have taken an integrated planning approach in developing a Mobile Source Strategy to collectively meet California's air quality, climate, and risk reduction goals.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Staff presented a discussion draft of the Mobile Source Strategy to the Board last fall and released an update in May 2016. As an integrated plan, the Mobile Source Strategy has been providing a framework to link multiple ARB planning efforts currently underway.

Each plan shown on the chart draws elements from the Mobile Source Strategy needed to meet its individual goals. For example, the scoping plan will reflect the mobile source actions that provide greenhouse gas reductions. These actions were discussed at a scoping plan workshop last week. The Short-Lived Climate Pollutant Plan incorporates actions that reduce black carbon.

The Sustainable Freight Action Plan draws on the freight-related actions in the Mobile Source Strategy, which supports the action plan's long-term vision for zero emissions.

Finally, today we are focusing on the SIP Strategy, which includes measures in the Mobile Source Strategy that provide the criteria pollutant reductions needed to meet air quality standards over the next 15 years.

CHAIR NICHOLS: Excuse the interruption, but I've just been informed that we're having problems with the webcast. I just want to let everyone who's watching or trying to watch know that we're aware of the technical difficulties and they're working on trying to fix it.

Thank you.

AIR POLLUTION SPECIALIST CAYABYAB: Thank you, Chair Nichols.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: With that as background, in the next section of the presentation, I'll describe the SIP development process.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: So what is the SIP?

The SIP is required by the federal Clean Air Act, and serves as a framework for actions to meet health-based air quality standards. It includes a comprehensive technical foundation that provides the basis for identifying the emission control strategy for a region. It also provides the State's legal commitment to achieve all of the needed reductions and the types of actions that will be pursued.

The focus of this year's SIPs is on the 75 parts per billion 8-hour ozone standard, and the 12 microgram per cubic meter annual PM2.5 standard.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: As I noted earlier, the South Coast and San Joaquin Valley are the focus of current SIP efforts. And the responsibility for SIP development is shared between ARB and these air districts. SIPs are first developed at the regional level, and they must be approved by ARB before submittal to EPA. The South Coast released its draft Air Quality Management Plan, or AQMP, on June 30th.

This AQMP includes local measures for stationary and area sources. The SIP strategy is incorporated into the AQMP and provides measures for mobile sources, fuels, and consumer products.

We have coordinated well with the South Coast on draft AQMP. And as a result of that collaboration, the draft AQMP includes measures that are intended to reflect and support implementation of ARB's mobile source measures. The South Coast plans to consider the AQMP in

December. The Board will then consider both the SIP strategy and the AQMP in January 2017.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: As you recall, the Board approved the San Joaquin Valley's ozone plan at the July Board meeting. While the current control program is sufficient to meet the Valley's ozone attainment needs, the SIP Strategy will provide important additional reductions to accelerate rate ozone progress.

Work is still ongoing to define the strategy needed to meet PM2.5 standards in the Valley. Given the diversity of sources, the strategy will need to include both local district actions, as well as strategic use of incentives to increase the penetration of cleaner mobile source technologies.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: SIPs for the South Coast in San Joaquin Valley as well as other regions of the State consist of multiple elements. These include the scientific and technical foundations provided by air quality data, emission inventories, air quality modeling, and technology assessments. This is an extensive multi-year effort by both ARB and air districts to support the development of the control strategy.

Along with these elements, the SIP also provides

ARB's legal commitment to undertake the actions needed to implement the strategy.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: The scientific foundation begins with air quality data gathered throughout the State. California's networks consist of over 200 locations characterizing regional exposure. This data helps us define the scope of the air quality challenge as part of the initial process for designating areas as attainment or nonattainment.

Statewide, about 12 million Californians live in communities that exceed current ozone and PM2.5 standards. Two areas of the State, the South Coast and the San Joaquin Valley have the highest concentrations, as shown to the map -- in the map to the left.

While the plan before you will provide important public health benefits throughout the State and provide emission reductions needed for the 70 parts per billion ozone standard EPA finalized in 2015, the severity of ozone levels in the South Coast and PM2.5 levels in the San Joaquin Valley drive the scope and timing of needed emission reductions.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: The next step is identifying key sources contributing to air quality in each region. Emission inventories provide a comprehensive accounting of emissions for sources throughout the State, ranging from passenger cars to ocean-going vessels, and use of consumer products to large industrial facilities.

Each SIP includes comprehensive updates to the emissions inventory. This process began over 3 years ago through a joint effort between ARB and district staff. The inventory updates focused on both current emissions, as well as forecasts of future levels based on current control programs coupled with estimates of population and economic growth. A key element included an extensive update to ARB's mobile source emissions model.

As seen in this chart, due to the success of the current control program, NOx emissions in the South Coast are projected to decrease over 50 percent from today's levels by 2031. While emissions of all mobile sources are decreasing, as shown in the graphic, heavy-duty trucks in red, and federal sources such as locomotives, ocean-going vessels, and, aircraft in green, remain some of the largest contributors. Therefore, the strategy must address a wide variety of mobile sources.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Air quality models then integrate air quality and emissions data, along with weather with weather patterns to predict future air quality. California's modeling is based on decades of research and field studies, and has been regularly updated to reflect the latest science in EPA model and guidance.

This modeling provides the basis for determining the emission reductions needed for attainment, as well as evaluating the benefits of controlling various precursors.

Over the last 2 years, ARB and district staff has been collaborating on developing inputs, evaluating the performance of the model, and conducting hundreds of modeling runs to inform development of the strategy.

The result of this work has demonstrated the effectiveness of NOx controls and the need for significant NOx reductions to meet both ozone and PM2.5 standards.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: As part of current SIP efforts, air quality modeling shows that an approximately 80 percent reduction in NOx will be needed to reach the 75 ppb ozone standard by 2031 in the South Coast. Implementation of the existing program provides a significant downpayment achieving two-thirds of the needed NOx reductions. These reductions are also sufficient to provide the 50 percent reduction in NOx emissions needed for attainment of the ozone standard in the San Joaquin Valley.

As discussed earlier, meeting PM2.5 standards in the valley is the valley's greater challenge. Staff will be providing an initial discussion of the strategy needs at next month's Board meeting in with full SIP consideration next summer.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Building from attainment needs -- building from attainment needs, technology assessments evaluate the capabilities -- is that working?

I think my -- building from attainment -- check. Check

VICE CHAIR BERG: I don't -- I don't -- it's not your microphone. We just had them take it down a hair, because it was a little bit -- so they're going to fix it for you.

AIR POLLUTION SPECIALIST CAYABYAB: Check.

Okay. Building from attainment needs, technology assessments evaluate the capabilities of cost effectiveness of new technologies and fuels. ARB staff, in collaboration with EPA and the South Coast, began this effort times on the status of technology in key sectors. The assessments have demonstrated the great -- the next generation of cleaner technologies is here today.

Light-duty zero emission technologies are gaining market share and fueling infrastructure continues to expand. A Cummins Heavy-duty natural gas engine has now been certified to the optional low-NOx standard. And heavy-duty zero emission technologies are currently being demonstrated in applications such as transit buses and delivery trucks.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: These technical components have informed the measures proposed in the SIP Strategy, which consists of a comprehensive set of actions for mobile sources, fuels, and consumer products. The strategy is designed to provide ARB's commitment to achieve all of the emission reductions needed to meet air quality standards. As illustrated in the graphic on the right, in aggregate these actions will provide the overall 80 percent reduction needed in the South Coast by 2031. The measures will also serve as a foundation for future SIPs -- for future standards, such as the 75 parts per billion 8-hour zone standard covered in the consent time you just considered.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: ARB's commitment to achieve these reductions consists of 2 components, a commitment to take action on new measures according to an implementation schedule, and a commitment to achieve aggregate emission reductions by specific dates.

If a particular matter does not achieve its expected emission reductions, the Clean Air Act provides flexibility to achieve those reductions from alternate measures to meet the overall aggregate commitments.

Finally, once a SIP is submitted to EPA, the commitment to attain the aggregate reductions and the action dates becomes federally enforceable.

The next 2 slides delve more into each of these 2 components.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: The first part of the legal commitment is the proposed implementation schedule. It identifies the timing for bringing each measure to the Board or otherwise take action, as well as initial implementation dates. These actions proposed in the strategy include new regulatory measures, petitions for federal action, and international advocacy, as well as working with other State agencies, such as the Bureau of Automotive Repair.

After the plan is approved by EPA, ARB's rule development process for each proposed measure provides an additional opportunity for public and stakeholder input as well as further assessments of costs, feasibility, and environmental impacts.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: The second element of the commitment is to achieve a defined level of aggregate emission reductions. This reflects reductions from both the current control program and new actions needed to reach attainments.

Regulatory actions that establish requirements for cleaner technologies comprise the core of the overall strategy. The dark blue in the chart on the left represents the regulatory reductions. So, for example, existing regulations and new proposed regulations for passenger cars provide 93 percent of the overall reductions for the sector. For trucks, current and proposed regulations provide 88 percent of the reductions.

The relative proportion of regulatory and incentive reductions varies by sector reflecting differences in the maturity of the current control program authority and technology developments. Thus, for sources regulated by EPA and international agencies and for off-road sources, incentives will need to play a bigger role. Overall, approximately 80 percent of the reductions in the strategy come from regulations.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: So what actions are called for in the strategy?

The subsequent slide provides and overrule of the proposed measures.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: The SIP Strategy proposes a comprehensive list of measures to deploy the cleanest technology and fuels through a suite of mechanisms. A key aspect is establishing more stringent engines standards. The majority of the NOx reduction results from these cleaner standards. The strategy then includes a number of measures that build on the new standards to increase the penetration of cleaner burning and zero emission technologies across multiple sectors.

These actions lay the groundwork for the long-term transformation that will be needed as outlined in the freight strategy. Zero emission technologies will be especially important for risk reduction in disadvantaged communities.

Along with these efforts, other measures ensure that vehicle engines continue to operate as cleanly as possible throughout their useful life. The strategy also calls for expanding the use of cleaner renewable fuels and conducting pilot studies and demonstrations to further support the developments of new technologies.

Finally, measures in each sector provide pathways to incentivize early deployment of these cleaner technologies. In the next series of slides I'll highlight a number of key actions, as well as how the approaches being considered have been refined due to the continued review and discussion with stakeholders.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: For the heavy-duty duty truck sector, combustion technology will continue to dominate over the next 15 years. The SIP Strategy therefore calls for establishing a new low NOx standard that is effectively 90 percent cleaner than today's standard, coupled with in-use performance requirements to ensure the fleet continues to operate as cleanly as possible and greater certification flexibility for advanced technologies.

However, as out-of-state trucks account for large -- for a large portion of truck activity, federal actions to implement a national low NOx engine standard is essential.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: To facilitate this effort, ARB staff have been working with EPA over the past two years to support the development of a federal low-NOx standard. Additionally, the South Coast and San Joaquin Valley air districts in partnership with other states recently submitted petitions to EPA requesting federal action. As a result of this ongoing engagement, in their final rule-making on the phase 2 GHG standards in August, EPA signaled their intent to begin developing more stringent federal NOx emission standards, in recognition of the need to pursue a harmonized national strategy in coordination with ARB.

ARB is strongly encouraged by this acknowledgement, and will continue our collaboration efforts on development of more stringent standards.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Establishing cleaner engine standards is also critical for sources such as locomotives and ocean-going vessels. Therefore, the strategy includes a petition for EPA action to establish a cleaner tier 5 engine standard for locomotives, along with stricter standards for remanufactured locomotives.

ARB staff has begun development of this petition. The strategy also includes a measure to advocate with international partners for stricter international maritime organization emission standards for ocean-going vessels.

--o0o-- care

AIR POLLUTION SPECIALIST CAYABYAB: For passenger cars, the focus is on increasing the penetration of zero-emission technologies. Building on the current

Advanced Clean Cars program, the strategy includes a measure that will ensure the continued expansion of the passenger ZEV market beyond 2026, while also increasing the stringency of fleet-wide emission standards.

This would result in over 4 million zero emission and hybrid passenger vehicles on the road by 2030. As part of the continued technology assessments, staff will be briefing the Board on the mid-term review for the current Advanced Clean Cars program at the end of the year. Similar to heavy-duty trucks, the strategy also specifies actions to ensure that passenger vehicles continue to operate as cleanly as possible.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: To expand ZEVs into heavier applications, the strategy includes measures for introduction of advanced technologies and applications that are well-suited to early adoption of ZEVs, such as transit fleets and last mile delivery.

Staff has continued to evaluate appropriate approaches for these sectors that take into account the characteristics of public and private fleets and their modes of service. For transit fleets, we have been following up on your direction to staff from last February's Board briefing.

In particular, this includes your direction that any action on transit fleets must not lead to reduced service, especially in disadvantaged communities. Staff has been meeting with transit agencies to gather information on costs to gain a better understanding of transit agencies financing challenges.

Staff efforts are still at the data-gathering phase, and no specific concepts have been developed. Staff will continue to hold workgroup meetings throughout this process.

For last mile delivery, the large delivery companies have reached out to ARB staff to share their interest in pursuing ZEVs in this sector. While very interested in these technologies, they are concerned that a purchasing requirement alone will not ensure that manufactures can support the demand for trucks and ongoing service and maintenance.

While the active participation of the delivery -- with the active participation of the delivery industry, staff believes that this is an area that zero emission technology can be put into service in the near term. ARB staff will be initiating a stakeholder working group as part of the measured development process that includes both the delivery companies and the manufacturers.

Discussions will then include consideration of both purchase and manufacturer requirements, ways to use the advanced technology credit provisions EPA has included in its phase 2 rule, and the role of incentives.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: For off-road equipment, zero emission technologies are becoming increasingly available in certain applications. Thus, measures will establish requirements for increasing use of zero emission technologies for lawn and garden equipment, forklifts, transport refrigeration units, and airport ground support equipment.

In addition, technology assessments will be conducted to assess the emission reduction potential from increased worksite efficiencies and advanced technologies such as connected vehicles and automation. Along with other sectors, these measures provide the foundation for longer term transformation to zero emission technologies.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: In addition to setting requirements for cleaner engine standards and zero emission vehicles and equipment, the strategy also includes measures to incentivize the development of these cleaner technologies to ensure sufficient market penetration by attainment deadlines.

These measures include a suite of potential actions, which include: Incentive programs and advocacy for further federal and international action, further regulatory strategies, increasing system efficiencies, and utilizing intelligent transportation systems, and emerging autonomous and connected vehicle technologies such as truck platooning.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Beyond technology measures, the strategy includes development of specifications for a cleaner low-NOx fuel. The low emission diesel fuel standard would require that diesel fuel providers sell steadily increasing volumes of low-emission diesel until it comprises 50 percent of total diesel sales by 2031. The proposed measure would be phased in through a gradual implementation strategy that starts in the South Coast and subsequently expands statewide.

This measure is an important component of ARB's renewable fuels program, as it would provide both NOx and GHG benefits.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Finally, the SIP strategy also includes a measure to reduce emissions from consumer products. Consumer products, such as personal, household, and automotive care products are the largest source of ROG emissions in the South Coast.

Current regulations have been effective in substantially reducing emissions from these products.

Looking forward, the primary focus of the measure would be to maintain the success in light of population growth. Approaches being considered include evaluating categories with higher mass and reactivity, investing concepts for expanding manufacturer compliance options, and reviewing existing exemptions.

ARB staff is continuing to work with the consumer products industry on potential emission reduction needs and approaches for the sector.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: In the final section, I'll talk about what will be occurring over the next several months.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Implementing the SIP Strategy will require efforts not only by ARB, but also local air districts, EPA, and other international agencies. ARB staff is continuing to collaborate with the South Coast and the San Joaquin Valley on developing a comprehensive funding plan to identify overall funding needs and financing mechanisms.

As part of this effort, the South Coast has begun to map out a broad suite of potential funding mechanisms at the local, State, and federal level. These approaches will look to maximize criteria pollutants and GHG reduction benefits. Distribution of incentive funds will also need to consider mechanisms to ensure they benefit disadvantaged communities.

To ensure that SIPs meet Clean Air Act requirements, ARB is also working with EPA to develop the appropriate programmatic structure to credit incentive-based measures in the SIP. This includes reductions from incentive funding that has already been spent, appropriations that have not yet been distributed, and future incentives where the funding needs still need to be raised.

Finally, ongoing coordination is also underway with other State partners to develop the necessary infrastructure for advanced technologies and fueling systems.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: As part of the SIP Strategy, an economic analysis assessed statewide costs and benefits on affected industries as well as the overall economy. The total direct cost of implementing the prosed strategy is approximately $60 billion over the lifetime of the program. The actions and the strategies support multiple planning efforts.

As such, the investments in cleaner technologies and fuels provide multiple environmental benefits, including ozone and PM2.5 attainment, greenhouse gas reductions, and risk reduction.

--o0o--

AIR POLLUTION SPECIALIST CAYABYAB: Along with the economic assessment, staff also released a draft Environmental Analysis, which identified potentially significant impacts for some resource areas.

We are in the process of preparing responses to relevant comments received, which along with a final Environmental Analysis, will be posted for the Board consideration prior to the January Board hearing. Moving forward, staff will continue with ongoing stakeholder engagements. Based on that feedback and direction from today's Board meeting, we will bring the SIP strategy back for Board consideration in January.

Staff will also initiate actions for the proposed measures, a number of which are slated for consideration next year, as well as continue to work with the South Coast on implementing mobile source measures at the local level.

And, as I mentioned earlier, after the districts adopt SIPs at the regional level, each area's plan, including State and local components, will be brought to the Board for consideration. Upon Board approval, the SIP Strategy and area plans will then be submitted to EPA.

This concludes the presentation and we will be happy to answer any questions from the Board.

CHAIR NICHOLS: Thank you. We have a list of witnesses who've signed up. There are 20 of them, so it fits neatly onto one page.

(Laughter.)

CHAIR NICHOLS: However, if you want to go over to a second page, we would appreciate it if you would let the Board clerk know, so that she can quickly spring into action and put the rest of them together.

I want to say a word as Henry Hogo is coming up here about to be our first speaker, about the context of what we're doing here, because it just -- it's kind of irresistible with this item being the first on our agenda.

So I think everybody knows, but we don't necessarily always articulate that the mobile source strategy and the SIP are at the core of what we do. They are the foundation of what the Air Resources Board is, what it was created to do, which was to reduce the impacts on health of motor vehicles in the State of California, and we've built our program really on this core of our expertise.

As it happens, the pollutants that we are focusing on in the SIP are the National Ambient Air Quality Standards, which are defined in terms of health effects of those particular pollutants that it covers, and are not -- do not include explicitly either toxic air contaminants that affect people also directly in communities, or the global pollutants that we talk about so much in terms of AB 32 and now SB 32.

An yet, the vehicles that we are talking about here, and the fuels that we are talking about here are at least as important in terms of their impact on those pollutants, both the localized toxics and the global pollutants, as they are on the pollutants that we deal with in the SIP.

And so I guess in addition to that kind of statement of the obvious, but hopefully as a -- just as a reminder of what we're doing here, the reason for bringing it up right now is that in the Environmental Assessment that you're talking about, which needs to be done as part of the SIP, it seems to me that we also need to be taking into account the effects of these measures that we're proposing on those other two areas of our responsibility, as well as any other environmental impacts that they might have -- that these strategies might have.

And I just want to make sure, and I guess I'm really looking to Mr. Corey here, but others may wish to join in, that we're -- that we have a process in place that enables us to do that, because this is very hard actually to be thinking on three plains at the same time, and to be making sure that what we're doing is moving us forward on all of them at the same time, especially when it seems at least likely that some of the strategies are going to be more beneficial in one area than they are in another.

So this is a thought question here, and obviously I didn't -- I wasn't planning on asking it, but I'd like your comment anyway.

(Laughter.)

EXECUTIVE OFFICER COREY: Yeah. Mary, not one to hold back. But in terms of the Environmental Assessment, answering that question -- and you know at the plan stage, they're conceptual, but the environmental characterization is intended -- does need to answer that question as best as we can. So to me, there are a few ways that it's addressed.

One, as much specificity in the environmental document, what the potential implications are for the other pollutants you're talking about, and at a more specific high resolution level when the individual measures are developed and brought before this Board, in other words a met mobile source measure that's targeted, let's say, focusing on NOx, what are the implications of that proposed measure with respect to toxics and GHG? So the technical analysis would absolutely address that question.

CHAIR NICHOLS: Okay. Thank you.

Mr. Hogo. Now, you're here.

MR. HOGO: Good morning, Chairman -- good morning, Chairman Nichols and members of the Board. I'm Henry Hogo Assistant Deputy Executive Officer at the South Coast AQMD.

First, I would like to commend Mr. Corey and staff for working closely with the South Coast District staff in preparing not only the State Mobile Source Strategy, but also the various technical elements of the 2016 Air Quality Management Plan for the South Coast Air Basin and Coachella Valley.

The working, coordination, and cooperation between the staffs of the two agencies over the last three years is truly unprecedented. It is for this reason that the South Coast District staff believes that we have a strong plan to achieve clean air in Southern California. The South Coast District staff has been involved from the very beginning in the discussions on technical data, in identifying areas to pursue further emission reductions from mobile sources.

The draft State SIP Strategy is critical for the South Coast region to attain federal ozone air quality standards over the next 7 to 15 years, as well as the federal fine particulate air quality standards.

The South Coast District staff recognizes the challenges the State faces in developing regulatory proposals to meet air quality standards, especially given the existing regulatory requirements for new and existing vehicles that extend out to the 2025 time frame. As such, financial incentives will play a critical role in accelerating the early retirement of older vehicles, while at the same time incentivizing the purchase of the cleanest commercially-available vehicles.

This includes the prioritization of zero emission technologies wherever feasible, and near zero emission technology everywhere else.

We are seeing greater numbers of zero emission vehicle products being offered. However, zero emission technologies are not yet feasible or available for every vocation. As such, we need to begin incentivizing near zero emission technologies wherever possible in order to meet short-term attainment deadlines, and to realize real improvements in public health as early as possible.

We believe that the approach of incentivizing near zero emission technologies in near-term will not cause delays in the development of zero emission technologies, if we are able to incentivize fleets wisely.

However, additional near zero emission technology products need to be developed and commercialized as quickly as possible. This is why the South Coast AQMD along with a broad-based national collation of over 16 co-signers and supporters petition U.S. EPA to develop new ultra-low NOx engine emission standards. We are encouraged that U.S. EPA will be starting this effort shortly.

I would like to focus the remainder of my comments on the proposed further development cleaner technology measures.

The measures call for a significant amount of emission reduction commitments to help the South Coast region -- if I may?

CHAIR NICHOLS: Please, finish.

MR. HOGO: It's significant -- the measures call for a significant amount of emission reduction commitments to health the South Coast region attain federal air quality standards. Implementation of these measures require a combination of funding incentives in the near term with potential regulatory actions in the longer term.

In addition, proposed implementation approaches include quantification of emission reduction benefits from operational efficiencies, and co-benefits of greater deployment of autonomous vehicles, connected vehicles, and intelligent transportation systems. Many perceive these measures as black box in nature, given that there are uncertainties in obtaining additional incentive funding and the ability to quantify operational efficiency.

As such, the South Coast Air District is listed as an implementing agency for the further deployment measure. We have included 15 local mobile source measures that are designed to provide additional certainty to the further deployment measures. They propose a specific process to identify additional emission reductions that the further deployment measures can be approvable by U.S. EPA and not be considered as black box measures. We truly want to eliminate the black box.

The South Coast District has received a number of comments that the district-proposed mobile source measures are not needed, since they do not identify any associated emission reductions and that the South Coast District mobile source measures should be removed.

On the other hand, we have also received comments that the proposed process does not go far enough to provide that certainty, and that the South Coast District should immediately begin rule development to require affected sources to reduce emissions.

Given the challenges the region faces in meeting the federal air quality standard by 2023, there is a need to work collaboratively to achieve the needed emission reductions in the near term. This is why the South Coast District staff is proposing to work with the stakeholders to enable their desire for action to clean our air, to, in essence, trust that they will achieve their emission reductions. Concurrently, we will strive to find sufficient incentives funding or identify actions and verify that the stakeholder's actions are real.

If we do not see commensurate stakeholder progress, we will pivot and develop rules to bring about the necessary requirements to achieve further emission reductions. In essence, we will move towards regulatory as -- the regulatory aspect and enforcement

So we're taking this approach that in the near term we need to get these reductions very quickly, and -- in order to meet the further development deployment measures that are in the State SIP. We believe we're setting a process to do that, and we're going to give ourselves one year to go through a collaborative process. And if after one year, if we don't see sufficient funding or identify sufficient actions, we will propose our Board to do a rule-making.

CHAIR NICHOLS: Excuse me. Thank you. Are you finished?

MR. HOGO: So basically concludes my -- I want to say that we stand ready to work with your staff on moving forward.

CHAIR NICHOLS: Okay. Thank you. I obviously let you complete your statement, because it's very interesting, and it's also not exactly typical testimony on a presentation. You're really proposing a rather complicated alternative. And this is ground that has been litigated many times in many different places, as you know, approvability of a SIP, and how strong the commitments have to be, and how enforceable, and when.

So this is going to require quite a lot of thought and communication between the State and the local district around this issue. And I assure you we take it very seriously. And I know in the past when needed, we've convened a process where we've had board-to-board meetings to resolve some of these questions as well. I don't know if that's appropriate at this point, but it's certainly something that we would stand ready to offer, if that seems to be necessary, because there's -- this is really breaking new ground here in many ways. And we need to figure out how to accommodate the wishes of the District while at the same time meeting our legal responsibilities as well. So thank you for that.

MR. HOGO: Chair Nichol, if I may comment?

CHAIR NICHOLS: Yes.

MR. HOGO: We don't think it's an alternative. It's really complementary that we're providing certainty to those further deployment measures, so that they're not treated as black box measures. And that's our approach to work with your staff in moving forward with implementation to get those reductions.

CHAIR NICHOLS: Okay. Well, I hope we'll be hearing back before this comes back to the Board.

Thank you.

Mr. Sheikh.

MR. SHEIKH: Good morning, Chairman, members of the Board. Thank you for the opportunity to provide some brief comments on the strategy. I wanted to start off by commending Mr. Corey, Mr. Karperos, Ms. Magliano, the entire time, very big team that's worked on this strategy, very comprehensive and highly complex, as we've all heard.

And as you know, the difficulty in meeting air quality standards in the San Joaquin Valley is really unmatched by any other region in the nation. We have a variety of reasons why the challenge is as great as it is. And over the years, we've had to adopt over 600 regulations to reduce emissions from a variety of sources. We've worked closely with ARB to look for ways to reduce emissions, and through those efforts have really done a great job over the years actually in reducing emissions significantly by over 80 percent to where now still, you know, stationary sources make up 15 percent of our total emissions and 85 percent of our total NOx emissions come from mobile sources.

As we move forward with trying to address the very difficult PM2.5 standards that were mentioned earlier during the staff presentation, it's really important that the district continue to leave no stone unturned, and looking for technologically and economically feasible ways of reducing emissions. And that was mentioned earlier during the presentation. Those are measures that would expedites attainment and protect public health.

But the fact of the matter is that the mobile sources do make up the significant majority of the remaining NOx emissions in the valley. That is a primary precursor to PM2.5. And we really are at a critical juncture in our journey towards meeting federal clean air mandates with several PM2.5 ambient air quality standards that we'd have to meet that do require some enormous emissions reductions in order for us to demonstrate attainment, and really the development and deployment of Transformative measures in the coming years.

As Henry mentioned earlier, unfortunately with

PM2.5, and fortunately from a public health perspective, but unfortunately with respect to developing our attainment plans, we don't have a black box provision for PM2.5. And as hard as we're going to work collectively to avoid a black box in South Coast, when you're talking about a 2019 and 2025 attainment time frame for PM2.5, whether it's the '06 standard or the '012 standard, you don't have that ability to develop attainment plans that rely on these further yet-to-be-developed measures.

And so we do have to actually find a way of quantifiably and enforceably put together a suite of measures that bring about those necessary reductions.

We all agree that the ARB, South Coast, and San Joaquin Valley that we do need to come up with a suite of both regulatory and incentive-based measures to bring about those reductions and are going to be essential components of putting together our upcoming PM2.5 SIPs.

We appreciate staff's recognition in putting this strategy together that we do need to achieve those reductions. However, as you've heard in the prior presentation, and as you've seen in the draft strategy, right now it really is currently focused on bringing about the necessary reductions by that 2023 and 2031 time frame with the South Coast plan sort of ahead of our plan and that schedule.

And so, you know, one of the biggest requests that we have today as we move forward in working with your staff in putting this together is that we explicitly recognize the 2019 and 2025 attainment deadlines.

If I may just have a few more seconds here to finish.

CHAIR NICHOLS:

MR. SHEIKH: As part of the process, we appreciate the commitment that's been made to continue to work with us on defining those dates and the required reductions and how the strategy would bring about those reductions. It's going to be absolutely essential. There's no way that we see ourselves putting together a federally approvable attainment plan or plans for those standards without actually having, as with South Coast, defined measures that show how we're going to bring about that massive amount of reductions that we need by those very, very quick time frames.

So I wanted to again just close by appreciating and recognizing staff for their presentation today, bringing this item to your Board, and also committing to working with us on explicitly defining those PM2.5 needed reductions, and working with us to identify those potential measures. And we look forward to working with staff as you move forward with that.

So thank you very much.

CHAIR NICHOLS: Thank you.

Mr. Altamura.

MR. ALTAMURA: Good Morning, Madam Chair and members. My name is Ivan Altamura. I'm with Capital Advocacy and I'm here today on behalf of Global Automakers.

Global Automakers represents -- is an association of automakers that represents 12 international automobile manufacturers. These manufacturers represent 50 percent of the overall sales of vehicles in California, as well as 79 percent of the overall green vehicle sales in the State.

Global automakers members are invested in the long-term goals of reducing greenhouse has emissions, increasing fuel efficiencies, and improving air quality. We're developing innovative technologies to meet these goals, and will continue to invest in those. These efforts require significant resources on our manufacturers parts, ongoing fleet changes, and time to implement these changes.

We also know that the road to meeting the 2025 vehicle requirements is very challenging. The SIP identifies measures to provide important air quality improvements beyond 2025. This plan relies quite a bit on further mobile resource improvements, and incorporates efforts identified in the recent Mobile Source Strategy. We recognize that mobile source reduction must be apart of the solution, and our members are committed as always to working collaboratively with the Board and ARB staff on solutions that are good for everyone in California.

In that vein, Global Automakers would like to raise the following two areas for the Board's consideration:

First, the SIP Strategy and corresponding Mobile Source Strategy are preliminarily looked -- are preliminarily looked at a potential future -- futuristic scenario. It reflects a modeling exercise base on the State's long-term air quality and climate change goals. At the same time, ARB's modeling is the foundational tool that informs policy. But the model does not consider the regulatory cost, technical feasibility, or most importantly the impact on customers, and we believe that these factors must be considered.

Global Automakers also believes there are likely many possible mobile source reduction scenarios going forward. Further analysis of the assumptions and the scenarios will help the State create a more flexible and cost effective approach to the SIP goals as well as the GHG goals the State has.

We are committed to working with staff to make sure that the modeling is accurate and reflects both the goals of the State, as well as the best estimates of where technological improvements can take us in the future.

And secondly, the Board should remain open to all technology options and regulatory frameworks that meet the State SIP. An example of this is the change to ARB's previous modeling between 2009 and 2016. Seven years ago, it appeared that the only solutions for 2020 -- excuse me, 2050 would include fuel cells and battery electric vehicles.

More recently, ARB concluded that -- three more sentences.

CHAIR NICHOLS: All right.

(Laughter.)

MR. ALTAMURA: May I finish?

CHAIR NICHOLS: Go ahead. Yeah, just finish up.

MR. ALTAMURA: More recently, ARB concluded that all cleaner and more efficient technology options, conventional plug-in hybrids, battery, and fuel cells will likely play a role.

And recently, Global Automakers, and individual member companies, have provided ARB with feedback on these additional flexibilities that could be included, while still achieving the State's goals.

And thus, we encourage the staff to consider and evaluate additional sources. We think it's important to offer strategies to solve the problems, and we think that deciding too soon on one specific pathway, at the exclusions of others, would lock the State into potentially an unnecessarily expensive or less flexible strategy.

And, we, at Global Automakers, look forward to continuing to work with the agency on finding solutions.

Thank you.

MR. SHIMODA: Good morning. Chairman Nichols, members of the Board I'm Chris Shimoda with the California Trucking Association. And just wanted to comment today on the proposed last mile delivery control measure.

So since the draft SIP was released, we've had a series of very productive discussions with your staff, and are supportive of the current direction that they're taking to convene a work group with other key stakeholders and to explore a broader set of potential implementation tools.

And as stated in the staff presentation, our impact members share an interest with the Board to advance the commercialization of electric drive capable vehicles in the last mile delivery space, and look forward to working with ARB on this process.

So thank you.

CHAIR NICHOLS: Thank you.

MS. GOLDSMITH: Good morning, Chair Nichols and members of the Board. My name is Hannah Goldsmith, and I'm a project manager for the California Electric Transportation Coalition. Our membership is comprised of utilities, major automakers, manufacturers of medium- and heavy-duty plug-in electric vehicles and others supportive of transportation electrification.

Thank you for the opportunity to provide comments on the 2016 State Strategy for the State Implementation Plan. Thank you also to staff for their hard work on this plan, and for engaging stakeholders like us throughout the process.

CalETC submitted written comments on the Mobile Source Strategy and the 26 State -- 2016 State Strategy. And I will be brief. But overall, the broad -- we support the broad suite of proposed measures intended to ensure emission reductions.

We support the commitment to zero emission technology everywhere feasible, and near zero emission technologies powered by clean renewable fuels everywhere else. We also encourage CARB staff and the Board to ensure that the proposed measures, once adopted through formal rule-makings, achieve the emissions benefits contemplated in the Mobile Source Strategy and the 2016 State Strategy.

We know that fleet transformation through measures like the Advanced Clean Transit rule and zero emission last mile delivery may seem ambitious, but the emission reductions from these sectors are both necessary and achievable through cost-effective means.

In relation to costs, CalETC also supports staff's recognition, and we very much also recognize, that incentive funding is and will continue to be critical to achieve further deployment and adoption of advanced clean technologies.

As a final recommendation, we encourage staff to include the role for utilities to help meet the emission reduction goals in the strategy, especially within the SB 350 CPUC process.

Thank you.

CHAIR NICHOLS: Thank you.

MS. POWER: Good morning, Chair Nichols and Board members. I'm Kristin Power with the Consumer Specialty Products Association. CSPA represents the interests of companies engaged in the manufacture, formulation, distribution and sale of consumer products that help household and institutional consumers create cleaner and healthier environments.

Our industry has a long and cooperative history of working with the Air Resources Board to improve air quality. We have worked collaboratively on numerous consumer product regulations over the years that have reduced VOC emissions from regulated products by 50 percent. We are proud to have been able to contribute to the profound improvements that ARB has achieved improving air quality for all Californians.

Our concern with this State Strategy relates to the consumer products program measure that would commit to 10 tons per day statewide and further VOC reductions at an estimated cost of $108 million. CSPA filed extensive written comments in July urging that the tonnage commitment be removed.

It is important to note that the legislative authority to regulate consumer products has some unique provisions. One of those provisions states that to regulate consumer products, the State must have adequate data to establish the regulations are necessary to attain State and federal ambient air quality standards. We believe that this must be done now in the development of this SIP.

We have provided significant scientific data in our written comments that the 10 tons are likely not at all necessary for ozone attainment.

Last week, the South Coast Air Quality Management District released the ozone attainment modeling and alternatives analysis for their draft air quality management plan. Our scientists reviewed those new technical documents thoroughly and surprisingly found that the list of measures used to demonstrate ozone attainment do not appear to include any with reductions in consumer products. They also found that no modeling was done to determine whether or not the consumer products reduction was necessary for attainment.

CSPA is following up with AQMD scientists seeking additional clarification on the modeling and the draft AQMP. Please understand that we are only seeking to have the reduction goal removed. We are not asking that the consumer products program measure be removed from the SIP. We recognize the need to continue our cooperative efforts with ARB, and look forward to working to set additional flexibility and sustained innovation through alternative control measures.

CSPA believes that this can be achieved through enhancement to various provision of existing regulation. CSPA looks forward to continuing this cooperative work with ARB, recognizing that further reductions in consumer product VOCs will be extremely difficult and costly. Thank you for the opportunity to present.

CHAIR NICHOLS: Thanks.

OEHHA ASSISTANT DEPUTY DIRECTOR MARTY:

MR. MARTINEZ: Good morning, Chair Nichols and members of the Board. My name is Adrian Martinez and I'm here on behalf of Earthjustice.

At the outset, I do a lot of work in the South Coast Air Basin As you know, it has some of the worst pollution problems in the nation. This plan is very important. Initially, I just want to -- we've heard that one of the hearings on the State strategy or approval of the South Coast SIP will actually happen in the South Coast Air Basin. We appreciate that. There's a lot of growing concern about very high level of ozone violation days. And I think people really want to participate, present to this Board, and talk about that plan in a public way.

On that point, there's been some push-back from the oversight of this body on the South Coast plan. We think it's important, particularly in places like the NOx reclaim program, which many of our groups think is a broken system that the oil industry others have used to prevent installing life-saving pollution controls.

One of the issues that's been discussed extensively are incentives. And I just want to clarify our points. We provided a letter from 8 groups that was submitted this week, and it was handed out to the Board members. We're concerned about an overreliance on incentives in this plan. And when we look at the incentives, we look at what are the emission reductions that are needed going forward.

The vast majority of those -- of the new programs, new measures -- new reductions are from incentives. And we're not critiquing that to diminish the work that's happened on Prop 1B implementation, the Volkswagen settlement, those types of programs. Those are important efforts that have been undertaken.

But what's being proposed here is such a dramatic increase in the amount of incentives that we don't understand how it's going to be implemented, how it would actually succeed. Just today, the LA Times is reporting on a proposal for a $30 or $50 vehicle license fee increase in the -- for South Coast Air Basin.

We don't understand how that's even first politically feasible. But even if you could get the money, how would you implement such a massive increase in giving out, or free vehicles or replacing vehicles. These types of programs need to be based in reality.

In our letter, we also identify several regulations that we are very happy. The concepts are being put in. We've asked for some of them to be strengthened. I have colleagues here today who will probably address some of those items in more detail. I want to go over one set of new regulations we're proposing, and that's related to port equipment.

I spent quite a bit of time studying the docket for recent particulate matter approval that EPA did around the South Coast plan. The port submitted a lot of letters, and we're suggesting doing regulations on cargo handling equipment and port drayage trucks. We think the concepts could be -- vary in design, but we think it's very important to start that discussion now about how do we increase zero emission vehicles in those sectors in a regulatory manner.

Thank you.

CHAIR NICHOLS: Thank you.

My understanding is that we would hold the final hearing on the SIP in the South Coast basin, isn't that correct?

I'm seeing nodding.

EXECUTIVE OFFICER COREY: That's correct.

CHAIR NICHOLS: Yes, we definitely will. Okay.

MR. LAWSON: Hi. Good morning, Chair, Vice Chair, and the Board. My name is Thomas Lawson. I'm the president of the California Natural Gas Vehicle Coalition.

And we submitted written comments on the Mobile Source Strategy as well as State Sip Strategy. And I wanted to just focus on a few items. One, I think we are very supportive of the adoption of a California, as well as a federal, low-NOx standard. And we think that we are -- we want to be able to offer our assistance in making that happen.

As you know, there was -- which was already mentioned, there was a engine that was already -- a low-NOx engine that is already certified. We think that that's going to be key. And the Air Resources Board, as well as the CEC, has put in a lot of resources as we get to the next phase of a larger engine that's going to be coming to market pretty soon.

One of the things that I also wanted to talk about was we support the projection of almost 900,000 Class 2B and last mile delivery trucks, specifically 425,000 in the Class 7 and 8. But one of the things that we're concerned about is that the plan does not necessarily layout how we get there. You know, obviously, there's a huge focus on incentives, but we also know that there's a huge focus on zero emission in that particular sector.

And one of the concerns that we have is we believe that the low-NOx engine, and using natural gas or renewable natural gas as a cleaner fuel is ready right now. And the question is what happens if the technology in the zero emission space doesn't arrive in time, and how do we switch and pivot? So we believe that there has to be some equity in how that is done.

The other thing when you talk about fuels is, you know, with the passage and signage of SB 1383, there was a provision in there, a section in there, that deals with renewable natural gas, and having a -- the State regulatory agencies focus on how to incorporate the use of renewable natural gas in its plans. And so I know that that was -- the bill obviously passed and signed after this plan was written, but we do want to -- we would like to see some of -- some more inclusion of that in the next draft that comes forward.

I know that our industry is going to provide some additional comments, so I will end there and I appreciate the time.

Thank you.

CHAIR NICHOLS: Thank you.

MR. PIMENTEL: Madam Chair and Board Members, Michael Pimentel for the California Transit Association.

I want to thank you for the opportunity to address you again to discuss the advanced clean transit regulation. I'll admit, it's a fairly small component of the State Implementation Plan before you today. The Association, as you know, represents more than 80 transit agencies across the State. Collectively, our members provide the vast majority of the 1.4 billion unlinked transit trips taken annually in the State. And they do so with ever cleaner fuels and vehicle technologies and to the great benefits of the communities that they serve.

We're here today because the ultimate structure of the ACT regulation, its cost and feasibility remain key concerns for our members. While your staff has just published their initial cost figures, a draft to which we have not yet responded formally, we see some real concerns, and we suspect that some elements may be in direct conflict with what we've seen on the ground.

I want to emphasize for the Board that the conversation surrounding the cost of the ACT regulation is ongoing. Your staff has provided additional opportunities to engage in the evaluation of the cost figures we've seen so far. And the Association is committed to making sure that you have the most accurate cost information available to inform your decision-making process.

The concerns we've discussed with your staff throughout the process also underscore why we look forward to the opportunity to continue to work with ARB staff on the development of alternatives to the ACT purchase mandate. And we appreciate the personal commitment made to us by Mr. Corey and Mr. Kitowski to engage in those discussions and future discussions of costs.

I will now turn to Paul Jablonski, CEO of San Diego Metropolitan Transit System who will go into some greater detail about some of the issues our members have faced in the regulatory process to date, and what we'd like to see moving forward.

So thank you.

MR. JABLONSKI: Thank you, Michael.

Madam Chair and members of the Board, besides running the transit system in San Diego, I'm also the Chair of the CARB initiated Transit Advisory Group to interact with staff on this particular issue. And as Michael said, we're here to talk about one specific part of the implementation plan, and that is the Advanced Clean Transit regulation.

You may recall that, and I've spoken before you before, in sharing the concerns of my colleagues with the purchase mandate of the ACT. And when we were last here and spoke before this Board in February, I thought there was some very specific direction to staff regarding the ACT and looking more towards performance-based technology neutral alternatives, as well as an implementation plan that would not create substantial financial burdens for transit systems and curtail their primary function is to carry people.

I have to admit over the last few days we've had discussions with senior staff of CARB, and I think they have encouraged us to continue to work with them. And they've pledged greater cooperation in coming to some resolution on this. One of the specific things that I wanted to talk about is the estimate for the implementation of the ACT. And I believe the State Implementation Plan says that it's about $95 million.

I can tell you that independent studies in L.A. alone suggest that it's more toward a billion just in L.A., and I know it's several hundred million in San Diego. And so those numbers certainly need to be refined.

There's also kind of a general premise out there of acceptance that the price of zero emission buses is going to come down. Yet, when we look practically at a place like Long Beach, California, who just issued a contract for electric buses for a five-year multi-bus purchase contract, the price of the bus is going up every year by the Producer's Price Index, so it's not coming down. So rather than projections, we need to look at real life.

I think it's hard to justify a purchase mandate in going to electricity especially, as the report indicates, the impact is less than one-tenth of 1 percent on greenhouse gases. But it's almost impossible to justify when you look at alternatives like we are running in San Diego, like L.A., like Sacramento, where we're 100 percent biogas, and now switching to the Cummins new ultra low-NOx engine. And we've been testing that engine for Cummins for the last two years, and it will be commercially available within just a few months.

I think the pilots that are out there now are good, but they have shown that the -- I'll be -- they have shown that -- we're not commercially ready with this technology at this particular time.

What we're advocating for is an incentive-based voluntary program to get electric buses out there.

CHAIR NICHOLS: Right. We have heard you and we've also gotten your testimony. So thank you again for participating and continuing to participate.

Ms. Heffling.

MS. HEFFLING: Good morning, Chair Nichols and Board members. My name is Emily Heffling and I'm an outreach coordinator with the Union of Concerned Scientists. And on behalf of our 78,000 supporters and nearly 3,000 scientific experts in California, I thank you for working to meet the federal air quality standards needed for safer and healthier communities with the proposed SIP.

As our outreach specialist, I get to know first hand what our supporters care the most about. And in California, they care a lot about clean air. That's evident by or exceptionally high engagement and our clean freight and clean bus related actions that we have with them.

Our supporters want to see real change as soon as possible. Fortunately, as all of you know, we do have the technology to get there. And several of those technologies are outlined in the draft SIP. However, the draft does not clearly illustrate how the State will attain these clean air standards.

In particular, at UCS we're most concerned about relying on the strategy identified as further deployment of clean technologies, which lacks the specific details, but represents some of the largest emissions. In addition, to further specifying how reductions in this strategy will be achieved, we encourage ARB to prioritize bolstering the following 3 measures:

First, adjustments to the ZEV Program, which I think you know, are stated already. They're needed to achieve at least 15 percent sales by 2025, in addition to implementing standards in 2026 and beyond.

Second, the Board must adopt a stronger

commitment to the ACT. Like the presentation prior to me, I do think we have to look at reality. And as illustrated by Proterra's recent announcement of their 350-mile range bus, in addition to BYD's new expansion of their manufacturing site in Lancaster, the obstacles of range and cost that were once debated for battery electric buses are quickly being addressed.

So we suggest the purchase requirement increase from 20 percent to 100 percent. Notably, there are also transit agencies in the State already committing to 100 percent by 2030.

Third, last mile delivery trucks are also ready for electrification as ARB has already identified. The proposed requirement of 2.5 sales starting in 2020 is a good start, but leveling off at just 10 percent is simply not enough. And given the critical need to identify greater emission reductions, a higher level of deployment should be targeted for 2030.

Further, the technology for zero emission drayage trucks also advancing rapidly. And the plan does not include regulations for these vehicles, which emit NOx and other pollutants in port communities. So we suggest these trucks also be included for regulatory action in the final SIP.

Regulation and market signals are needed for the

State to make use of the significant investments that we've already made in recent demonstrations of zero emission drayage trucks.

In conclusion -- so in conclusion, thank you, and we hope the plan reflects the urgency that we see on the ground in California.

CHAIR NICHOLS: Thank you.

MR. MAGAVERN: Good morning, Madam Chair and members. I'm Bill Magavern with the Coalition for Clean Air. And, of course, we care a lot about this plan because it's about how we get to clean air. And we've just ended a summer which had many smoggy days in much of the State. So we're reminded of the persistence of our State's air pollution problem.

Reading the plan, we see that we have many successful programs that have worked and are continuing to work to reduce air pollution. There are also proposals for a number of promising new measures like the low emission diesel requirement, which will continue our progress in cleaning up our transportation system.

We agree that it's appropriate to have a mix of regulatory and incentive measures. And indeed, we support the incentive programs and work frequently with your staff on those.

So we absolutely like the idea of turning over the fleets more rapidly to get the cleaner vehicles out on the road, but we do not think that it's appropriate to count on funds that do not exist. And we know about the challenges that many of our incentive programs face, for example, the uncertainty with the Greenhouse Gas Reduction Fund. It's not acceptable to gamble the health of our children on the hope that these dollars will be available, and we don't think that it complies with the Clean Air Act.

For example, the plan projects a scrap and replacement program for light-duty vehicles that would be many, many orders of magnitude higher than anything that's ever been achieved. So much as we like that program and have seen successful pilots, the feasibility of scaling up that rapidly is very doubtful.

Therefore, some of the plans regulatory measures we think should be made more aggressive and some additional measures should be added. For example, in the area of Advanced Clean Cars, we very much agree that the program needs to ramp up in the 2026 and later period. We also think it needs some adjustments through 2025. And this is something you talked about at your last hearing in July.

You know that because of the improved battery technology, there's now a surpluses of credits. And we're on a pace to fall short of the requirements of a million electric vehicles on the road by 2023, and the Governor's goal of a million and a half by 2025.

So the ZEV Program needs a tune-up. We recommend adjusting the credit values for future sales, so that we are not as generous with the credits per vehicle, and also think that you should ensure that manufacturers cannot rely solely on credits to comply, because the goal of the program is to get those zero emission vehicles on the road not just to get credits out there. So my colleague Shrayas will address some of our further recommendations.

MR. JATKAR: Good morning, Madam Chair and members of the Board. Shrayas Jatkar with Coalition for Clean Air. As others have noted, we support the State strategy for requiring zero emission technologies everywhere feasible, and near zero emission with low carbon fuels everywhere else, in order to actually reduce emissions and deal with the health damaging and climate disrupting effects from the mobile source sector.

We're pleased to see zero emission requirements in a number of sectors and vocations, where the technology is feasible, and that includes on-road and off-road. And those have been mentioned in the staff presentation. And off-road, you saw that in forklifts, for instance, and on-road in clean transit, last mile delivery.

And there at least 2 places where we see that the proposed measures need to be strengthened in this area, and that is in the clean transit and last mile delivery sectors, which Emily from Union of Concerned Scientists addressed earlier.

And I wanted to say a few other points about this that have not been mentioned so far. So, you know, thankfully we have Greenhouse Gas Reduction Fund money that has been appropriated by the legislature. Next month you'll be asked to consider the final funding plan, which includes $60 million for shovel-ready projects that would actually be for zero emission trucks and buses.

And so to complement that incentive money, we think that the regulations on those sectors should be strengthened. As noted earlier, the purchase requirements should be increased to get greater deployment of those vehicles on the road. And, of course, we already see a number of zero emission buses in California. And in the last mile delivery sector, we see those on our streets here in Sacramento every day.

And so we know the technology is available. It's commercially available as well. And to the point around emissions, while these are, you know, small sectors within an overall State strategy, this is an important part of the puzzle we think that requiring greater deployment of these zero emission technologies is really important for the heavy-duty sector overall.

With clean transit, we, of course, have a workgroup already underway, and just want to commend staff for the work to address the cost issues, and also to start collecting data about the transit fleets, so that we know the differences in transit fleets. And from the data we've seen so far, about two-thirds of the routes, at least of the folks who responded to the survey, you know, a significant share can meet their routes with the zero emission technologies currently available. And so we -- again, we do see this as a feasible strategy to accelerate the phase-in schedule for zero emission buses.

And then lastly, I would just like to say on the indirect source rule, we would encourage a rule-making process to commence for that. You know, we know staff is starting to collect data about freight hubs, which includes rail yards, maintenance facilities, but we do think that a regulation is also -- should be started for that.

We are encouraged by the letters to U.S. EPA, and to a International Maritime Organization for ships and locomotives, but we can't wait for those.

CHAIR NICHOLS: Thank you.

MR. TUNNELL: Good morning, Chair Nichols and members of the Board. My name is Mike Tunnell, and I'm with the American Trucking Association.

Ten years ago today, this did not exist.

(Points to Smartphone.)

MR. TUNNELL: So I just point that out to the difficulty in predicting technology as we move forward, and probably the difficulty of your job just to develop this plan that is predicated on the future development of technology.

So I think it's wise that there is some maintaining a nimble plan that has flexibility in it, as we just don't know how technology will advance. Autonomous cars and trucks, we're hearing a lot about how that plays into all this, and what are the impacts on this plan. We don't know.

So, you know, just pointing that out, trucking relies on industry suppliers and infrastructure providers to develop the technologies and the infrastructure. We're a consumer of those products. We purchase trucks. We purchase fuel. And so we're relying heavily on the industry suppliers to develop these advancements as we go forward.

So it's going to take a significant investment on both -- from both the private sector and the public sector going forward in low emission technologies, and infrastructure in matching these two together or not, depending on which technology you go for.

So, you know, I think the plan tries to lay that out going forward. I think the role of public money in this, as the next speaker can probably attest to, has played an important role in bringing a lot of this technology forward.

So the industry has had a lot of experience in developing lower emission technologies and purchasing it in the last several years. We've dealt with a lot of unintended consequences that we will continue to point out to you as we go forward in developing this. But I would just say that we'll appreciate all staff's efforts in reaching out to us, and I'm only a phone call away.

Thank you.

(Laughter.)

CHAIR NICHOLS: Thank you.

MR. CARMICHAEL: Good morning, Chair Nichols, members of the Board. Tim Carmichael with Southern California Gas Company. In short, I'm here to express excitement, concern, and frustration.

I'm going to start with excitement, because I haven't heard enough about the fact that for the first time in my life working on these issues, I can honestly say we know how to get to where we want to get to. Not suggesting it's going to be easy, not suggesting that all the details have been worked out. But we actually can say we know how we're going to get there. And for the last 20 years or longer, maybe 40 years, we haven't really honestly been able to say that, and so I'm excited about that.

I'm excited about the technologies that are being developed, not only in the natural gas world, but across the spectrum. I'm excited about the fuel work that we're all doing collectively to develop the next generation of fuels, primarily the renewable fuels, and California is going to be leading the world on that.

So there are concerns though. And I think Bill Magavern did a very good job of covering the concern about the overreliance on incentives. That, I see, as the greatest challenge in this plan, and what are we going to do collectively to ensure that we raise the money that we all know is necessary to realize what we're trying to realize over the next 15 years.

And, you know, back to Mary's point about, you know, the collaboration between agencies and other stakeholders. We've done that in the past and it's been effective. I encourage us all to try and do something similar, because nobody has the pot of money to tap right now that's going to address all these issues.

The other concern is as excited as we are about the transition away from diesel to alternative fuels, lately we've been feeling like the staff has been focusing exclusively on renewable diesel, at least public comments. And we just want to remind everyone that we believe, at least in the heavy-duty sector renewable natural gas is going to play -- is today and is going to continue to play an incredibly important role in trucking and heavy-duty equipment going forward.

Finally, to frustration. I just have one frustration, which I'm sure you'll be happy to hear.

(Laughter.)

MR. CARMICHAEL: And it relates to our lack of progress on the Advanced Clean Transit program over the last year. I commend Michael Pimentel and Paul from the California Transit Agency for being so diplomatic and composed. But it has been incredibly frustrating to participate in the working group meeting on this issue over the last year.

Yes, progress has been made on cost analysis and costs estimates, but we have literally had no serious discussion about an alternative approach to a ZEV mandate, or ZEV requirement, regulation, which I, and many others, heard this Board suggest we needed to talk about, that as much passion as there is about ZEV technologies for buses, that forcing that technology could actually cause harm in service for the transit agencies.

So my specific request there is to -- the staff and to the Board please give direction that we need to have a serious conversation about what the program is going to look like. And the California Transit Association has a proposal -- a draft proposal. I'm not saying that's the end-game. I'm not saying it's the only way to go, but we haven't had a serious conversation about alternatives, and we need to.

Thank you very much.

CHAIR NICHOLS: Okay. I hope your frustration is a little bit cured by being given extra time. You know, we really do --

(Laughter.)

CHAIR NICHOLS: -- we do try.

MR. CARMICHAEL: I appreciate that. Thank you.

CHAIR NICHOLS: Thank you.

MS. HASSON: Hello, Chairman Nichols and members of the Board. Thank you for the opportunity to speak. My name is Michele Hasson. I represent the Center for Community Action and Environmental Justice. We are an environmental justice organization based in the heart of the Inland Empire.

I would like to echo the comments so eloquently laid out by my colleagues of the Coalition for Clean Air, Earthjustice, the Union For Concerned Scientists. But one thing I haven't heard in these deliberations is people. I come here with the blessing of many impacted residents, those that suffer from low -- slow lung development as children, cancer, a myriad of public health opportunities that don't allow them to participate in California's dream.

And this plan is about clean air. In our communities, specifically those in San Bernardino, which according to very recent public health data from New York University, we have one 1,600 approximately avoidable deaths a year that are related to poor air quality.

This isn't just something arbitrary. This is people's lives. People are dying because of our air quality, and we really need to do something more.

And when we look at our communities that are so impacted in these freight hubs, we ask what can we do? And we presented some solutions, but we're also asking for more collaboration with not only stakeholders, such as you've done an excellent job through the EJAC scoping process. And I would like to really honor and thank the Board members who represent EJ communities, because it has been a difference.

And right now, what we're seeing is that we need to step up electrification of freight. We need indirect mobile sources rules. We cannot just allow the logistics industry to continue to sprawl and continue to pollute our communities, because people are dying. This isn't just a regulation. It's somebody's life.

We also really need transit agencies to stop putting natural gas in our communities. The majority of CNG fueling stations for transit agencies in the Inland Empire are in disadvantaged communities. Right there -- and those people don't even have access to transit. So we ask, please, increase and, please, improve regulations, and don't rely so much on incentives. Incentives are a great partner in getting to clean air, but we really need to take a step up and do something a little bit more daring, that doesn't rely on a green box, because we've gone from the black box of technology, and now we know it exists to a green box of money that we don't even know where we're going to get it from.

So I implore you, please, for the communities that are on the front lines and who are suffering the burdens of our air pollution, take a harder stance, because it's what we need.

Thank you.

MR. WIRAATMADJA: Good morning, Madam Chair and Board members. My name is Vincent Wiraatmadja. I'm here on behalf of BYD Motors, which is a California-based manufacturer of heavy-duty electric trucks and buses. We'd like to express our strong support for many of the actions outlined in the SIP, and thank the staff for all their hard work in putting this together.

These measures we feel are critical to ensuring that California will meet its greenhouse gas reduction goals. And we'd like to encourage the Board to be even more aggressive in its pursuit of these goals.

As a California-based manufacturer, we will do our part to make sure that the State is able to implement these procedures -- these measures.

As part of that, BYD would like to highlight four elements that we think will be critical to the success of the SIP. The first one, of course, being the Advanced Clean Transit rule. The strong -- a strong ACT is going to be needed in order to hit the 2030 goals. Indeed, the 2030 scoping plan in each of its 4 different scenarios has a strong ACT as part of the pathway to actually making the 2030 goals.

And while this rule has been in development on and off for years, the momentum is there now, and the Board should take advantage of this strong showing of support and move forward to implement it quickly.

We have multiple manufacturers in the space -- in the transit space, and near advance -- near constant advances in battery electric technology. It will mean that the buses are commercially available, and are able to meet the needs of transit agencies, while also providing clean air and comfortable rides to its passengers.

The Board should embrace a strong ACT as a way of meeting its long-term goals. And it should also be noted that there's significant overlap between the zero emission airport bus rule and the ACT. So the two rules should probably be aligned and implemented quickly.

The next thing that we would like to address is the last mile delivery. We know that this is an important aspect of our new found addiction to Amazon Prime and other forms of Internet eCommerce. These box trucks mull about our communities and emit large amounts of emissions.

But the technology is there to electrify them, and it is the logical next step in the transportation electrification process in the heavy-duty sector. That technology is there as direct result of technology transfers from advances made in the transit sector.

And so we just want to reiterate that BYD is manufacturing a large variety of Class 3 through 7 heavy-duty trucks, and will be able to help the goods movement sector transition over into zero emission.

Similarly, there are many battery electric fork-lifts available on the market, and so we'd also like to see those transition quickly. And as a final note, as many people have alluded to, there is a limited amount of incentives. Where commercially feasible and available, priority should be given to zero emission technologies over any near zero options when it comes to incentive funding.

Thank you.

CHAIR NICHOLS: Thank you.

MR. ANTWIH: Good morning, Madam Chair and members of the Board. My name is Andrew Antwih with Shaw, Yoder, Antwih.

I'm here today on behalf of the Los Angeles County Metropolitan Transportation Authority. That public agency has asked me to come and address the Board today regarding the Advanced Clean Transit rule that's a component of the SIP.

I'd like to start off on behalf of L.A. Metro by thanking the Board for working with L.A. Metro and other transit agencies during the conversations regarding the ACT regulation. And I want to point out that in L.A. County we're in the midst of a rail revolution. There's heavy investment in public transportation. We're expanding our rail network in ways that are not matched by other agencies around the State. And frankly, we'd argue that the expansion and the rate of expansion probably matches or exceeds expansion of rail around the country.

In fact, we point to the Exposition Light Rail line, which coincides with the return of the NFL to Los Angeles.

(Laughter.)

MR. ANTWIH: Many of the fans who wanted to show up for that first game took the Exposition Light Rail, and they'll continue to take it, we expect. Ridership has already exceeded our original projections, and so we note that as a success. This success comes with investment. The voters in Los Angeles have approved measures that provide a source of revenue so that L.A. Metro is investing in public transportation in a massive way. It really is transforming the footprint. Car-based L.A. doesn't look the same anymore for those of you that look for options to get around town.

And so we want to encourage the Air Board to kind of look at that, but also partner with us. We have been engaged in the conversations about the ACT. We do have some concerns. Some of the concerns have been noted earlier about whether or not the estimates on exactly what the costs will be for transit agencies statewide to comply and purchase zero emission vehicles are realistic. We think 95 million is far short of the number.

We also note that through the Transit Association, we've been informed that Air Board staff have acknowledged that more work needs to be done. But we think the number is off by 100-fold just for our agency alone. So we do want to work with staff going forward to make sure we fine-tune that.

I do want to also just mention that the Board of Directors for the L.A. Metro Agency have adopted their own target towards purchasing zero emission buses. We also do have the largest natural gas fleet in the State. We are working aggressively to incorporate renewable natural gas, and we're also bringing on-line low-NOx engines as well.

And so if we get the commitment to continue to work to fine-tune the ACT regulation to really factor in the cost, we think the partnership that we've enjoyed with the Air Board will continue. Frankly, transit agencies end up being the test lab for these engine technologies, before they get deployed in other markets. We want to continue to do that, but it has to be based on realistic estimates and performance characteristics that meet the distance and the performance ratings that we need to make sure that people actually ride transit and they get out of their vehicles.

Thank you.

CHAIR NICHOLS: Did you have a comment or a question?

VICE CHAIR BERG: Just quickly. If you keep up that $200 parking for those Rams Games, I think it will increase that ridership as well.

(Laughter.)

VICE CHAIR BERG: So good job on that.

MR. ANTWIH: Thank you, Vice Chair. I'll pass that along.

(Laughter.)

CHAIR NICHOLS: It does.

MS. VAZQUEZ: Good evening -- morning, sorry. It's been a long day. It's just the morning too.

(Laughter.)

MS. VAZQUEZ: Chair and Board members, my name is Diana Vazquez. I'm here on behalf of Sierra Club California, but -- and I want to reiterate some comments that were made by our colleagues from Earthjustice, Coalition for Clean Air, Union of Concerned Scientists. Specifically on the SIP, we think the staff are really being open to us and accepting our comments and our suggestions as this has been developed.

But specifically I'm here to talk about one rule that has been already mentioned, ACT, Advanced Clean Transit. We've been working on this rule with -- along with a lot of coalition partners throughout this year and trying to really see that we know there's obstacles, and we know that there's going to be challenges in implementing this rule, but we understand that this rule is needed. And it's because this rule is one of the rules that's highlighted within the SIP. We understand that this rule has to be actually implemented in districts that are impacted, specifically in South Coast in San Joaquin Valley.

So we think that we understand that there's different challenges. And one of the challenges is ridership. We, as a club, do not want to impact ridership, because a lot of these buses are being used by our own members. But within that said, the working group has really been a good space where we can actually discuss how we actually impact ridership and increase it, not decrease it, but also how do we develop off-ramps.

And that's one of the things that we're going to be actually having the discussion on October 4th and really looking at the off-ramps. What do we need to really start penetrating this technology in the sector, given that we understand the technology is here, and is ready to be used?

And we've seen other transit agencies actually using and welcoming this technology where they're actually committing 100 percent zero emission buses by 2030. And we're not seeing turnover of fleet in 10 years or in 5 years, we're seeing do it where you can actually do it in a smooth transition, and how do we actually get there?

And also incentives have been discussed. We understand money is required. And this is something that if we know how much money we need, and realistically need based on the technology and the cost of this technology, then we can actually have a plan.

And within that, I think moving forward, we really look forward to working with your staff, but also with the local air districts to really see how do we actually include this technology within those districts, and actually make it work for everybody effectively and efficiently.

And like I said, I think we're going to be seeing each other more often than anything, given that we need to actually start really thinking about rule-making -- about this rule-making now versus 2, 3 years from now. Because if we want this technology to actually be effective, we have to actually do it now versus waiting 10 years from now.

But thank you and thank you for the staff. And also, we had some discussions with some of the Board members throughout the month, and we presented our concerns in a letter, and hopefully you guys can go ahead and reflect on the letter, and see if we can actually be of any help.

Thank you.

CHAIR NICHOLS: Thank you.

MS. HOLMES-GEN: Chairman Nichols and Board members, Bonnie Holmes-Gen with the American Lung Association in California. And I wanted to first thank you for your leadership and clean air regulation innovation. Across the years, we have come a long way and we always want to recognize the progress. But as you know, air pollution continues to pose a public health crisis, and we have millions that are living in areas unaffected -- that are affected by unhealthy air.

And we know that children, seniors, low-income communities, those with existing lung and heart diseases are most affected, and that children are experiencing slowed lung development that affects them for life. So we need to work hard to address this crisis.

And this State Implementation Plan is a critically important roadmap to address this crisis and to meet our federal health protective air quality standards. And we are looking forward to engaging -- we are engaging in this process at the State level, at the local level, with our local advocates.

We think it's incredibly important to have strong local plans and strong regulations to meet our EPA health-based standards. And we are looking toward your board to exercise your oversight role and to make sure there are strong tangible commitments in the local plans, and a solid focus on regulations. I know you've heard a lot of discussion about that.

Incentives are obvious -- always an important strategy to get these early reductions, but we're really focusing on these tangible commitments. We believe that the draft today is a very good start, and we join the letter with our colleagues, urging some additional strengthening, because we think there is more that can be done.

Pushing for the EPA strengthening of heavy-duty NOx, that's very important. But we also need to strengthen existing regulations here, the Zero Emission Vehicle Program, to make sure we hit our 2025 goals and ramp up afterwards.

We want to see an increased focus on zero emission and heavy-duty, and we think this -- that the development of the Advanced Clean Transit, zero emission vehicle drayage trucks. I mean, all of these are so important to advance technology across all sectors.

We are -- we think it's extremely important to get these early reductions from zero emission technology to benefit communities living near sources of diesel pollution and to protect the millions of Californians that are burdened by air pollution.

In fact, the American Lung Association in California will be releasing an analysis next month showing the health and climate benefits of the zero emission vehicle regulation in California, and all 10 ZEV states, and underscoring the importance of moving forward as quickly as possible to achieve these benefits. And we'll be looking at avoided costs and avoided health outcomes from a focus on zero emission. So we look forward to bringing this to you and continuing to talk about the important benefits.

As we move forward, partnerships are going to be a key theme. We look forward to you -- your partnership with the air districts, local agencies, and we want to be a partner with the public health community working with you toward this strong plan.

MR. NOYES: Good morning, Chair Nichols, members of the Board. My name is Graham Noyes. Thank you for the opportunity to address the Board. I'm going to express thanks and support from 2 different groups this morning regarding the Stated Implementation Plan, and do it very quickly.

First off, on behalf of the Low Carbon Fuels

Coalition, I've been working with the biofuels industry now for 15 years. We're now evolving into the low carbon fuels industry. Throughout that time, we have asked for strong and consistent policy signals. And I can say now that California is delivering the strongest and most consistent policy signals we've seen.

Now, with SB 32, we have a 2030 number that's very aggressive to think about. And within the State Implementation Plan, we have a 2031 number for low emission diesel fuel that's very clear, tremendous policy signal, and the industry is going to step and respond to that. So we thank you for that integration in the plan.

Secondly, on behalf of clients that I'm representing in the aviation fuels sector that are producing low carbon aviation fuels. I'd like to thank Executive Officer Corey and his staff for the support that they've given to the idea of integrating low carbon aviation fuels into the Low Carbon Fuel Standard. That's something we've discussed at other Board meetings. They have not committed to anything, but been very open to discussions and to accelerating that process. And we're right now involved in a literature review looking at the emissions reductions, particularly around PM, that are available from that initiative as essentially co-benefits off the LCFS. As Chair Nichols pointed out, there are often opportunities for co-benefits, and we see those here.

We already have AltAir supplying United in LAX already delivering some benefits. And we think these policy signals can drive that faster.

So thank you.

CHAIR NICHOLS: Thanks.

MS. VAN OSTEN: Good morning, Madam Chair and members -- Board members. Kathy Van Osten representing United Airlines, and just wanted to take a moment today to thank the Board, the Board's interest, and the work of your staff with respect to the renewable aviation fuels issue.

We've made some great progress this year. I do see the work that we have done and the work that we are continuing to do as a great complement, a dovetail, with the State Implementation Plan. What we've seen over the last 15 years are economic drivers with respect to reducing fuel consumption among the airlines. We saw fuel go from $0.52 a gallon about 15 years ago. It spiked with the fuel crisis at about 4.25. Most of the airlines -- United Airlines was in bankruptcy at that point in time. So every morsel of fuel that they could conserve, they worked on those practices.

They developed the wing tips, they altered their flying practices. Everything that they could do to conserve fuel has been done, and incorporated into their standard practices. So where there has been control, the airlines have done it. There is a new international agreement by IATA, it's International Aviation Transportation Association. They have goals that they've set for 2020. And as much as we can -- United is striving to work towards those goals, there are certain things that are just simply out of our control, which is access to the renewable fuels -- renewable aviation fuels.

And we do see that happening as soon as we can get into the LCFS, as soon as renewable aviation fuels are incorporated in that. The Board was very gracious, you included us in the Low Carbon Incentive Fund Program this year -- earlier this year. We worked hard up until the very end of session to try to make sure that there was funding available in that program. Those doors were yanked at the last minute, so we were disappointed in that.

So as much as we can continue to work quickly, swiftly with the Board and your staff under the LCFS program, we would certainly stand here willing to do our part. So thank you very much.

CHAIR NICHOLS: Thank you.

MR. CAMPBELL: Good morning, Madam Chair and members of the Board. My name is Todd Campbell representing Clean Energy, a conventional natural gas as well as renewable natural gas fuel provider for light-, medium-, and heavy-duty vehicles.

Clean Energy generally supports the staff's proposed strategic plan, because it properly emphasizes the need for significant mobile sources or source emission reductions and identifies zero and near zero emission strategies as the key strategies required to reduce a daunting 80 percent of NOx emissions within the next 15 years.

We, however, want the Board to direct staff to embrace or be more embracive of near zero emission strategies for heavy-duty vehicle fleets on an equal footing with zero emission strategies by establishing emissions reduction targets or metrics required by each fleet to achieve a tons-per-day target under the SIP.

This is particularly critical when the data suggests that both zero and near zero mission strategies are comparable in NOx emission reductions, but near zero strategies tend to be far more cost effective.

It is not lost upon us that the agency wants to eliminate emissions from the transportation sector to the maximum extent possible, but the reality of achieving this goals in the heavy-duty space is at least several decades away. We simply cannot afford to lose the momentum on air quality goals by narrowly focusing on zero emission strategies, when it comes to designing heavy-duty fleet measures within the SIP, given the urgency in meeting federal ozone attainment in the less than 7 years, and the need to reduce emissions on a mass scale now in our communities.

This is particularly true for 2 extreme nonattainment regions, the South Coast and the San Joaquin that are heavily impacted by heavy-duty truck emissions.

The South Coast Air Basin estimates that they need approximately 270,000 low NOx heavy-duty vehicles powered by renewable fuels deployed before the 2023 deadline.

Meanwhile, the State's proposed strategic plan depends heavily upon vehicle incentives to encourage low NOx and bus adoption prior to 2023, since the soonest implementation of a low-NOx engine rule will not go into effect until 2023.

The point has already been made by Earthjustice and the Coalition for Clean Air and several other groups that these funds may not be sufficient, the incentive funds. It is therefore critical that this Board send market signals now to both industry and fleet customers that California wants a 0.02 gram low-NOx engine standard powered by renewable fuels, especially if zero emission trucks and buses are not feasible or affordable within the required time frame.

Honorable Board members, we need to encourage more engine manufacturers to produce, quite frankly, more zero emission or near zero emission low-NOx engines at 0.02 grams, and ensure fleet customers that this agency will not abandon them and their capital investments already made in the pursuit of clean air.

Specifically, we should provide such assurances be equally emphasizing zero and near zero emission vehicle strategies in the proposed advanced clean transit measure, the last mile delivery truck measure, and the airport shuttle fleet measure.

We urge you, if I may, to sum up -- we urge you to set emission targets not pick winners, so that we can successfully deliver clean air to our communities, especially to those who are most burdened by toxic air pollution.

And, you know, my final thought is we need to do all we can, and we need to make sure that in these measures that we're embracing these strategies, because history from being on the nonprofit side and now in the business side, for me being with you, says that if we don't embrace these technologies, diesel will continue to dominate the market.

With that, I'd like to thank you and thank you for your time. I'd like also like to thank the staff for their hard work on this document.

CHAIR NICHOLS: Thank you. Mr. Blumberg and one more, Steve Douglas also wants to speak.

MR. BLUMBERG: Good morning, Madam Chair and members of the Board. My name is Louis Blumberg. I'm the director of the California Climate Change Program for the Nature Conservancy.

When I came here, I had not intended to comment on this item. And unfortunately, we do not have the capacity to really engage in the development of this particular plan. But I was struck, Madam Chair, by your comments about how the connection of the various activities in which the ARB is engaged in produce multiple benefits, and I wanted to underscore that and comment on that.

And so for the past decade, our focus has been on the reduction of greenhouse gases through the implementation of AB 32, but we are also concerned about air pollution and public health impacts, including those to localized health -- communities.

And so we want to just lend our support to this effort and encourage ARB to continue to develop a strong rule that will reduce criteria air pollutants and air toxics, protect public health, and also for the additional co-benefits of reducing greenhouse gases, which will help California meet its greenhouse gas goals, as well as have a global impact.

Thank you.

CHAIR NICHOLS: Thank you.

Okay. Last word.

MR. DOUGLAS: Okay. Thank you, Chair Nichols.

I'm Steve Douglas with the Alliance of Automobile Manufacturers. We're a trade association representing 12 car and light truck manufacturers. And I appreciate the opportunity. I didn't intend to speak today either, and so I appreciate you accommodating me.

I appreciate the staff's work on this, and we have worked with them. And we've identified a few issues which we've discussed with the staff, and we'll continue to work with them on those, but I think what struck me is all the numbers that have been thrown around the zero emission vehicle requirements.

So we've got 1 million, 1.5, 4 million. And I think what we need more than yet another number, which is a target goal requirement, is a market for those vehicles. And so I think from the manufacturers perspective, our goal with the ZEV Program is a robust, sustainable, and growing ZEV market. That's where we want to be in 2021. It's where we want to be in 2025. And I think that's where we have to be if we want to grow this market, if we want to meet the goals, the long-term goals of the auto industry and the Air Resources Board and the nation, in fact.

So along those lines, what have the manufacturers been doing? And I guess this is also somewhat a defense of the much maligned ZEV credit program, which has been termed a failure, a ZEV credit glut. And I think from our perspective, over the last 3 years, we've doubled the number of ZEV models from 12. And today -- by the end of this year there will be over 30, almost 35 different ZEV models. They're in every vehicle category from subcompact, mini-compact, to standard size SUV. We have 2-wheel drive, we have all-wheel drive ZEV. And we have them in every different technology from plug-in hybrid electric vehicles with short range, with long range. We have battery electric vehicles. Soon, we'll have a mass market long range battery electric vehicle.

And we have -- so those are all kind of the result of the credit program, and it's the result of the manufacturers. So I think from our perspective, the focus should be, and this is our focus certainly, is on developing the market. And some areas that we believe are important in the next few years are infrastructure. California is far behind in developing the infrastructure for plug-in electric vehicles. And we're developing it for hydrogen.

The incentives are going away. We've sponsored legislation. We've worked very hard, and we've worked with ARB to encourage incentives and support legislation to do that.

So from our perspective, like I say, rather than yet another number, I think a focus on the market is where we should -- we should focus on the next few years.

So with that, I'd like to thank you.

CHAIR NICHOLS: Okay. Thank you.

If there's a point of view out there that we have failed to hear from, I don't know what it is.

(Laughter.)

CHAIR NICHOLS: Every issue that relates to a mobile source strategy, whether you manufacture or purchase, or use, breathe, whether you're on the fuel side, or the vehicle side, everyone has an opinion. The good news is that they're all here, and they're all interested and engaged.

It speaks very well of California that people take it so seriously, but it does put a lot of burden on our staff to come up with something here that really tries to meet all of those needs.

And we've heard some criticisms of the pursuit that they are engaged in, or some suggestions that they may have perhaps neglected some areas of thought. So, you know, if Board members wish to comment on any of that, they should. I know that we do have one question or comment down here from Mr. Serna.

BOARD MEMBER SERNA: Great. Thank you, Chair Nichols. And thanks to staff for all the work done to date on this subject and the presentation today. And thanks to the many that decided to share their opinions about the work done so far.

I want to preface everything I'm going to say, including my question, with I do wear another hat. I am a director on our local regional transit district board of directors. And we obviously heard this morning from a number of organizations, the representatives, about their concerns from two pretty extreme perspectives about ACT.

And I guess my first question is, is just one that wasn't clear in the presentation. I wanted some clarity, and that was whether or not the Environmental Analysis for the SIP is -- the public comment is out now. It's going to be out for review soon. How much opportunity is there left for public comment?

DEPUTY EXECUTIVE OFFICER KARPEROS: Supervisor

Serna, we've had one cycle of public comment on this plan. That comment period ended some several weeks ago. But we will be taking your guidance and reviewing the comments we've got here, and be revising the document. It will be released again before we bring it back to you after the first of the year. And so there will be a comment period between now essentially and the end of the year that folks can weigh in.

BOARD MEMBER SERNA: So there will be -- there will be an opportunity between today's informational understanding about the SIP Strategy. We're intending to take action in January, are we not, on it?

DEPUTY EXECUTIVE OFFICER KARPEROS: Yes.

BOARD MEMBER SERNA: So there will be some opportunity for not just this Board but the general public, other advocacy organizations to continue to provide comments?

DEPUTY EXECUTIVE OFFICER KARPEROS: Absolutely, there will be, yes.

BOARD MEMBER SERNA: Okay. Very good. Thank you.

So wearing that other hat, and kind of looking through the lens of the challenges of not just our local transit district here in Sacramento, but I would assume across the State, no one wants to see electric buses, zero emission vehicles as part of our fleets more than me as a member of a local transit district board of directors.

But I guess I'm -- I still express concern as I did back in January about understanding kind of the cost elasticity of -- and the availability of zero emission bus fleets that won't bankrupt local districts.

We hear -- we heard from a number of organizations today, both environmental, social justice, transit district representation itself, manufacturers, and they all have a concern. I think we all want to go in the same direction. We want to see those fleets deployed sooner rather than later. But my concern is not all transit districts are made alike, not all of them are -- have the same circumstance.

I can tell you here locally, it's no secret that we are facing the end of useful life for our light rail transit trains, that perhaps some even took today to get to this hearing. That's about $150 million nut for our local transit district. So I say that, because if there aren't going to be ample incentives, different ways to bring down that effective cost for local transit districts to meet the intent to get to where we want to be by 2030 and the full deployment of -- and maximization of zero emission transit fleets, we could very easily -- I can see very easily having a very unintended and severe consequence of having to make adjustments -- and I said this back in February -- make adjustments in terms of service delivery.

And if the intent is to maximize ridership, as you know a representative from, I believe, the Sierra Club mentioned in her testimony, we really -- I feel we really run the risk of seeing some of those unintended consequences materialize.

So, I mean, this is probably one of the most precarious parts of what we're trying to do through the SIP. I think that's why we heard as much as we did on this particular subtopic of it this morning.

So I'd like to understand just how much we understand, you understand, what that elasticity is, what are we doing to continue to work with the transit agencies to make sure that we have as clear an understanding about how to avoid those unintended consequences moving forward.

DEPUTY EXECUTIVE OFFICER AYALA: Let me try to address your comments directly, Supervisor Serna, and maybe provide some additional perspective for the Board.

Certainly, on behalf of staff, because one of the things that surprised me is the criticism that we're moving too slow. Typically, we're not accused of that.

(Laughter.)

DEPUTY EXECUTIVE OFFICER AYALA: And exactly what you said, because we understand and completely heard your direction, that we are taking our time and being very deliberate to understand the needs and the potential opportunities for each transit agency. That is a reason we are taking a very methodical, very deliberate approach.

The reason you hear such different numbers in terms of our cost estimates versus some of the transit agencies is fundamentally a difference in the assumptions that we are working with. And again, that is going to be part of the process. We need to continue to work together to make sure the staff's approach was essentially to put our first take at the cost, and the cost analysis, and the assumptions that go into that cost analysis. So industry and others have opportunity now to actually look at the assumptions we're going to be using.

What we have not done is iterated on that process and going back to them. But again, we need to balance that with the criticism you heard today of staff, which apparently is, you know, we need to move very quickly to a policy proposal.

We completely hear you, and understand that what we want to do is achieve a balanced approach. We understand that the need to get to zero is critical to what the State is trying to do, but at the same time, we completely agree with you. This is not about disrupting service or changing service. This is really about improving to, as Professor Sperling often comments, an innovative transit approach.

But we are going to be taking a deliberate step-by-step process, and we're going to go back and interact with you and the industry and others. We want to bring you a proposal as soon as possible, but at the same time, because we understand that this is so important, we don't want to rush to something that is not fully developed.

BOARD MEMBER SERNA: And I appreciate that. I didn't issue my comments intending to have it be taken as criticism in terms of timing of staff activity necessarily. But I did open with a question about the environmental analysis. Is there still an opportunity through the comment process, especially from us as Board members, if there isn't as robust a consideration or acknowledgement in that document about what those possible consequences could be, just, you know, depending on various -- the kind of the incentive environment or not?

I think that -- I think that actually belongs in the environmental analysis. It actually has, I think, some serious consequence for the environment, and that's what the -- that's the whole point of having this document made public is to understand what the impacts may or may not be.

And if the -- you know, if the incentive environment is not what we hope it will be, which would be a rich one, so that you don't necessarily squeeze the transit districts to a point of having to explore things like cuts in service, you know, I think that would be the most informed position we can find ourselves in.

So that would be my direct clear comment hopefully to -- and suggestion to staff today is that that environmental analysis should have some very clear, understandable presentation of that relationship between the capital expense involved and the prospect of service change.

CHAIR NICHOLS: Okay. Supervisor Roberts.

BOARD MEMBER ROBERTS: Well, thank you, Madam Chair.

CHAIR NICHOLS: Also a transit agency official, I believe.

BOARD MEMBER ROBERTS: I was -- full disclosure.

CHAIR NICHOLS: Yes, yes.

BOARD MEMBER ROBERTS: Just like Supervisor Serna at the other end, I, too, am very involved with transit and have been for a good long period, almost 30 years now.

And I -- first off, I want to start by complimenting L.A. Transit. We were there last week, and

I got to ride the trolleys and the subways, and get completely lost at times with having fun. And I even had one of the Sheriffs stop me to make sure I had a pass.

(Laughter.)

BOARD MEMBER ROBERTS: You know, so I always checked out in every, way, shape or form, and fortunately I was okay. Everything worked out.

(Laughter.)

BOARD MEMBER ROBERTS: I was also interested in hearing how their trolley line and their NFL is working out, because we have a slightly different situation where the NFL is trying to take over one of our major bus facilities. I shouldn't say the NFL. It's one of the teams. You can narrow it down and figure it out.

(Laughter.)

BOARD MEMBER ROBERTS: But -- so we have kind of a different relationship. And they -- you know, they're doing planning. And, of course, they haven't even considered that you're going to need a different kind of trolley service and other things, you know, new types of stations.

But that being -- we did have a very good week, in that -- just to give you an idea that there are things going on in the world of electricity. We were able to sign a full funding agreement last Wednesday with the federal government. They will be providing just in excess of 1. -- over $1 billion for a new trolley line. We will match that with local funds. We're spending a lot to electrify. That's a $2 billion project that will go to one of the universities.

And I'm saying this -- I should also mention, Saturday we had one of the largest displays of electric cars, and trucks, and bicycles, and everything else -- I'm told the largest in the State up to this point -- at our stadium. And people came to be able to drive those cars, to sample them, and really decide, in many cases, what they're going to buy here in the future. It was a really -- it was a good promotion. And we had all of the stakeholders involved. So there's a lot going on that's really positive in the world of electricity.

I guess what -- you know, what I want to say, public transit is not our enemy. Okay. They're not out there trying to destroy anybody or harm the environment. It's one of the best allies that we have. And trying to make improvements, and many of the improvements that have been made, are because we've had these successes.

We've had successes, because we've relied on performance-driven standards. Okay. Supervisor Serna said that, that all the transit agencies, we're not alike. We're not all alike. We're different. And the needs are different, and the operations are different.

Now, I know we have -- we have some disagreements now over costs that we need to work on. There's no question about that. We've heard that clearly.

But there's operational costs. It's not just the cost of a bus. It's operational expenses. It's replacement expenses. There's a whole series of things. And there are alternatives, and we need to consider the alternatives. Okay.

We should know -- we should have an analysis from the source to the wheels on electricity. You know, we're hearing about low NOx engines. We should know about these things, and we shouldn't just rule them out, because we're talking about all electric. We need to know what the differentials are, and if there are, and what the implications are from a cost standpoint, because they may be considerable.

At the end of the day, I think what most people are interested in is how do we get the services, and how do we get more people riding, how do we get the frequencies? In all my experience, the one thing I've learned, the more -- the frequency of service is like the biggest issue. And if we load expenses in a way that we have to either reduce or not expand services, we haven't done -- we've done a disservice.

So I'd like to make sure we're being very, very thorough in this regard, and to allow the nimbleness that I heard referred to in one of the comments in planning, and not just prescribe here's the solution, but let's start to look at performance. What are we trying to achieve? And maybe we have a standard for fleets and agencies, and let them kind of decide what their mix is going to be.

Some may opt to spend a lot of money in fixed rail, electrified systems, and others may -- we've seen smaller agencies that say, well, we can go to buses. Well, they don't have anything other than buses. And it makes it a very different game.

So I see a lot of -- we're all after the same thing here. And it's a question of how we get there. And we've found in the past when we talked about all electric, there were times when we get out in front of the technology, and it didn't work so good, and we had to regroup and come back and change things. And because of that, there's a real success story going on in California. I want to see that continue, and I think we have the capability of doing it.

I hope between now and January that some of these issues -- I almost feel like we need to see this somewhere in mid-course, because I don't feel like we've -- I don't feel like I'm equipped now, much more than I was months ago when we talked about this. The issues and the concerns seem to be largely the same, and, you know, with respect to cost, and performance, and other things.

So it may be that it's introduced in January and it's going to take some time to get through it. I don't think anybody is saying rush into this. I think we're saying let's get this right, because at the end of the day, there is a lot at stake here. And if it's done right, this could be a major, major success story.

And I think that every transit agency I'm involved with and those that I've met with are -- they want to see it done right. So thank you

CHAIR NICHOLS: Dr. Balmes.

BOARD MEMBER BALMES: Well, I want to move away from the Advanced Clean Transit rule to sort of the macro-picture here. You know, first of all, I greatly appreciate the staff's work on this. And, you know, I love the slide where we're integrating multiple programs into one. I always brag about that's what one of the things that we're trying to do is integrate our climate change, and our air quality, and our toxics reduction programs.

But that said, I want to echo several of the witnesses who testified before us. You know, where is the money? You know, I really feel that -- and we haven't even been able to adequately fund CVRP for the last few years. And the incentives that we're talking about here are huge.

I mean, I've seen figures from the South Coast that they need from 500 million to a billion dollars a year in dollars for the incentive programs. And I just don't see where that, you know, money is coming from. I also read what Mr. Martinez read in the LA Times today about a $30 to $60 vehicle registration fee, which the LA Times said would be considered a tax, and would have to be passed by a two-thirds majority here in the legislature.

You know, let's get real, and maybe that would happen, but I don't think we can count on it. And somebody -- I believe it was Michele Hasson talked about the green box. I love that term. I'm going to, you know, keep that.

BOARD MEMBER ROBERTS: That was good.

BOARD MEMBER BALMES: You know, the amount of scrapping of vehicles that the plan talks about, it's like 70 to 80 thousand per year of cars. We're currently scrapping like 1,000 per year.

You know, who's going to administer this? You know, it's like we'd have to turn into a bank. We or the districts, I guess, more likely. We get -- you know, I've been party to multiple discussions about we can't add another thing on to the staff. I totally agree that staff is overworked. But this kind of financial administration, again, I don't see where the infrastructure -- you know, the personnel infrastructure for that is.

So, you know -- and I haven't even talked about trucks, you know, what -- it would be like 15 to 20 thousand trucks per year that we're going to be turning over. And, you know, I guess I feel a little bit more optimistic about trucks than cars.

But in any event, I'm really worried that this plan is kind of fantasy with regard to the dollars. You know, if we could implement all this -- these incentive programs with real dollars, I would feel much better.

So, you know, I could go on to details, but I think I'd rather just leave it at that, that I -- right now, I consider this total fantasy.

CHAIR NICHOLS: Okay. Yes. Dr. Sperling.

BOARD MEMBER SPERLING: So I want to just briefly frame what we're doing, and then focus on a couple things. I'm going to praise staff and challenge staff at the same time.

I think, you know, one thing we should be declaring maybe not victory, but, you know, acknowledge a huge success we have had in reducing emissions from cars and light-duty vehicles. I mean, it's extraordinary what we've achieved, and, you know, almost no one is talking about it. We're on path to even further reductions.

So that's a big success story. Now, there's that piece of it like beyond 2025, 2030 where we're going to get into the electric drive and ZEV technology. And I agree with, I guess it was, Steve Douglas, you know, we really need to focus on the market development. And there's a lot of people are thinking about that, but I'll just leave that on the table.

The other big area is trucks. And there we've also had huge improvement, huge success. Now, it's lagging probably 20 years -- you know, we started regulating the trucks in a serious way, you know, about 20 years after cars. And there are a variety of reasons for that, and -- but now, we've made a lot of progress.

But now, just like with cars, we're kind of at the tail of the distribution or at the -- you know, we've captured all the low-hanging fruit. And it's getting a lot more complicated and a lot harder, because we still have improvements we want, still have health problems, still have -- and we have a long ways to go on greenhouse gases.

So my thought here is that -- and this was motivated -- last night, there were a number of us that were at a meeting with the truck manufacturers. There are a couple -- a few of us Board members, and senior staff. And it really struck me that we really need to start getting more creative in some of the things we do. Some of the old blunt instruments that we used that worked real well when there was low-hanging fruit were very effective.

But, you know, trucks and buses, and the next generation of cars, we need to be getting a little more creative, and I -- so I don't have the answers for that but I would say for trucks, it's really expensive to go from, you know, another 90 percent reduction in NOx emissions. And I'm not sure we're going to be able to convince the Feds to do it anyway. I'm not involved in that debate discussion, so I'm not sure, but I suspect that's going to be difficult.

Maybe we can get -- you know, maybe we ought to be aiming for, you know, instead of 0.2 grams, you know, 0.1 -- you know, going to 0.1 instead of 0.02, or something like that, but that's even very expensive. So maybe the areas that are polluted are areas we're going to focus on. And I just keep thinking there has to be more creative approaches that we look at those polluted areas and we -- you know, now with all the technology exists, we can geofence these areas, and we can, you know, perhaps even either require or incentivize the very low-polluting or zero emission technology in those areas without having to go to 0.02 grams for the whole country, world, which extraordinarily expensive in places that don't have major pollution problems, but look at it more creatively.

And we certainly, I think -- it's clear we can get lower emission trucks, and -- in the new Cummins Westport natural gas engine is really promising. It's great. It's coming out, but it is on a -- running on a gas. It's going to be much harder running it on diesel fuel.

So anyway, so one -- a plea there for a little more. And I know this is hard on staff, because flex -- you know, thinking about more creatively means a lot more effort. But the other area is the transit and I'll just leave it at that is, you know, as several Board members have said, as we said in a previous meeting, I mean, I was bombarded more by the transit people for this item than anything else. And I think there is a real issue here about cost on the one hand, and -- looking forward, and creating moral alternatives.

The trend -- as Dr. Ayala says -- hinted at, you know, my theme about innovative transit, we are in the last -- just in the last 6 months even, the transit industry has really embraced working with all of these new types of mobility services, and thinking about how can they integrate better to reduce their cost, to expand their market?

Because at the end of the day, our public transit system is supplying 3 or 4 percent of our passenger miles. That's tiny. So the goal should be to be greatly expanding it. And if we're going to do anything that's going to inhibit that, it makes me very nervous, and makes me wonder if we've got our priorities right.

You know, this is -- you know, people keep focusing on the disadvantaged communities, and disadvantaged riders, and EJ issues. To me, improving transit -- we should be talking about improving transit service, not just holding it constant, and trying to, you know, deal with the cost. We should be improving it and expanding it.

And that's -- that would be my focus. And I'm -- I'd be -- you know, I think that's the discussion we need to have.

CHAIR NICHOLS: I'm waiting -- okay. One more. Yeah, or maybe more.

BOARD MEMBER MITCHELL: Thank you, and thank you, Dr. Sperling, for those comments, because it does highlight the tremendous challenges that we face certainly in the South Coast District and San Joaquin Valley.

And I, first of all, want to thank our staff for all the work they've done. They have been very collaborative with our districts, and we really thank you for that. I think it's really a good step and a necessary step, because what we do we need to do together. We talk about how much it's going to cost in the South Coast District under the current plan, the -- and you're right, Dr. Balmes, it was estimated to be a billion a year.

But I also want to highlight that most of our pollution is from mobile sources. And it's the ARB's responsibility to control mobile sources. So that's why this important work in working together is really critical.

I want to say a couple of things that the -- a lot of the target is on the heavy-duty sector. And the heavy-duty sector really depends on new technology to get where we need to go. And we've seen wonderful strides in that new technology with the Cummins Westport engine. That's 0.02 NOx. And, of course, that has led us in the South Coast to file the petition for a federal regulation on low NOx.

And we expect that this Air Board and this Agency will follow suit in the next year with support for that federal regulation.

The other thing I want to mention, because it's a bit of a mystery to me is renewable natural gas. I have heard from the people in the natural gas industry that renewable natural gas gets us to zero and negative zero. I don't -- I don't know whether I shall accept that as a statement, but it seems to me with a lot of our bus fleets operating on natural gas, that -- and we also just have 1383 -- SB 1383 come into being, and this goes sort of back to our Chairman's initial comments about what we do hear. We have lots of realms of responsibility.

One of those is our approach to short-lived climate pollutants, and 1383 is the bill that addresses that. But that's also a pathway to renewable natural gas.

And then the transition of fleets from natural gas to renewable natural gas is cost effective. I -- as -- from what I understand. And I just think that's an area that our staff should be looking into. If we're going to coordinate and complement one set of strategies with another, this is an opportunity to do that.

So I welcome further collaboration between the South Coast District staff and this staff. And whatever may be needed, I'm willing to pitch in and help with that. So thank you for all your good work

CHAIR NICHOLS: Ms. Berg.

VICE CHAIR BERG: Thank you.

Thank you very much for a great opening item.

Certainly, we've got lots.

(Laughter.)

VICE CHAIR BERG: I'm look forward to lunch, I think.

(Laughter.)

VICE CHAIR BERG: Thank you so much, staff.

This has -- you've been really working -- we've been talking about this for well over maybe even two years, how we're going to approach this, and what we're going to be looking at. I really appreciated Chair Nichols' opening comment highlighting the challenge of really looking at the planning and the creating on 3 different planes and how complicated that is.

So the only comment that I'm going to make today is really about strategy. And we'd look at strategy, we've got short-term strategy, and short-term needs, short-term benchmarks, short-term levels that we need to meet, and we have long term, and as Ms. Mitchell just indicated, how important technology is.

And technology really depends on market certainty, because in our world of companies, they want to really look at opportunities that is going to create a sustainable business. On the other hand, for businesses, they're looking at the fact that lifecycle for equipment and versus stranded assets, and what are we looking at that is creating market certainty for them?

Well, one is short term and one is -- tends to be long term. And they can be in conflict with each other, because as we're trying to build technology opportunity, and through incentive creating early action, on the other hand, you've got marketplaces that are waiting. Are we going to go to near zero? Am I going to get my 15, 20, 30 years of useful life? Are we going to go to -- wait and go to zero.

And so this tension is something within the SIP. And when I talk to various stakeholders, I'm really seeing that tension. And how we can try to frame up how both of these have got to work in lockstep together, I think could be really helpful.

And I do have a list. I'll be working with staff. I'm not going to go over that right this moment, and available to help.

Thanks.

CHAIR NICHOLS: Yes. Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Just very brief. Again, thank you, staff, for putting this together. And all of the comments are very well taken from the public. But I want to just state my personal view, that at the end of the day, we, this Board, CARB, are responsible for submitting compliant SIPs to the federal government, compliant with the federal Clean Air Act.

And I, for one, am not going to send something along that I know is flawed. And so whatever we get from the regions better be something that we all are comfortable sending along, that it is compliant, that -- there's always going to be some unknowns, but that those unknowns are kept to a bare minimum, and that there is a bridge for those unknowns to be resolved in the time period. I think that's the fundamental thing that we need to say here on the first day of this conversation.

Thank you.

CHAIR NICHOLS: Thank you. I probably hinted at this before, but, you know, one of the great advantages of growing older is that you've heard many things before, and --

(Laughter.)

CHAIR NICHOLS: -- so I'd like to comment on a couple of them.

One is the low-hanging fruit. It's always low-hanging fruit in the rear-view mirror. It didn't feel like low-hanging fruit at the time that we were adopting and implementing those truck rules. None of it felt like low-hanging fruit. It was really hard, and it's going to be hard again, not necessarily -- not necessarily harder, just hard.

Secondly, we keep acting as though it's a zero sum game. And maybe in life a lot of the time it is. And maybe we don't, within our own agency, control all of the levers that could bring more money into this equation. But the fact is that it doesn't have to be a tradeoff every time between clean and service, or clean and numbers of buses purchased. If we are doing our job of communicating with and working with others, including the boards of the transit agencies, we maybe have a chance at actually bringing some more resources into the equation.

Now, I have to say that most of the new resources in my part of the world for expanding the rail has come from a vote of the people, and tremendous leadership on the part of a lot of citizens and elected officials to get that done, to get people to come up with taxes that they're willing to impose upon themselves to expand the rail system.

It's long overdue, and it takes a long time, and it's incredibly expensive, but it really is working. And the fact that we always have some big events and a lack of parking doesn't hurt either for sure. But I also can't resist pointing out that from the State's perspective, the only new source of funding that I'm aware of for transit in the last several years is money from the Greenhouse Gas Reduction Fund, which is money that was acquired from cap and trade.

And the legislature made a decision to put a significant chunk of that money into transit, because they too saw that this was a very high priority, and something that was really needed. But I am mindful of the fact, again we all, you know, bring our experience to these things, that, you know, I see in L.A., that the places where the fueling is done, the big congregation of buses is primarily in communities where it also is part of a panoply of pollution sources that people live with.

So I can well understand why folks who, even if they're transit dependent or are seeking more transit service, would want to have the cleanest, best, if at all possible, zero emission buses in their communities. And I think that's one of the things that we should be putting into our planning, as we think about how we roll any of these new plans out.

So staff just go out and make it happen, please.

(Laughter.)

CHAIR NICHOLS: There they are, right?

(Laughter.)

CHAIR NICHOLS: Mr. Corey is turning red.

(Laughter.)

CHAIR NICHOLS: Seriously, this has been a really enlightening and interesting discussion. I think we all have additional thoughts and comments about this. But as I see you moving forward -- oh, one more, sorry. Two more. I'm sorry. You know, if you'd raise your hands, I wouldn't have spoken then, because I try to be last, but okay. Go ahead. I'll do it anyway.

(Laughter.)

BOARD MEMBER SHERRIFFS: You can still be last.

CHAIR NICHOLS: I could be.

Go ahead, Ms. Takvorian.

BOARD MEMBER TAKVORIAN: I was blaming Dr. Sherriffs, because I'm height challenged, and you are tall.

(Laughter.)

BOARD MEMBER TAKVORIAN: So you couldn't see me here, but I'm here.

(Laughter.)

BOARD MEMBER TAKVORIAN: So thank you. And I also want to thank everyone for being here, and for the staff's hard work, and for all the commenters. And I, too, Mary want to say that I really appreciate your context setting in the beginning, because I think that this is the key challenge that we have. How do we submit a compliant SIP, as our colleague has stated, and how do we also address the greenhouse gas reduction issues, and the cap and trade issues that are coming forward, I think today?

And I haven't heard enough about impacts to human health. And I think that it's important -- obviously, we all have to think about cost considerations, but I think as Michele from CCAJ so eloquently stated, we have serious problems. We continue to have those.

So even while we have made these huge improvements, the bad situation we were in is not the -- you know, the threshold. We need to get to clean and healthy communities. And you're right, Chair, that many of these facilities of all kinds are in environmental justice communities, those that are most disadvantaged.

So I guess I want to see a little more balance, if you will, on the discussion of human health concerns, and that of cost, because I know that all of our agencies care deeply about that. I have no question in my mind about it, but I -- but I really think that we have to push that up.

We need to talk about what the impacts are, and obviously to our climate. So in that vein, the incentives are certainly critical, but they have to be combined with mandatory regulations, as the Clean Air Act requires. And I think we -- you know, I guess full disclosure, as everyone else has. I'm not a transit agency member, but a transit justice advocate. So we want more transit, not less transit. We want cheaper transit, not more expensive transit. We want cleaner transit and not to have these fueling stations in our communities.

And the same thing is true for freight, and the zero emission vehicles that have to be -- that have to come forward in the heavy-duty sector. And as Dr. Sperling said, but those have to get cleaner. They are in environmental justice communities, in the most disadvantaged communities.

So as we clean those up, everybody benefits, the climate benefits, but those communities where these things are concentrated are going to really benefit. And they're the ones that are suffering the most at this point.

So we have a long way to go. But I guess my question or my request would be that as we come forward with the next hearing, and I guess in the next environmental review, that the health impacts are lifted up, and that we're able to look at those as well as what are stunning costs, and we all recognize that.

Thank you.

BOARD MEMBER SHERRIFFS: Thank you. I trust I won't be last.

Full disclosure, I won't talk about my hat, but my tie is definitely a valley tie. It's got grapes on it, and the raisins are rolled, so people are sleeping at night. But anyway, valley perspective.

Yeah, agreed about the incentives and health. You know, we talk about the incentives and the money. I guess I'd back up and I think, you know, when I was first appointed to the Board 4 or 5 years ago, anytime anybody said ozone, you know, there was an audible gasp, and people's hearts they either palpitated or stop beating, because it just seemed like an impossible goal.

And it's really remarkable that here we are today, yes, there's some heavy lifting, but ozone seems to be achievable for the South Coast and for the San Joaquin Valley.

And so some remarkable things have been accomplished. And it's policies that are put in place and pay forward. And I think that's one important way of thinking about the incentives. You know, you hear a 500 million, a billion dollars per year from the South Coast. Well, that's a big number, but it's a real number, and it's not an impossible number. It's not a trillion dollars a year. It's a doable number.

And when we think about -- when we think about, you know, 1,000 lives, a billion dollars. Well, I'm not sure about the math, but I think that's a million dollars a life, which seems like a big number, and maybe people don't think it's worth that.

But again, you pay it forward, because when you do things that impact the health impacts, well, it's 1,000 lives now, but that billion dollars now -- now, you know, we're talking 500 lives in the future, 250 lives. The cost goes down over time.

So these are big numbers, real numbers, but they're achievable numbers. South Coast, I believe, has a plan. They're thinking about how to do this. And this is, I think, encouraging, optimistic.

Now, more to do. You know, putting on my valley hat. PM2.5, and reiterating Mr. Sheikh's comments, yeah, we need more clarity about the 2.5 path. I think we really need to work on that, because the valley -- the Board in the valley is very nervous about these 2019, 2025 deadlines. There's a lot of anxiety. There's a lot of concern about adverse economic consequences, the implications of nonattainment. So I think it is very important, very helpful that we be more specific, that we focus on how this SIP will help us get there, meet those deadlines.

Having said that, I think it -- we also need to remember and emphasize -- well, you know, it's part of why would anybody else put money into this? It's because we step up. And so, yeah, the San Joaquin Valley has done a lot, and we need to continue to do more. You know, in some ways, it seems like squeezing what out of turnips, or rocks, or whatever. But, you know, lawn and garden products, wood burning, charbroiling. You know, it's hard to believe that charbroiling has a -- as big an impact on PM2.5 as it does, but it does. It's really important in the Valley.

And doing more, although the districts are not responsible for mobile, yeah, but we need to do more, think about more that we can do to promote the near and zero infrastructure. So that's work that I think needs to go into tuning the plan.

So thank you.

CHAIR NICHOLS: Does anybody else feel moved to comment?

BOARD MEMBER GIOIA: Sometimes when others say it all, there's not a need to add more.

(Laughter.)

CHAIR NICHOLS: I will accept the wisdom of your remarks --

(Laughter.)

CHAIR NICHOLS: -- and say that this item has concluded, and we'll be back.

So let's move on. Before we take up the next item on the agenda, however, I had asked that we receive at least a brief summary of an important study that was released last week, because it so relates to all of the questions and concerns that are going to be coming up as we move into items relating to cap and trade, and to more generally really to our program for dealing with greenhouse gases.

And unfortunately, by the time we realized that we needed this presentation, all of the authors of the study were otherwise engaged. We are going to have a focused meeting, which Board members will be invited to also, where we will really be able to engage with the authors of the study.

But it seemed like it was valuable to have just a summary. And this is -- I've put our fellow Board member on the spot. He'll be earning his magnificent salary as a Board member today, double duty. But since Dr. Balmes is both a friend and colleague of some of the authors, and also familiar with the type of study that we're talking about, I guess, I asked him if we would just give us a very brief summary of this new work that I think probably everybody has at least heard about that, attempted to see whether they could make a link between emissions in communities near environmental justice communities and the Cap-and-Trade Program.

And so without trying to characterize what it means or what we do with it, I did ask Dr. Balmes if we would just briefly give us a summary of the report. We're going to do it right now, I think.

Well, I thought we were going to do it actually before the greenhouse gas reporting rule, if that's okay. Can we?

Yeah, okay.

BOARD MEMBER BALMES: Thank you, Chair Nichols. When I suggested to the Chair that we might hear a report from the authors about their report, she said they weren't available, so I got stuck with it. And I -- she said she didn't need slides, just five minutes of verbal summary. But I do think a picture is worth a thousand words.

So I am going to do it in five minutes, but with slides. You know as a professor, at Berkeley I teach regularly, and I can't do anything without slides.

So first off, with regard to full disclosure, I am a personal friend and colleague -- we used to share and office actually with Rachel Morello-Frosch, who is probably the senior author on this particular report, because her student, who is -- there it is -- Lara Cushing did probably the heavy lifting with regard to the analysis, though this team of Morello-Frosch, Pastor and Jim Sadd has done a lot of good work, including the research that underpins the CalEnviroScreen that we're using now.

And before I go into this particular report, I just would say one thing I like about this group is that they are sort of unabashed advocates for environmental justice, but they do it with data, which I think is the way to do it.

So this is a preliminary -- and that's important to emphasize. The authors told me to emphasize that they're not saying that this report is and end-all be-all critique of cap and trade and its equity, because we've only had the program for a couple years, but it's a start.

So a preliminary environmental equity assessment of California's Cap-and-Trade Program.

So could I have the next slide.

--o0o--

BOARD MEMBER BALMES: So they focused on emitter covered emissions. Now, that means the localized in-State emissions mostly from fossil fuel combustion, and imported electricity from out of State.

They don't deal with distributed emissions from the transportation industry, but they warn us that that's their next focus -- the focus of the next report. So what they did was local -- localized with geocoding and other techniques, where the high greenhouse gas emitting facilities are located in the State.

And this set of maps shows the valley, Southern

California, and the Bay Area. And I think several of our Board members probably live near some of these facilities. And they showed that the number of facilities, high greenhouse gas emitting facilities within 2.5 miles of census block groups, the centers of those census block groups, the more facilities that emit high levels of green how gas emissions, the greater proportion of residents of color, and residents who are living below 2 times the federal poverty level, because the federal poverty level in California is ridiculous, 2 times the federal poverty level is still quite poor.

And there's basically about a 20 percent difference. You know, 20 percent more people of color and people of low socioeconomic status live in areas where there are a lot of these facilities. They also point out that facilities that are high greenhouse gas emitters are also high particulate matter 10 micron -- PM10 emitters.

And again, these facilities that emit both high greenhouse gases and a lot of PM10, are in poor and minority areas of the State. There was actually a very tight correlation.

Now, those of you who are sophisticated about air pollution metrics would say why PM10, which is -- you know, PM2.5, the fine particulate matter is more directly related with a lot of health outcomes. Well, they -- I actually directly queried the authors, and they said, well, the PM10 data was much more complete than the PM2.5 data. And I'll come to that later.

So then can I have the next slide?

--o0o--

BOARD MEMBER BALMES: So this is what was eye opening for me. You know, they are showing temporal changes in the total emitter coverage greenhouse gas emissions by industrial sector in this figure. And basically, you can see that only a few sectors -- actually, only -- and this slide cogeneration is actually going down much.

You know, there's -- I guess you'll see on the next slide, you know, it's not terrible news in terms of meeting our current requirements in terms of the cap, but it's also a little sobering too about how much we might need to do.

Could I have the next slide?

--o0o--

BOARD MEMBER BALMES: And then this is showing the total allowance budget on the far left of the figure, and that, you know, we're still under that. You know, we're below the cap. Total emissions with a compliance obligation are the emitters we're talking about here. The stars for the first 2 years is when we required reporting, but we're actually not requiring compliance. And you can see there's basically been not a big change. And then electricity imported is actually where we've got a big positive impact. The authors suggest that we're going to run out of bang for buck here with a -- in terms of clean energy importation. And so we have to start focusing on our big emitters here in the State.

Now, let me just say they conclude that - and I think there's evidence to support this from other studies - that we could get more public health impact from greater reductions in emissions from these high-emitting facilities, these facilities that emit both -- a lot of greenhouse gas emissions, and a lot of other pollutants.

So they're -- they would conclude by saying that while greenhouse gas emissions have been trending down since 2001, in-State emissions have actually increased in several sectors, and high-emitting facilities -- I don't show any slides about this -- they also claim, based on their analysis of the data that high-emitting facilities are using offsets outside of California more than other facilities.

And again, as I've already pointed out much of the reduction in greenhouse gas emissions comes from imported electricity that we've gotten that's cleaner.

They conclude -- actually, maybe one more slide, I think

--o0o--

BOARD MEMBER BALMES: This is a schematic of how they did their analysis. You know, and without going into a lot of detail, they found facilities that were reported emitter covered emissions on all 4 years that they looked at. So any facility that only reported in 1 or 2 years wouldn't be concluded here, 2011 to 2014, 353. Start with narrowed down to 314.

They also looked at the PM10 emissions data from, I don't know if you say Ceidars[see-ders} or Ceidars[say-dars].

Ceidars[see-ders], yeah I figured as much -- that they could link, you know, in terms of the same facilities that were reported -- that we're reporting under our mandatory greenhouse gas reporting system. And they had to do a fair amount of work to link these facilities, because the databases aren't compatible.

So as all researchers always want to say that more easily accessible databases would be better, not just for their own research, but so that California could track co-pollutants -- reduction of co-pollutants as we implemented our greenhouse gas reduction strategies.

They also wanted more publicly accessible data that was facility specific. They had to sort of hunt through again various sources to determine who was using offsets and who wasn't, and et cetera.

So Chair Nichols asked me to just do a brief summary. And I'm not going to engage in any kind of personal reflection on this, but I do think that tracking the co-benefits we get with regard to reduction of co-pollutants has been something that I think everybody who's been on the board with me for a while and staff knows is close to my heart with regard to impacting public health as we improve -- as we mitigate climate change.

CHAIR NICHOLS: Yes, we do. And it's a topic that obviously requires a lot more study and information. I thought the comments -- I did read the material that was released last week. And I thought the comments about the difficulties of accessing data were actually as interesting in some ways as the results of the study, in the sense that we really need -- we need it. And I'm happy to say that that's an item that's actually addressed in AB 197, which is helpful in terms of pushing that issue forward.

Mr. Gioia.

BOARD MEMBER GIOIA: Yeah, just a comment. I appreciate your presentation. And I think I had seen the study, read it before, but it's good getting your brief presentation. I just wanted to follow up on the last --

on page 11 sort of the -- some of the suggestions about how to collect more data, because I think that could also be useful for us at the local air district level. And I may talk more about this later. We're looking at some regulations in the Bay Area with regard to GHG caps. And we're also looking at it from a co-benefit standpoint as well.

So these recommendations about building better Linkages between State facility level databases on GHG, and co-pollutant emissions, tracking and making data available on company and company-specific allowance trading patterns, publicly releasing data on specific allowance allocations. So especially this idea of understanding the co-pollutant emissions associate -- that could be decreased associate with GHG emission decreases.

So I just want to maybe ask the staff how do you see going forward in trying to strengthen that data linkage between co-pollutants and GHGs and making it easier. What would you see as a way to make progress in that area?

DEPUTY EXECUTIVE OFFICER CHANG: Thank you.

BOARD MEMBER GIOIA: Because they had to get to it in a roundabout way in the study, and how would you see our role in being able to -- in working with local air districts be able to improve that.

DEPUTY EXECUTIVE OFFICER CHANG: Supervisor Gioia, as the Chair mentioned, this is something that is covered in SB 197.

BOARD MEMBER GIOIA: Right.

DEPUTY EXECUTIVE OFFICER CHANG: And SB 197 requires the Air Resources Board to make available annually information about the greenhouse gas criteria pollutant and air toxics emissions from major facilities, and in a way that makes it more accessible for people. So we do have a visualization tool right now that provides greenhouse gas emissions, and we have been working with the air districts on inserting criteria pollutant and toxic emissions into that tool. So this is a graphical tool, so you can see where all the facilities are relative to any particular location that you're interested in.

So the challenge of matching up those 2 data sets it is difficult. We have been working that too internally. And so as we're implementing 197, and I think we've got efforts that are happening even in advance of 197. So I think that we're going to be able to provide better information both for the districts that will be helpful, but also for the public.

BOARD MEMBER GIOIA: So what's the timing of when you think we'll have sort of a meaningful expanded tool?

DEPUTY EXECUTIVE OFFICER CHANG: We're looking at trying to get the criteria pollutant data in before the end of this year, if we can. 197 basically says put the criteria pollutant data and the greenhouse gas data together. And then it asks us to include the toxics information by the --

BOARD MEMBER GIOIA: Yeah, I was going to say about -- all right.

DEPUTY EXECUTIVE OFFICER CHANG: -- by the end of 2017.

BOARD MEMBER GIOIA: So critieria pollutants at the end of this year, toxic data by the end of next year.

DEPUTY EXECUTIVE OFFICER CHANG: Yes.

BOARD MEMBER GIOIA: Okay. Thanks.

CHAIR NICHOLS: At this point, I'm going to have to throw a flag down on the topic, although it's going to come up again, I know in connection with the other items on the agenda.

But we need to take a break for the court reporter. My question is is it smart to take lunch at the same time or are we not ready to do that? I can do either. Personally, I could either do this or wait till the next item, which --

EXECUTIVE OFFICER COREY: Next item will run about between staff presentation and testimony, 15 people signed, it's about 45, 50 minute item.

CHAIR NICHOLS: Well, then why don't we just take a short break.

EXECUTIVE OFFICER COREY: Sounds great.

CHAIR NICHOLS: It's like 10 minutes max. Okay.

Thank you.

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

(Thereupon a recess was taken.)

(On record: 12:30 p.m.)

CHAIR NICHOLS: As usual, my estimate of time was a little bit too optimistic.

Okay. Ladies and gentlemen, we are ready now for the public hearing to consider proposed amendments to the regulation for mandatory reporting of greenhouse gas emissions. This will be relatively short compared with the others that we've got. But I'm going to ask people to do 2 things.

First of all, I'm going to ask the Board members to cut their lunch time short. We do have an executive session at lunch, but I would like us to be able to eat and talk in a half an hour. And secondly, I'm going to ask everybody who's speaking on this and future items, and I'll repeat this again to consider whether they could shorten their time. I'm not going to mandate a shortened time yet. But if you're thinking about your testimony and working on it, or looking at it, if you can turn it into a on 2 minute, that would be good.

Okay. So. This item is the first of 3 related items that will be presented today. The other two are the proposed amendments to the Cap-and-Trade Program, which is certainly the one that's attracted the most attention, and the State's draft compliance plan for the federal Clean Power Plan.

The first item, the mandatory reporting regulation, contains the requirements and methods for reporting greenhouse gas emissions data. The data collected represent the foundation of the Cap-and-Trade Program, but they also provide emissions data to support other Air Resources Board climate change programs, including ARB's cost of implementation fee regulation, and the statewide greenhouse gas inventory.

And as just noted, when Dr. Balmes did his presentation, the data that the authors of the study used were from that mandatory reporting requirement. And the fact that we had such good data is what enabled us to develop the scoping plan when we did.

So, Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks Chair Nichols. So the Global Warming Solutions Act of 2006, or AB 32, created a comprehensive multi-year program to reduce greenhouse gas emissions in California.

And one of the requirements of AB 32 was for ARB to adopt a regulation for the mandatory reporting of greenhouse gas emissions data. And in 2007, the Board approved the regulation for the mandatory reporting of greenhouse gas emissions, establishing the nation's first mandatory reporting rule for greenhouse gas emissions reporting.

The first facility reporting began in early 2009 for data collected in 2008. Now, we collect annual data from over 775 entities. The Board has previously approved amendments to report -- to the reporting regulation. And since the last revisions in 2014, ARB staff has identified additional clarifications to the regulatory requirements needed to support the Cap-and-Trade Program.

Today, staff is proposing revisions that are needed to ensure consistency with benchmarking, allocation of allowances, and the calculation of compliance obligations. The proposed modifications and clarifications will ensure accurate and consistent data are collected to fully support the Cap-and-Trade Program and other ARB climate programs.

In addition, we've added provisions needed to support the implementation of the U.S. EPA Clean Power Plan requirements that we'll be hearing about later today.

Now, John Swanson from the Climate Change Reporting Section will provide the staff presentation.

John.

(Thereupon an overhead presentation was presented as follows.)

EXECUTIVE OFFICER COREY: January

AIR POLLUTION SPECIALIST SWANSON: Thank you, Mr. Corey. Good afternoon, Chair Nichols, and members of the Board. This Board item is to discuss staff's proposed amendments to the regulation for the mandatory reporting of greenhouse gas emissions.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: I would like to remind the Board that this is the first of two Board hearings for this rule-making on the proposed mandatory reporting regulation amendments. There's no Board action on this item today. And the second Board hearing on these amendments is currently scheduled for spring of 2017.

The amendments we are proposing today provide updates necessary to ensure that reported data are accurate, complete, and fully support ARB's climate program. The proposed revisions were developed in coordination with affected stakeholders, who provided helpful comments to staff.

For today's presentation, we will provide some background on the mandatory reporting program, summarize the proposed amendments, describe areas where staff are proposing 15-day changes based on stakeholder input, and outline the next steps in the regulatory process.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: Today, we are presenting 3 interrelated items to the Board. First is the mandatory reporting regulation, also known as MRR, which collects greenhouse gas data and includes verification requirements to support the California Cap-and-Trade Program, the statewide emissions inventory, as well as other ARB climate programs.

In the second item, staff will present proposed amendments to the Cap-and-Trade Program regulation. And in the final item, staff will present ARB's draft compliance plan required to comply with the federal Clean Power Plan, or CPP rule. All proposed changes or regulatory updates are being closely coordinated for these 3 items.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: The regulation before you today is the 5th revision to the mandatory reporting regulation, which was initially adopted by the Board in 2007. This year, nearly 800 entities reported under the mandatory reporting regulation to support the various climate change programs at ARB. The reporting entities subject to the regulation fall into 3 primary categories.

First, we have stationary source facilities with GHG emissions of more than 10,000 metric tons of carbon dioxide equivalent, or CO_2e, per year.

Next, electricity importers and retail providers of electricity must report under the regulation. There is no minimum reporting threshold for these entities.

In addition, fuel suppliers, including transportation fuel and natural gas suppliers with emissions over 10,000 metrics tons of CO_2e are subject to reporting.

To ensure the high quality and accuracy of submitted data, all reporting entities that emit over 25,000 metrics tons of CO_2e per year and are subject to the Cap-and-Trade Program CO_2e are required to have their data fully verified by an ARB-accredited independent third-party verification body.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: The amendments before you today are proposed to ensure that complete and accurate data are used to support ARB's climate programs. This slide provides a summary of the major changes, which I will then explain in more detail in subsequent slides.

Staff is proposing a series of general updates to the regulation based on experience with the program, and stakeholder input to clarify and streamline the reporting requirements and their implementation.

Also, we are proposing amendments to align the reporting requirements with the proposed changes to the Cap-and-Trade Regulation as needed for ongoing program consistency.

We have also included clarification and updates for the petroleum and natural gas production sector and for fuel suppliers. We've also added a new section to the regulation needed to implement the U.S. EPA Clean Power Plan requirements, provided updates for electric power entities or importers of electricity to California, and have proposed moving the annual verification deadline up by a month from September 1st to August 1st.

I will now walk through the proposed updates in more detail.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: Staff is proposing several updates for accuracy, clarity, and completeness. To reflect current science and to be consistent with ARB's statewide greenhouse gas inventory program, staff is proposing an update to the global warming potential values used for calculations starting with calendar year 2021 data reported in 2022. The regulation would be moving from the second assessment report of the Intergovernmental Panel on Climate Change to the fourth assessment report.

Other changes include revisions to clarify and modify the cessation criteria for reporting and verification. Staff is also proposing to modify applicability requirements for small oil and gas producers to include flaring emissions.

We have also proposed an update to the point of regulation for liquefied petroleum gas and liquefied natural gas imported to California from the consignee to the importer. This change is needed to fully account for emissions from the combustion of fuels imported into California.

Other updates are intended to clarify reporting Applicability for reporters that are both fuel suppliers and direct emitters, and the emissions sources that must be reported for natural gas processing plants.

The majority of the amendments would take effect for the 2018 data reported in 2019. However, some product data reporting updates would take effect one year earlier for 2017 data report in 2018 to support the allocation of allowances under the Cap-and-Trade Program.

The proposed Clean Power Plan changes would take effect for 2021 data reported in 2022, consistent with the federally mandated compliance schedule.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: The mandatory reporting regulation provides critical emissions, product, and other data needed for Cap-and-Trade Program implementation. Therefore, with the proposed 2016 Cap-and-Trade Regulation amendments, we need to make conforming updates to the reporting regulation for consistency and to implement the Cap-and-Trade Program.

Specifically, the updates to align with the Cap-and-Trade Regulation are necessary to support the calculation of compliance obligations and allowance allocations. We have proposed several minor changes necessary to fully an accurately collect data used to calculate this information.

Staff is proposing updates to definitions in the reporting regulation to harmonize with the Cap-and-Trade Regulation and to clarify and add product data reporting, which is necessary for allowance allocation. For example, we are proposing clarifications for refinery complexity weighted barrel, or CWB, throughput, which includes consolidation of product data reporting for refineries as well as clarifications to hydrogen production reporting, and clarifications to requirements for sectors such as milk production, tomato products, poultry and others.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: For the petroleum and natural gas systems sector, staff is proposing several minor modifications to clarify the calculation of greenhouse gas emissions, including the conversion of volumetric data to reflect standard conditions, and to allow use of a default combustion efficiency value when computing combustion emissions.

The proposed updates also replaced the existing flash emissions test method with a revised method, which is needed to improve data quality and provide consistency with other ARB programs.

Finally, we have clarified that all sorbent-related greenhouse gas emissions must be reported by this sector.

Beginning with the 2015 data reported this year, fuel suppliers now have a compliance obligation under the Cap-and-Trade Program. We are prosing several changes to support the Cap-and-Trade Program and to clarify the requirements. For example, to address the potential double reporting of fuel volumes, staff is proposing to clarify the reporting requirements for transportation fuel that passes through multiple racks prior to final delivery, and remove the reporting requirement for enterers and in-state producers of ethanol and biodiesel.

Also, to facilitate the verification process, and better assure accurate reporting, staff is proposing to add a new requirement to report the volume of transportation fuel that is excluded from emissions reporting and cap-and-trade obligations due to export out of California, or use in either aviation or marine applications.

Staff is also clarifying the reporting requirements for intrastate pipeline suppliers, and facilities that deliver or pass through natural gas to other facilities, in order to avoid ambiguity in who is required to report as an intrastate pipeline natural gas supplier.

We've also included the option for local distribution companies to report biomethane deliveries that they deliver on behalf of another company to allow these fuels to be removed from the deliverer's cap-and-trade compliance obligation when specified criteria are met.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: Staff has added a new subarticle to the mandatory reporting rule to implement the collection of data to support the Clean Power Plan requirements. For example, additional watt meter and other data will be reported to ARB that is also currently reported to EPA. And each electricity generating unit must be separately reported.

Generally, most affected California power plants already meet the Clean Power Plan reporting requirements through compliance with the mandatory reporting regulation and the proposed amendments will require minimal changes to current reporting.

The proposed amendments to support the Clean Power Plan would take effect for 2021 data reported in 2022, assuming the Clean Power Plan is upheld and there are no changes to the existing EPA compliance schedule.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: For electric power entities, or importers of electricity to California, staff is proposing several modifications to make the reporting of electricity imports more complete, robust, and transparent. We are clarifying the reporting requirements for specified source imports to ensure accurate emissions accounting.

Next, staff is proposing amendments to the reporting requirements to address the incomplete reporting of emissions associated with imported electricity transfers within the energy imbalance market.

This is an area where we will continue to work with stakeholders to ensure we accurately capture all emissions associated with electricity load that serves California.

On a related subject, we have also included a proposal to include the California Independent System Operator, or CAISO, as a reporting entity under MRR, to track electricity imports data that is related to transfers within the energy imbalance market. Timely, accurate, and verified data is critical to support our GHG inventory and Cap-and-Trade Program. Staff will continue to coordinate with stakeholders to refine the proposed amendments.

In addition, staff is proposing removal of the provisions associated with the qualified export adjustment, which is necessary to be consistent with the Cap-and-Trade Program's treatment of these emissions. We have also proposed amendments to clarify the requirements for reporting sales into the CAISO for Cap-and-Trade Program implementation purposes.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: One critical change we are proposing is moving the annual verification deadline up from September 1st of each year to August 1st. This change is necessary to better support the implementation of the Cap-and-Trade program, including the allocation of allowances by the annual November 1st compliance deadline for entities subject to that program.

Currently, Reporting and Cap-and-Trade Program staff only has a few weeks to fully perform quality assurance of the verified data, and calculate compliance obligations before ARB allocates allowances and assesses compliance obligations for entities subject to the Cap-and-Trade Program.

Currently, this truncates the time that staff need to address any issues that may arise in the data, and does not provide entities sufficient time to review their allocations and compliance obligations to determine whether they need to purchase additional compliance instruments prior to November 1st.

Moving the verification deadline up by one month will ensure staff has sufficient time to quality check the data and to calculate and assess compliance obligations, such that the cap-and-trade entities have ample time to understand and meet their financial obligations under the Cap-and-Trade Program.

We believe that the August 1st deadline can successfully be attained by reporters and verifiers, if they start early to choose and contract with the verification body, begin the verification immediately after the completed reports are submitted, and maintain consistent engagement throughout the verification process.

Staff is working with stakeholders to identify efficiencies that could be implemented by both ARB staff and the reporting entities to ensure a more streamlined reporting and verification process to support this proposed deadline change.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: To help address some stakeholder concerns related to the change in the verification deadline, staff is proposing adjustments to timing requirements for verifier submittal of documentation and ARB review of the materials to help streamline the process.

Staff also is proposing minor changes to streamline the accreditation process for verifiers.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: Staff is anticipating a few targeted 15-day revisions, which we will address and release to the public as a regulatory update package consistent with the Administrative Procedures Act and in consultation with stakeholders.

We determined that a source category associated with nitric acid production is not currently reportable under MRR, so we intend to add these emissions to the reporting requirements as part of applicability provisions. For fuel suppliers, we will have minor clarifications to the already proposed amendments to changes in ownership and cessation requirements.

We are also expecting additional definition changes as we work with Cap-and-Trade Program staff to refine product data reporting requirements, which are used to quantify allocations for industry sectors.

For verification, we plan to add additional information regarding what should be included in the verifier's issues log, which is used to document potential problems identified during verification, and as discussed earlier in this presentation, we will continue to engage with stakeholders to streamline the verification process in support of the proposed deadline change.

We also expect ongoing revisions as we work with stakeholders to address incomplete reporting of imported electricity emissions under the California Independent System Operator Energy Imbalance Market.

--o0o--

AIR POLLUTION SPECIALIST SWANSON: This Board item for mandatory reporting will be addressed through 2 Board meetings. Based on written comments received during our initial comment period, testimony provided today, and direction from the Board, pursuant to the Administrative Procedures Act, staff will publicly notice and release proposed 15-day changes for further comment.

Staff will then appear before the Board during the spring of 2017 for a final determination on the proposed amendments. If the updates are approved by the Board, we will submit the full regulation package to the Office of Administrative Law during the summer of 2017.

If approved, the regulation would become effective on January 1st, 2018. Thank you for your time. This concludes my presentation, and staff will be happy to answer any questions you may have.

CHAIR NICHOLS: I think we can move directly to the testimony on this. So people will please come forward and be ready to speak when your time comes, we would appreciate it.

And at the completion of this, I will be closing the record, except for 15-day comments, so just be prepared.

Come on down. Is Shelly Sullivan here?

Excuse me? Oh, the list was not up. Oh, sorry. I was wondering why people were looking confused. I have it right here.

(Laughter.)

CHAIR NICHOLS: Okay. Thank you.

MS. SULLIVAN: I'm sorry, I didn't see the list.

I'm Shelly Sullivan. I'm here on behalf of the

Climate Change Policy Coalition. We represent business and taxpayer organization. And mainly, we just really wanted to comment basically back to slide 12, upon review of the MRR, we are opposed to changing the verification deadline to August 1st. We believe that moving that deadline is going to create a significant burden for both reporting entities and verification bodies. So we recommend leaving it at the current deadline. And if we need to, maybe push back the cap-and-trade deadlines, because they appear to be more flexible.

We did submit our written comments today as well. And we stated there that if ARB does move the deadline, we have some suggestions in those written comments that you might want to consider, for example, providing incentives for advanced reporting and verification, and then maybe even recognition of good faith efforts by obligated parties to provide timely compliance that is otherwise compromised because of the deadline change.

Our other suggestions are -- we have about 4 or 5 other ones for your consideration, and I think other people will probably cover that. So thank you for your time.

CHAIR NICHOLS: Thank you.

MS. BERLIN: Good afternoon, Madam Chair, members of the Board. My name is Susie Berlin and I'm representing MSR Public Power, and the Northern California Power Agency.

And just briefly on the MRR amendments, we echo concerns with regard to the changed verification deadline. We've been working through the timelines, and our folks find it very difficult to envision being able to timely meet the accelerated verification deadline. And that's not just because of information that they're compiling, but the need to work with other entities to receive information, and then the ongoing work with the verifier site visits and the like. That process just takes too long, and they're very concerned with being able to accelerate the entire process by one month.

And I know you're not taking any action today on the actual regulations, but we appreciate hearing the coordination with regard to the amendments that are going to also impact the Cap-and-Trade Program, and implementation of the Clean Power Plan. And we urge you to ensure that stakeholders have sufficient time to review both sets of regulations together. And with regard to the proposed revisions that would restrict the ability to utilize the cap-and-trade adjustment, and in our estimation comply with the RPS program without added cost, and changes that are aimed at addressing the concerns with the EIM accounting.

We ask that those be completely held off until after the substantive underlying issues have been reviewed and assessed, and concluded in the context of the Cap-and-Trade Program regulation, and then the MRR amendments that would be necessary to affect those changes be taken up.

Thank you.

CHAIR NICHOLS: Thank you.

MR. WINTERGREEN: Good afternoon, Chair Nichols, and Board members. My name is Jay Wintergreen. I work for First Environment. And we are an ARB-accredited verification body for emission data reports, and have been active in this area since 2009. As indicated in the staff presentation, a proposed revision to the MRR is a change to the verification deadline from September 1st to August 1st. This shortens the verification period by 20 percent for facilities, and 33 percent for electric power entities. And I just bring this up because it is a material reduction in that verification period.

It's been our experience that it's not uncommon for verification activities to extend into August and, in some cases, right up to the current September 1st deadline. And staff -- ARB staff presentations have supported this trend towards the end. And in some cases, and in many cases, these delays are outside of the control of verification bodies. If the deadline is changed to an August 1st deadline, as is currently proposed, we are concerned that it will result in reduced quality of reported data, an increased risk in reporters missing the deadline and potential enforcement actions. And we feel that this would be an unfortunate situation at a critical point in the AB -- AB 32 program.

ARB staff have presented a need for the change in this deadline, and we respect that argument for the need for the change, and -- but if the August 1st deadline revision is necessary, we request additional revisions to the regulation to facilitate success at meeting the shortened deadline. And we have submitted written comments to ARB identifying proposed additional changes to the regulation.

Thank you very much for the opportunity to present these concerns.

MR. BENGTSSON: Good afternoon, Chair Nichols, members of the Board. Nathan Bengtsson on behalf of PG&E. Just 4 points for your consideration today, even though the MRR can be really technical, these have to do mostly with calendar, which I think we all understand.

I also just want to say really quickly that we support the comments made by Susie Berlin regarding the GHG AM issue, and the RPS adjustment issue.

So, for one thing, advancing the verification due date by one month to August 1st will increase the risk of noncompliance as you've just heard. Fifteen MRR reports are required annually, and that covers hundreds, if not thousands, of facilities, spanning from the Oregon border to Arizona. Seven years of experience has shown us just how meticulous and rigorous these checks are. It just takes time.

And August 1st will be a very challenging deadline to meet. We understand that staff are squeezed too, but we respectfully ask that you direct staff to reconsider this change and continue talking with us to fine a workable date or otherwise workable solution.

Also on calendar items, staff have proposed reducing the time limit to respond to data requests by over 75 percent. That's from 20 days to 5 days. And this unduly increases the risk of a violation resulting from untimely responses. We suggest at least a 10-business day response time be considered. Again, these things just take time.

And then finally, we ask that ARB extend the time the same verification body can provide services. Right now it's 6 years. We hope that could be increased to 12 years. These services are in high demand. The people who get to know our systems, that takes time too. The turnover takes even more time.

And so especially with potential other AB 32 regulations requiring verification, like potentially LCFS, we hope that you'll consider extending from 6 to 12 years. ARB has a robust vetting program anyway, and this change will not impact the integrity or success of the MRR program.

Finally, I'll just say, we strongly support the amendment to eliminate the risk of an adverse verification as a result of reporting errors that are not linked with covered emissions. This is going to allow us to focus on the right things.

Thanks.

CHAIR NICHOLS: Thank you.

MR. ARITA: Madam Chair, members of the Board. My name is Steven Arita with Chevron Corporation. I'll be real quick for you too, because I know you're working to get to lunch. I'd just like to support Ms. Sullivan's comments in regards to pushing the verification date up to a month. That is a big concern of ours. We have spent many times with Rajinder, and Brieanne, and staff in going through our concerns with this proposed change.

And, in fact, what we have done also is we did go through a very detailed description of the process that we go through and other members of our industry go through during the verification process. So it is a long, intensive process. And I think the bottom line is, and I've said this before, on other revisions of the MRR regulation, is that we all -- we both want accurate information.

And even here we are today as we go forward with other reports, it still takes time. It's still a process, especially for those facilities that are larger facilities. So we would request that staff consider the other options that Ms. Sullivan referenced, one of which was pushing the date back. It would allow, you know, both time for staff to do what they need to do, which we realize is very important, but also it preserves our ability for the regulated community to provide an accurate and -- a report so that it is accurate and it supports the Cap-and-Trade Program.

One other option too that we would like to throw out for consideration is -- among the options, is that again recognizing what staff's needs are to ensure the -- they have the time to review and do the calculation for the allocations of the program -- for the Cap-and-Trade Program, one other option we had thrown out was what if we were to look at splitting the time? What if we were to settle on a date of August 15th as one option.

That way we would be able to at least address our concerns. We would still be constrained. We'd still have to meet the requirements obviously on a reduced time frame, but it also gives staff some additional time as well. So we would respectfully request that, you know, Madam Chair, that you and the Board would consider that as an alternative option, and as a compromise so that we can both get the work that we need to do, get done in an accurate way. And again, that's the point, we both want accurate information.

CHAIR NICHOLS: So I just want to be clear though that is a one-time problem with a change, whatever it is. You're going to have a year -- a full year going forward, whatever the date is that's chosen, right?

MR. ARITA: Yes. Well, that's how we understand, but they change --

CHAIR NICHOLS: Okay. I just wanted to be sure. So it's a transition problem as people say, but -- okay. It's a -- I understand it's a problem. I'm just -- yeah, okay. Thank you.

MR. ARITA: And we just think that would be a very reasonable compromise that we would hope that you would consider. Thank you.

CHAIR NICHOLS: Okay. Thank you.

MR. SPITZER: Good afternoon, Chair Nichols and Board members. My name is Paul Spitzer from Avan Grid

Renewables. I will attempt to keep my comments simple and brief, which is the opposite of the reporting process for the CARB report.

(Laughter.)

MR. SPITZER: I'm the analyst at Avan Grid Renewables tasked with overseeing producing the CARB report in conjunction with a number of folks in our office, as well as coordinating with a number of other offices in order to make sure that everything is accurate, complete and meets the requirements of the ARB.

We did everything in our power to engage our verifier early. We had them in our office one week after the -- our deadline for submitting the report, and we still were working with our verifier on August 30 and 31st in order to make sure that everything was correct in our report.

I would echo the comments of previous folks here, and I'm assuming folks who will speak after me, that the August 1st deadline would pose a large hardship on those producing the report, and runs the risk of errors, et cetera, that could emerge from trying to rush through things.

Thank you very much.

CHAIR NICHOLS: Thank you.

MR. SPITZER: And also, this is not a

transitionary problem. It would happen every year, just because of having to coordinate amongst the renewable energy credits and other counterparties, et cetera. So I don't feel it's a issue of transition.

CHAIR NICHOLS: Okay.

MS. ROBERTS: Chair Nichols and members of the Board. My name is Tiffany Roberts from Western States Petroleum Association. We really appreciate the opportunity to comment today. And for the past year WSPA and WSPA-member companies have worked extensively with ARB staff and management in the development of the MRR amendments. And WSPA really appreciates staff's engagement on that.

We do have some outstanding concerns. We would echo the concern that I think you've heard today about the verification deadline. We've provided staff with a detailed timeline that demonstrates that every month and nearly every week between January and September is spent organizing, scheduling, presenting, and working through the inevitable iterative process with both verifiers and ARB.

And this iterative and robust process is critical to successful verification for complex facilities such as refineries and oil and gas production. We would echo the comments from Mr. Arita from Chevron in saying that as an alternative, we would propose a compromise of August 15th or we would ask the Board to direct staff to maintain the current verification deadline of September 1st.

Let me turn to a couple of other more technical items. Another concern for us is the material misstatement requirements. As it's currently drafted, the proposed amendment would double the potential for material misstatement violation at the field level, where both thermal and non-thermal barrels are produced. It makes each category of barrel, thermal and non-thermal, subject to a separate potential material misstatement, rather than a single misstatement for the entire field.

And although ARB staff has stated its intent to regulate all industries based on a common unit of measure, a more stringent standard is being proposed here for the oil and gas industry putting owners of split fields, the thermal and non-thermal fields, at an arbitrary disadvantage.

Lastly, and if I've got time here, in general, WSPA recommends that ARB be consistent in its use of deadlines by using quote unquote working days instead of calendar days. Currently, there's a mix of both of those terms, and there's been concern from ARB staff that working days may not be a term consistently interpreted by reporters and verification bodies. That can simply be resolved with the definition. And so the definition for working days would be defined as days of the week, excluding weekends and national and State holidays.

Thank you.

CHAIR NICHOLS: Thank you.

MR. TUTT: Good afternoon, Chair Nichols, members of the Board. My name is Timothy Tutt, and I'm representing the Sacramento Municipal Utility District here this afternoon.

I want to echo the previous comments about moving the verification deadline up by one month. It's not really a transitional issue, because it's a calendar year reporting period. We're supposed to get data up through December 31st. That data doesn't come on December 31st. For electric power importing, it often doesn't come until April, May, even June before we can actually give it to a verifier to verify. So there's very little time in the remaining period after the date is in to get this done. It's not transitional in my mind.

And then I'd also like to say that maybe some compromise date would be important or reasonable. Just don't choose August 6th, because that's my anniversary, I don't want that messed up.

(Laughter.)

MR. TUTT: Secondly, another concern that we have is the expansion of the lesser-of analysis to contracts that are currently grandfathered under the RPS. In the RPS program, a lesser-of analysis is required for some contracts the MRR as it stood last year before the proposed amendments was consistent with that. The expansion makes it inconsistent with that. And it's our position that you should have more consistency with the RPS and not less. It's going to be inefficient to require entities to do a particular kind of analysis under one program, and not have it under another program.

Thank you very much.

MS. PARSONS: Good afternoon Madam Chair and members of the Board. Cindy Parsons representing the Los Angeles Department of Water and Power. So verification deadline, we're on a role, same concerns. It is not a transitional issue.

Basically, what -- what's happening is that each year the reporting requirements get more and more complicated, and -- which requires a more thorough verification. And so you're taking a more complicated report and trying to compress the verification into a shorter time period.

And one of the issues for us is an electric power entity, as Tim mentioned, you don't get the data until June. And so you really only have two months if the

August 1st deadline is approved.

So we actually do request that you either leave it at September 1st or consider doing a bifurcated deadline where you have an earlier deadline for some of the simpler facilities -- not the complicated facilities, but the simpler ones. And that would give staff at least some data, so that they could start doing their work, and then leave September 1st as the deadline for the more complicated facilities and the entity reports. That seems like striking a balance between the needs of staff and the needs of the reporters and the verifiers.

In follow up to what Susie said, there are some outstanding issues related to the RPS adjustment. Some of the proposed amendments to the MRR are directly related to that issue. And given that it is unresolved, that we would ask you to hold off on any amendments related to the RPS adjustment, specifically the Sections are 95105(d)(6), 95111(a)(4), and 95111(g)(1)(M)(3). Those amendments are premature, and should not be adopted until this issue has been resolved.

And lastly, the lesser of analysis is also a concern for us. Those -- the grandfathered RPS contracts were exempt for a reason. And it's because you don't have the contractual right to the meter data that you would need to do that lesser-of analysis. And so it's really unfair for staff to impose a requirement when you may not be able to have the data to be able to perform that requirement.

And if you can't perform the requirement, then you get a non-conformance and a qualified positive verification statement. And so it's just -- the requirement should be feasible. And it's just not -- it's not a good idea to impose that on grandfathered RPS contracts.

Thank you.

CHAIR NICHOLS: Todd Shuman?

Mr. Shuman?

Sean Neal.

MR. NEAL: Thank you Madam Chair and Board. My name is Sean Neal. I'm here on behalf of the Modesto Irrigation District, or MID.

MID similarly opposes -- has concerns with the change in the verification deadline proposed from September 1 to August 1st. MID faces similar challenges of facing a rigorous schedule of site visits and data review.

While MID finds -- you know, strives to -- for timely completion of this report, it finds it is often completing the report with, you know, just a few days before the deadline. MID is -- while staff has raised the -- described how the Clean Power Plan requirements are similar and synch up with the reporting requirements, MID is concerned and fears that that will not end up being the case in actuality, and such that the change -- that the existing verification deadline would give adequate time to account for both.

And similarly to other commenters, we do not believe it's a transitional issue. One report and data input, the electric power entity emissions report, issued -- due June 1st every year creates this as a continuing issue, and -- rather than a transitional issue.

I thank you for your time.

CHAIR NICHOLS: Hi.

MR. LARREA: Good afternoon, Board members. John Larrea with the California League of Food Processors, continuing along the line of verification date changes. As you know, the food processors, their seasons are about 90 days. They run from July through September. So this verification change is kind of like taking those -- pushing us out of the smoke-filled room and into the fire room.

So we are really looking for -- you know, in the end, I've made the suggestion before, and I think it's still valid is that if you could incentivize some of this, you might find that you'd find a lot of the smaller companies that don't require as much verification moving much quicker. So I call it kind of like the early-bird registration. You know, you get a little bit off, if you register early.

So if you set like an incentive date of June 1st, companies like ours could probably get this done, and get it verified, and signed off by CARB well before that. And as part of the incentive, they'd get their allowances early, as opposed to waiting for the entire thing to happen.

It would also help the verifiers, because they'd be able to identify those companies are willing to move very, very quickly and allow them to maybe associate better timing with it, so that they could, you know, not be so rushed at the very end, because I suspect that for most of the companies like ours, you know, the more complex ones they start off on January 1st, and they take up all the time, and then we get left at the end, because they've got to be able to deal with those more complex issues. And so then it's a big rush for us, and it's right in the middle of our season.

So I'd -- you know, please take a look at policy incentivizing this. I'd appreciate that.

Thank you.

CHAIR NICHOLS: Thank you.

MS. TAHERI: Good afternoon, Chair and Board Members. Sarah Taheri with the Southern California Public Power Authority, or SCAPA.

SCAPA is a joint powers authority that is comprised of 12 public power members, including the largest municipal utility and the largest irrigation district in the nation.

Today, I simply want to echo comments from several parties regarding the one month shift of the verification reporting deadline. This is problematic for several of our members, and so we simply request that the Board work with staff to consider other options or keep the existing deadline of September 1st.

With that, thank for your time and consideration.

MS. HUGHES: Good afternoon, Chair and Board. My name is Kathleen Hughes from Silicon Valley Power. There's a lot of echoes in here, so I'll be very brief.

I'm echoing just about everybody else's concern about the movement of the MRR deadline up. We do our best. We work with our verifiers ahead of time. There's a lot of back and forth, and a lot of detail that goes into it, and we want to make sure that our report is complete and accurate.

And we believe we deliver that accurate product, but it takes the time. The other important part that we have to address is what Cindy Parsons mentioned and I'll -- another echo, is about the lesser-than analysis, and implications on the RPS adjustment, the RPS Program and how it's disjointed. And we really need to have things be more congruent with all policies in California. Thank you.

CHAIR NICHOLS: Thank you.

MR. BIERING: Good afternoon, Chairman Nichols members of the Board. I'm on behalf of Turlock Irrigation District. I, first, want to point off -- point out that I think, as you know, the electricity sector is extremely complex and dynamic. And I want to commend the ARB staff for working with the electricity sector to address the complexities and the involving nature of the MRR.

As a reporting entity, I mean, one of TID's primary goals is to make sure that its report is in compliance, is complete, is accurate, and can be verified. We also have to balance our reporting requirements against requirements that we have in other regulations, specifically the RPS.

Now, you've heard from a number of other people that some of the changes in the MRR that are being proposed will create inconsistencies with the RPS program, specifically the lesser-of meter data comparison. We'll echo that. That will create an inconsistency with how grandfathered resources are verified under the RPS program.

And the specified source import issue, it is more than just a clarification. It is a fundamental shift in policy. Right now, there is a requirement in the MRR for specified importers to report REC serial numbers. And that requirement has not been verified.

And what these changes would do is they would remove that REC serial number reporting requirement. And they would basically allow an entity that has not purchased the green attributes from a out-of-state resource to claim the green attributes of that resource.

That creates an inconsistency with the RPS program. And it undermines the value that California's ratepayers have paid for out-of-state RPS energy. So we would ask that, you know, you not just reconsider it and evaluate this in the context of the cap and trade, but really look at it in the context of its own issue under the MRR.

Thank you.

MR. SKVARLA: Hello. My name is Mik Skvarla. I'm here on behalf of the California Council for Environmental and Economic Balance, or CCEEB.

I want to echo the comments by most of the compliance entities and organizations representing compliance entities today with regards to the deadline. At this point, the MRR rule moving forward adds complexity. This complexity adds time.

Moving that deadline back and taking that month away is going to create an additional compliance risk for a number of organizations. We'd like to offer our assistance working with ARB staff moving forward. At this point, even in the workshops prior to this, I don't believe any compliance entity has supported this deadline change. And we think that perhaps it should be workshopped moving forward, and we can come to some sort of compromise that works for all parties involved.

Additionally, we'd like to request that the relationship time limits with the verifiers be extended beyond that 6 years. It takes while to learn these facilities. The complex -- especially the larger and more complex facilities. By extending that timeline, we might be able to get some additional efficiencies in how these reports are performed and turned in.

So appreciate your time. Thank you.

MR. GRIFFITHS: Good afternoon, Chair Nichols and members of the Board. My name is Dan Griffiths from the California Municipal Utilities Association, CMUA is a statewide organization of local public agencies in California that provide electricity, gas, and water service to California customers.

As with past speakers, we ask that the ARB not change the verification deadline from September 1st to August 1st, which would further strain efforts to complete the verification process by the allotted deadline.

We also recommend that the ARB continue to encourage and develop a large pool of accredited verifiers, which could reduce challenges in meeting verification deadlines. Thank for your time.

CHAIR NICHOLS: Thank you.

Todd Campbell.

MR. CAMPBELL: Madam Chair and members of the Board, Todd Campbell, representing Clean Energy. And I apologize for the late add. I didn't realize that this was an issue that we needed to formally testify on.

But we wanted to commend the ARB's acknowledgement and proposal to address the unintended competitive advantage that the MMR -- or MRR currently gives to imported LNG vehicle fuels versus California produced LNG.

However, we are concerned that there is a potential loophole in the proposed regulation. Changing the regulated party from the California consignee to the importer of LNG does, in theory, level the playing field, assuming that out-of-state LNG producers continue to act as the importers of the fuel to California.

However, in order to avoid potential MRR compliance costs, an out-of-state LNG producer could conceivably contract away their liability by simply transferring title to the LNG customer at an out-of-state LNG plant where shipments are picked up, or contracting through a third-party logistics firm to accept title and risk of loss to the LNG out-of-state plant as an act -- as the importer.

As long as the customer or logistics firm does not import and consume enough fuel in the aggregate to trigger a reporting obligation under MRR, and/or a compliance obligation under the cap and trade, then the LNG shipments would presumably continue to have competitive advantages versus LNG produced in California that does carry such a compliance obligation and cost.

Therefore, we would urge that the ARB consider amending the proposed regulation, so that an LNG producer that produces LNG vehicle fuel that is exported into California, so it's subject to the MRR and cap and trade with respect to those LNG exports, regardless of the entity that holds the title to the product at the time it crosses the California State line.

Potentially, this could be achieved by modifying the definition of importer with respect to the LNG imports to state that, "In the event that the importer does not otherwise trigger MRR or cap and trade with respect to the LNG volumes imported due to their small size, that the producer of that LNG will be considered the importer for the purpose of MRR and cap and trade.

And then for the purposes of time, we have one other issue with the eligibility requirements for the biomass -- biomass derived fuels. The eligibility requirements under Section 95852.1.1 for biomass derived fuels continue to apply only to biogas and biomethane, among all biofuels.

And we think if resource shuffling is to be applied at all under this regulation, it should be applied to all biomass fuels, not just biogas.

Thank you.

CHAIR NICHOLS: Okay. That concludes the list of witnesses that I had, so I think we can close the record at this point, and bring this back to the Board for any discussion. We appear to have not attracted a lot of support for the change in the date.

(Laughter.)

CHAIR NICHOLS: So not that that's the only criteria, but --

(Laughter.)

CHAIR NICHOLS: -- I am concerned that there just seems to be a wall of opposition here. So staff have any inclination to throw out a life-line here or --

(Laughter.)

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: I'm going to try and throw out a lifeline here.

So the proposal to change the verification deadline should be put into some context. So if you're reporting from January 1, 2015 -- or collecting data from January 1, 2015 until December 31st, 2015, that's 12 months of data. You have 4 or 5 months to actually report that data to ARB, and then you have a total of 9 months to September 1st -- actually, that's 8 months -- 8 months to get that information verified.

And so that's a total of 8 months to get your data reported and verified after you're done actually collecting that data for the previous year.

In contrast, Quebec gives their reporters until July 1 to not only report their data, verify their data, and then be prepared to surrender their compliance instruments to their Cap-and-Trade Program. So we're not asking for something that we think is unreasonable. This is already being done in practice in one of our linked jurisdiction partner jurisdictions.

The question --

CHAIR NICHOLS: Is that the motivation for doing this -- making this change?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: No. The motivation is that at the end of the verification deadline on September 1, staff spends about 5 weeks reviewing that data, doing some QC/QA checks across the system, looking at reports and data among entities because they do have some types of relationships when they're talking about imports and trading of electricity between some entities.

When that happens, we identify issues and we have to go back to the reporters. The reporters have to revise their reports and get them verified again.

So now you're into some point in October, where we have the final reported data. Once we're in October, we have to allocate millions of dollars of allowances on that data. And we also have to put the compliance obligations into the cap-and-trade tracking system. That's probably the third week of October. And the complete compliance for cap and trade is due on November 1.

We literally had to help people scramble 2 days before the November 1 deadline to get their reports verified and fixed, so that they were not incurring millions of dollars of compliance obligation. And so we managed to do that by scrambling at the last minute. But we want to try and avoid that by working earlier with reporters to make sure we get their data early, we review it across the system, and make sure that all the data is correct, and they have ample time to comply with cap and trade, instead of trying to ask us is your system available on Saturday and Sunday in case we get our instruments and we're able to comply by the deadline?

So we have these issues that are going on on the back-end that we're really trying to address.

CHAIR NICHOLS: Okay. I'm -- any other questions from any Board -- yes, Mr. Serna.

BOARD MEMBER SERNA: Thank you, Chair. So you opened Rajinder with a reference to Quebec. Is there any substantive difference though between their -- the whole pool of protocols affecting their reporting versus ours? If we're going to compare apples to apples, I'd like to know that.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Sure. So Quebec's reporting program is very similar to California's reporting program. We all started out with a basic design document about how reporting requirements had to be done, if we were going to link our programs. So the type of information is essentially the same.

So it's not that they have a simpler reporting process, it's essentially the same. They have less reporters --

BOARD MEMBER SERNA: I was going to say, is it a volume issue?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Right. So they have less reporters, and they have verifiers in Canada, but we also feel like we have sufficient -- a sufficient ratio of verifiers to reporters similar to what they have in Quebec.

And so I think when we're talking about it here, it's really looking at some of the data that we had before we proposed the change. And in looking at the data that we had for the last few years, we realized that after the reporting deadline, there's literally a lag in the summer before there's any action on verification.

And so when we proposed that 4 week change, we're really basing it on historical data that we've collected about who's doing what after reporting to actually begin and get through the verification process. And there seems to be some space in there based on the data that we have.

CHAIR NICHOLS: Mrs. Riordan.

BOARD MEMBER RIORDAN: Yes. I had a question about the offer or the thought of requesting those facilities that have perhaps not as complicated a system to go first, and then those who perhaps legitimately, because they have to get, you know, a very complicated system analyzed, giving them a little bit longer? Is there any opportunity there to work a compromise?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So we -- when we workshopped this, the suggestion came up, but everybody wanted to be in the more complicated category.

(Laughter.)

BOARD MEMBER RIORDAN: In the last category.

(Laughter.)

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: And so if the stakeholders would like to prepare a proposal about what this looks like, and how this helps, we're definitely open to it. But it was clear when we had the workshop that everyone felt like they were the more complex.

BOARD MEMBER RIORDAN: Complicated.

(Laughter.)

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Yes.

BOARD MEMBER RIORDAN: Okay. But you would be open to hearing --

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: That's right.

BOARD MEMBER RIORDAN: Okay.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: That's right. And the other thing I wanted to note is that it wasn't until the workshop where staff proposed the change, that we started hearing concerns about enough verifiers or having enough time with our verifiers. And it was only after that time, we started hearing, well, you can't move the deadline, because we have all these issues in verification. And so we want to understand what those issues are before we make a final recommendation for the date.

We just only heard about it after we did the proposal that there are going to be issues for folks. In terms of the verification pool, like I said, we have about 50 verifications bodies, we have about 200 accredited verifiers to work on this process. And, you know, we feel -- we felt comfortable with the ratio and the data that we had to make this proposal, but we're -- we're open to talking about what those concerns are, and maybe there are things we can do on our side to alleviate some of those concerns.

CHAIR NICHOLS: What's next in the process here? I'm sorry, for your purposes. No, I mean, what do we need to do with this item? Sorry.

EXECUTIVE OFFICER COREY: Process-wise, what Rajinder was suggesting was as part of the follow-on with the stakeholders, is there some sort of compromise position?

CHAIR NICHOLS: Yes.

EXECUTIVE OFFICER COREY: Does that compromise position get worked through a 15-day change or is it something outside a 15-day change? So I think we're hearing the issue, the concern. And I think it's -- the commitment is a follow-on discussion with the stakeholders to try and find a middle ground on this thing.

CHAIR NICHOLS: Okay. So you go off and then you work on 15-day changes?

EXECUTIVE OFFICER COREY: Yeah, if that -- my sense is that's probably how a compromised is expressed. But I think the first question is what are our compromise options and are they regulatory? The regulatory is a 15-day change that we'd work on.

CHAIR NICHOLS: Right. And if not, they're just implementation?

EXECUTIVE OFFICER COREY: Yes.

CHAIR NICHOLS: Okay. So do you need further direction from us then at this time?

EXECUTIVE OFFICER COREY: I'm understanding the direction here.

(Laughter.)

EXECUTIVE OFFICER COREY: Seek out a compromise position.

CHAIR NICHOLS: Okay. All right. Well then, in that case --

BOARD MEMBER MITCHELL: Madam Chair.

CHAIR NICHOLS: -- I think we're going to break for our lunch.

BOARD MEMBER MITCHELL: Madam Chair, may I make a comment, please?

CHAIR NICHOLS: Yes. Oh, sorry.

BOARD MEMBER MITCHELL: Thank you.

One of the things that we've heard about here today, and, you know, from our constituents in our district, is this concern about RPS and double-counting, and how you credit the renewable energy credit, the source of that and connecting the source of the renewable energy with the credit.

And I think that your presenter said you were going to keep working on that with some additional workshops, because I think that needs a little bit more work. There's a lot of controversy about how that is done, and what your changes are actually advocating.

And from my district, I've heard from people who have said that would increase their cost considerably. And so I think that really does need to have another look as well. Thank you.

VICE CHAIR BERG: So just from a process perspective, I can understand -- so that I understand that what is being presented today is the actual rule, and that anything that goes forward would be a 15-day change between now and the time you come back to the Board?

DEPUTY EXECUTIVE OFFICER CHANG: (Nods head.)

VICE CHAIR BERG: And then when you come back to the Board, it's preferable for an up or down vote, because if we get another 15-day change, that triggers more time, and then we might miss the deadline to be able to implement this rule, is that correct?

EXECUTIVE OFFICER COREY: That's correct.

VICE CHAIR BERG: Thank you.

CHAIR NICHOLS: All right. Yes, one more question here.

BOARD MEMBER SHERRIFFS: And we also heard concerns about the relationship limits. And I get those on a personal level. And also on a business level, you know, you get attached to your accountant, and they understand what's going on. You get attached to your doctor.

(Laughter.)

BOARD MEMBER SHERRIFFS: So I want to -- I want to be sure we've thought about why we put the limits in place and other ways to potentially satisfy those concerns.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So, Dr. Sherriffs, to the limit question itself, a lot of the conflict of interest limits in the regulation are based on Sarbanes-Oxley federal regulations in response to the Enron issues. And so it's out of the financial auditing world where we transferred those relationship limits into this world, because it is a market program.

CHAIR NICHOLS: Okay. All right. No further questions or comments.

Well, I do think we need a half hour realistically to just get food and have the briefing. Can we get back at 2:15 really promptly sharply at 2:15? Okay. Let's do it.

BOARD MEMBER TAKVORIAN: Madam chair, I'm sorry.

CHAIR NICHOLS: Oh, you did. Are you serious?

BOARD MEMBER TAKVORIAN: Can I just -- I'm sorry, because I know you're giving that direction, but I just want --

CHAIR NICHOLS: I haven't. I'm still open to change.

BOARD MEMBER TAKVORIAN: Okay. I was just wondering. I mean, there's so many people here, and I wondered if we could do the closed session at the end, so that -- and some of us grabbed food.

CHAIR NICHOLS: Oh, that's a very good point. Actually, that's a very good point.

BOARD MEMBER TAKVORIAN: And so maybe we could keep going.

CHAIR NICHOLS: Actually that's a very -- that's a thoughtful consideration which I had not made. I assumed we would do it at lunch.

BOARD MEMBER GIOIA: Some could be allowed to eat up here, right?

CHAIR NICHOLS: I don't think it's nice to just sit here and eat food. I personally always object when I see that happening at meetings. But if you want to -- can we move the closed session to the end despite having noticed it?

Yes, we could. All right. Are people willing to do that then?

It's going to make everybody really cheerful and -- no, it will be good. It's better. All right. Then let's come back at 2:00 o'clock promptly. And with apologies to our visitors, but we did have a scheduled lunch break. So we're just going to make it very short instead of an hour. And we will be back and will resuming the meeting at 2:00.

Thanks, Ms. Takvorian. That was a good

suggestion.

(Off record: 1:36 p.m.)

(Thereupon a lunch break was taken.)

A F T E R N O O N S E S S I O N

(On record: 2:02 p.m.)

CHAIR NICHOLS: Good afternoon again.

And let's resume our meeting here. Several members are making their way back to dais. But even when people are in the back, they can actually hear what's going on. So the next item on today's agenda is the proposed amendment to the Cap-and-Trade Regulation. This is the second of 3 related items to be presented today. The first one we just heard, which was the monitoring and reporting rule.

And this is the first of two Board meetings on these amendments, so the Board will not be taking any action today. There will be no vote on any of item today.

The amendments before us are designed to improve the Cap-and-Trade Program to assure its effectiveness in achieving meaningful greenhouse gas reduction in the future Today is a start to this important conversation.

But I think it's also useful to keep in mind why we're acting at all, why we're having this discussion about climate? And to point out that we are dealing with a global problem, which is increasingly evidenced in terms of rising temperatures and other dramatic physical changes including a historic drought.

It's also important to recognize that California is looked to globally as a success sorry for reducing air pollution while achieving robust economic growth. And so it's in that context that our staff is laying out a idea of what a post-2020 Cap-and-Trade Program would look like.

In particular, the Cap-and-Trade Program has been a critical element of a comprehensive set of programs outlined in the 2008 scoping plan to help California reach its 2020 greenhouse gas emissions target and to create an ongoing framework for action to cut emissions beyond 2020.

While carrying out this program in its early years, the staff has continued to meet and work with stakeholders to ensure that the program is implemented effectively, while also sharing lessons that have been learned with other jurisdictions that are considering the possibility of using cap and trade as a option for achieving climate change mitigation.

So the program has established itself as a mechanism -- as a viable mechanism for reducing greenhouse gas emissions. But it's only one part of a suite of programs, including mainly direct regulations, which are delivering greenhouse gas emissions reductions to meet the 2020 target. And it can continue to play an important role in achieving our State's mid- and long-term climate goals.

In addition, the Cap-and-Trade Program continues to inspire climate action beyond California, as we have already seen with our linkage with the Quebec, and we are in the early stages of linking our program with a very similar one in Ontario.

And I do want to say one other thing at the beginning of this session, which again we're not taking action today, but I'm very aware of the fact that there have been questions raised and there is litigation ongoing about the Board's legal authority to take any action on cap and trade. And I just want to make it clear that we are not going to be making any findings or having any discussion about that issue here at this meeting.

So if you put that in your prepared testimony, you can omit that part. You can submit it if you want to. We'll listen to it. But, I mean, it will be considered, but it's not going to be part of the discussion here today.

So with that, I will turn to Mr. Corey.

EXECUTIVE OFFICER COREY: Thanks, Chair Nichols.

So in October last year, staff held a kick-off workshop to commence the public process to develop these amendments, and a total of 10 publicly noticed workshops were held from October 2015 through June of 2016. In addition, staff also held numerous informal meetings with stakeholders to discuss specific topics related to the proposed amendments.

And the proposed amendments incorporate many aspects of those discussions. Key elements of these modifications would extend Cap-and-Trade Program beyond 2020 by establishing new caps, enable future auction and allocation of allowances, and continue all other provisions needed to oversee and implement the program post 2020.

And as already noted, the scoping plan currently being developed will inform any post-2020 Cap-and-Trade Program. We'll plan to discuss the draft in a Board hearing later this year.

The proposed amendments would also broaden the program through linkage with the new Cap-and-Trade Program in Ontario, Canada, and enable California's compliance with the federal Clean Power Plan also to be discussed later today.

And as part of the staff presentation, we'll also provide a status report on the adaptive management program, which is designed to monitor for and address unintended AQ -- air quality impacts of the Cap-and-Trade Program.

The Board will also hear a full report on adaptive management at its November Board hearing.

And with that, I'm going to ask Mark Sippola with the Climate Change Program Evaluation Branch to give the staff presentation.

Mark.

(Thereupon an overhead presentation was presented as follows.)

AIR RESOURCES ENGINEER SIPPOLA: Thank you, Mr. Corey. And good afternoon Chair Nichols and members of the Board.

Let me just start by pointing out that like this previous item and the next time on compliance with the federal Clean Power Plan, this presentation is being translated into Spanish. We have audio equipment with live Spanish interpretation available for check-out in the lobby.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Again, this is the first of two Board hearings on the proposed Cap-and-Trade regulation amendments. There's no Board action on this item today. The second hearing on the amendments is currently scheduled for spring 2017.

In 2015, Governor Brown issue an Executive Order that set a goal of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030. And this goal was reaffirmed by SB 32, which was passed by the legislature this year, and recently signed by the Governor.

ARB is updating the climate change scoping plan in collaboration with other State agencies to establish the path for realizing the 2030 greenhouse gas emissions limit. The process of updating the scoping plan is being done in parallel to the development of these Cap-and-Trade regulation amendments.

Staff will continue stakeholder engagement on these proposed amendments through the second Board hearing in early 2017, and we expect at least one additional round of proposed regulation changes -- regulatory changes with a 15-day comment period prior to that second Board hearing.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: AB 32 was passed by the State legislature in 2006. And it requires California to reduce GHG emissions to 1990 levels by the year 2020, to maintain and continue GHG reductions beyond 2020, and to coordinate other State agencies to develop a scoping plan that would layout the State's plan for achieving the maximum technologically feasible and cost effective emissions reductions.

The Cap-and-Trade Regulation was originally adopted in 2011 as one of a suite of measures to reduce GHG emissions and meet the goals of AB 32.

This year, the legislature passed and the

Governor signed SB 32, which directs ARB to use existing authority to ensure that GHG emissions are reduced to at least 40 percent below 1990 levels by 2030.

In 2011, the Board also approved an adaptive management plan to identify and track any increases in criteria and toxic pollutant emissions that would potentially be caused by implementation of the Cap-and-Trade Program. Staff believes that the Cap-and-Trade Program is unlikely to result in increased localizes emission impacts, but is committed to tracking the issue as the program is implemented. The development of the process to implement the adaptive management plan is currently underway and being conducted in collaboration with a air districts, academics, industry stakeholders, and environmental justice representatives.

The final process to implement the adaptive management plan is expected to be completed and presented to the Board at a hearing later this year.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The goal of the Cap-and-Trade Program is to reduce statewide GHG emissions. The cap limits total annual GHG emissions from all regulated sources and its cap declines each year to reduce emissions over time. The program is designed to provide flexibility so the lowest cost reductions in the economy can be targeted. The Cap-and-Trade Program works together with traditional command and control measures. A GHG emission reduction to satisfy a command and control regulation also reduces the compliance obligation in the Cap-and-Trade Program.

The program places a price on GHG emissions, which incentivizes change and spurs innovation for low emitting and energy efficient technologies. This combination of features, meeting environmental goals, flexibility, cost effectiveness make the Cap-and-Trade Program a valuable mechanism for achieving the State's GHG reduction goals.

We also support program transparency. And a large amount of the information on the program is publicly available at the main Cap-and-Trade Program website. And we also have a list of publicly available program information in the back of the auditorium today.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Amendments to most major provisions of the regulation are proposed in this regulatory package. Some changes would be effective starting in the program's third compliance period, called here CP3, which runs from 2018 through 2020. Many of these provisions would continue beyond 2020. Other proposed changes would take effect after 2020. We're including the post-2020 elements in this regulatory package to signal The expected direction of the program and to provide information useful to future compliance planning.

Areas of the program that would be affected by the proposed amendments in the third compliance period are listed here. Most proposed changes aim to clarify the regulation, streamline program implementation, simplify participation by covered entities, ensure the allowance allocations and compliance obligations are fair and accurate.

These changes incorporate stakeholder suggestions and staff experience to clarify and simplify, to the extent that we can, while maintaining the ability to effectively run the program.

The next few slides discuss the amendments that would be effective in the third compliance period and later slides will cover amendments regarding the post-2020 program.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: In general, the approach to free allowance allocation to all industrial sectors will continue through 2020. Currently, free allowance allocation is provided for transition assistance, and for leakage protection.

For allocation of industrial entities in CP3, we propose to eliminate and update some product-based benchmarks and some product definitions that are used to determine allowance allocation. These changes are proposed, so that the benchmarks more accurately represent current sector make-up, and so the product data reporting can be streamlined.

Third compliance period assistance factors for all existing industrial sectors would remain as they are in the current regulation, but we propose to add new assistance factors for sectors that are newly covered by the program using the same method as we've previously used.

Staff continues to engage with stakeholders on the specifics of these items and changes will be proposed in a future 15-day regulatory package.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Currently, free allowances are provided to utilities on behalf of the ratepayers, and the allowances must be used for ratepayer benefit. The proposed regulation includes some changes that would align these -- the requirements on how electric and natural gas utilities may use the value of allocated announces that are consigned to auction. We propose to add a requirement for electrical distribution utilities -

that's EDUs - that any allocated allowance auction proceeds that are returned to ratepayers must be returned in non-volumetric manner, thus ensuring that a carbon cost is felt by end-users of electricity to incentivize conservation and efficiency.

The existing regulation already prohibits natural gas suppliers from returning proceeds in non-volumetrically. Staff also proposes a 10-year deadline for spending EDU and natural gas supplier allocated allowance auction proceeds to ensure that this value is put to use in a timely manner.

The current structuring for reporting on the use of allowance -- allocated allowance value by the EDUs and the natural gas suppliers has gaps, such that the use of some proceeds may go unreported to ARB. So we also have proposed changes to close that reporting gap and give ARB a more complete picture of the use of these proceeds.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The 2014 expansion of the California Independent System Operator's real-time electricity market to include out-of-state areas has led to an incomplete accounting of GHG emissions associated with imported power serving California load.

This incomplete accounting results in emissions leakage, which AB 32 requires AB to minimize to the extent feasible. Amendments propose to modify the compliance obligation on electricity imports in the real-time market to ensure more accurate accounting. We continue, along with the CAISO staff, to engage with stakeholders to address and resolve this issue.

In addition, we propose to expand the eligibility requirements for the voluntary renewable electricity program while ensuring that the program requirements and goals are met. And we propose to remove the qualified export adjustment from the calculation of the compliance obligation for imported electricity, because we believe it is resulting in emissions leakage.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: We're proposing some changes to points of compliance and limited exemptions from obligations in the third compliance period. Most of these changes originate from stakeholder concerns and we're seeking to resolve these concerns through the proposed changes.

These would include changes for liquefied petroleum gas imports, liquefied natural gas suppliers, and waste-to-energy facilities. And the list of emissions without a compliance obligation would be updated to capture appropriate emission sources and align with MRR reporting.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: There are many relatively minor changes to the compliance offset credits program that seek to simplify and clarify implementation. Again, these proposed changes incorporate stakeholder suggestions, and staff's implementation experiences in the early years of the program.

Proposed changes would mean that livestock and mine methane capture projects would have more limited and validation time periods, and there would be additional time for a verified estimate of carbon stocks after an unintentional forest -- forestry offset reversal.

Additional changes would streamline provisions on offset project listing, reporting and verification, and issuance. For example, projects would be allowed to transfer from one registry to another, verification body rotation would be simplified, and authorized project designees would be able to request issuance of offset credits to any authorized party.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Similarly, in the areas of program registration and the administration of auctions and reserve sales, we're aiming to reduce the administrative burden, clarify the existing rules, and eliminate elements that are not needed.

For example, provisions on designating and changing account representatives would be streamlined. We would allow for some registration information to be submitted electronically instead of by hard copy, and criteria for determining if a reserve sale will not be offered would be clarified.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The corporate association disclosure requirements would be streamlined while retaining effective market oversight. Registered entities must currently disclose its corporate associations with other entities outside California and any jurisdiction with which the Cap-and-Trade Program is currently linked.

The proposed amendments would limit these disclosures to corporate associations -- to corporate associates that also participate in markets that are related to the California carbon market, and these disclosures would only be needed upon request by ARB. Also, a registered entity that only holds offset credits would not be required to disclose any corporate associations.

Some disclosure requirements would remain the same, such as the requirement to disclose all direct and indirect corporate associations with other registered entities, and to disclose all parent entities up to and through the ultimate parent.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Program linkage provides greater emissions reductions at a lower overall cost and improves market liquidity compared to unlinked program. The California program is currently linked with Quebec and no additional amendments or linkage findings under SB 1018 are required to continue that linkage.

The proposed amendments would Link the current program with the emerging Cap-and-Trade Program in Ontario beginning in 2018. Ontario is a member of the Western Climate Initiative and collaborated on the development of the WCI design recommendations to encourage program compatibility and facilitate Cap-and-Trade Program linkage.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Ontario is developing a new Cap-and-Trade Program. Their program has already begun entity registration with a proposed Ontario-only auction in early 2017. And staff expects to submit the required SB 1018 findings for linkage to the Governor prior to bringing the final package to the Board for approval.

During the development of these amendments, staff held several workshops on potentially incorporating sector-based offset credits into the program by linking with the tropical forestry program and Acre, Brazil. This linkage is not part of these amendments, but we continue to work toward incorporating sector-based offset credits into the program at a future date.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The program linkage with Quebec or the linkages that would occur with Ontario or a sector-based offset credits program are governed by the provisions in the existing regulation. In these linkages, substantial coordination is needed with linkage partners to harmonize schedules, as well as auction, market, and reserve sale procedures.

Staff's preference will be to continue -- staff's preference will continue to be for establishing these types of coordinated linkages. In recognition of discussions of other types of linkage engagements, the proposed amendments would also describe two new forms of engagement with other jurisdictions that are more limited in scope than the currently available traditional linkages.

One form would allow entities in California to retire compliance instruments issued by another GHG program to achieve compliance in California. And the second would enable entities in a non-California GHG program to retire California compliance instruments.

Interest in these more limited engagements arises from discussion with other GHG programs that may be compatible with our program, but have different market rules, source coverage, and compliance obligations.

No such engagements are currently proposed. However, we propose changes to describe the pathways for how these types of engagements could be achieved. Staff believes that it's important to conduct a public process and to seek Board approval for any new linkages or engagements with other jurisdictions, and that including the requirements for such engagements in the regulation is necessary to ensure that occurs.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The remaining slides cover amendments for the post-2020 program. These would extend all of the major provisions of the regulation to allow the program to be implemented after 2020. This would include establishing annual emissions cap through 2031 with a placeholder equation for caps beyond 2031, continuing linkages with Quebec and Ontario, and enabling the future auction and allocation of allowances.

Provisions are also included that would allow the Cap-and-Trade Program to enable California's compliance with the federal Clean Power Plan.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The chart shows proposed annual emission caps from 2020 through 2031. A linear cap trajectory is established to provide a gradual reduction path to the 2030 target. Staff acknowledges that any post-2030 caps would need to be revisited in the context of future updates to the scoping plan to reflect a 2050 limit.

We propose to allocate a small fraction of allowances to the allowance price containment reserve, the APCR. This is represented by the red portion at the top of each bar, and the amount decreases each year such that it's 0 in 2030 and beyond.

We propose to allocate allowances from the annual budgets to the APCR in a manner that recognizes that 2020 statewide emissions are expected to be lower than the 2020 target. The number of vintage 2021 allowances placed in the APCR equals the difference between the total budget in 2021, and the currently projected emissions in 2021, which are lower.

For subsequent years, the number allocated to the APCR is the difference between the two linear paths that start at these different points in 2021 and converge at the 2030 target.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: This would place an additional 54.5 million allowances in the APCR, which is less than the -- which is less than 1.9 percent of the total budget from 2021 through 2030. From 2013 through 2020, about 4 percent of the total budget was placed in APCR, a total of over 120 million allowances. Any of these pre-2020 allowances remaining in the reserve after 2020 would continue to be available in the post-2020 APCR.

The current APCR is 3 price tiers, and the price -- the prices each increase each year by five percent plus the rate of inflation. The post-2020 APCR would have a single price set at $60 above the auction floor price. This change would lead to a slower annual price increase for the APCR allowances.

Currently, a limited number of allowances that are unsold at auction become available for later resale after 2 auctions sell out above the auction floor price, and this continues indefinitely. Proposed amendments are included so that State-owned allowances that remain unsold for more than 24 months, that's 8 auctions, would be transferred to the APCR. This change would apply to the third compliance period, in addition to the post-2020 program.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: We propose several amendments to support California's compliance with the federal Clean Power Plan, which is a set of requirements put forth by U.S. EPA for GHG emissions from existing electricity-generating units. The Clean Power Plan, CPP would begin in 2022. The next Board item will discuss the elements we propose to include in California's CPP compliance plan in more detail, but here I want to describe the changes that we are proposing to the Cap-and-Trade Program, so it meets the CPP requirements.

CPP establishes aggregate GHG emission goals for existing electricity generating units, that's EGUs. Under this proposal, all EGUs in the State affected by CPP would be required to participate in the Cap-and-Trade Program regardless of emissions level, and compliance by EGUs with the program would allow California to demonstrate compliance with CPP.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The main elements for enabling CPP compliance include establishing mass emission targets for aggregate emissions from affected EGUs over the course of defined compliance periods; aligning Cap-and-Trade Program compliance periods with CPP compliance periods for all covered entities; and establishing a federally enforceable backstop emissions standard designed to bring aggregate EGU emissions into compliance with the federal target, and make up for any previous emissions overage in a timely manner, if participation in the Cap-and-Trade Program fails to meet the aggregate target in a given compliance period.

We believe that the backstop is extremely unlikely to be triggered based on projected emissions, even under the most conservative modeling scenarios. But the backstop provisions are included to meet the federally enforce -- federal enforceability requirements of CPP.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Staff proposes to retain approaches to allowance allocation in post-2020 program. All groups listed here that will receive allowance allocation in the third compliance period, would continue to receive free allocation for protection against emissions leakage and for ratepayer benefit as appropriate.

The current proposal includes placeholder text for most details of post-2020 allowance allocation. And staff continues discussions with stakeholders on nearly all aspects of post-2020 allocation. We expect to propose changes in an upcoming 15-day package that would incorporate the results of these discussions.

Specific elements that will be addressed include post-2020 assistance factors for calculating industrial allocation, the cap decline factors, and electrical distribution utility allocation.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Regarding post-2020 allocation to industrial entities, staff is under Board direction to investigate improvements to the initial leakage risk assessments conducted in 2010 and 2011 to best protect against emissions leakage. ARB commissioned 3 studies of emissions leakage risk for California's manufacturing sectors to inform the development of assistance factors used to calculate allocation to industrial entities.

This leakage risk assessment -- these leakage risk assessments were completed in May of this year and presented at a public workshop shortly thereafter. We propose to incorporate the results of these studies and apply a new leakage risk assessment methodology to establish post-2020 assistance factors. Because the release of the leakage studies was delayed, staff believes that more time is warranted to discuss the new method and to provide stakeholders more opportunity to review and comment on how to best incorporate the leakage studies for post-2020 allocation. Staff did not propose specific assistance factors in this initial package, but we do indicate our intent to provide specific values in the 15-day process.

Though not proposed for this regulatory package, staff is considering a change to direct -- to directly allocate to industrial covered entities for purchased electricity beginning with allocation of vintage 2021 allowances.

To prevent double-counting for the same electricity associated emissions, staff proposes in this rule-making to reduce post-2020 allowance allocations to electrical distribution utilities with industrial covered entity customers to reflect the increase in allowance allocation to the industry entities.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Post-2020 allocation to electrical distribution utilities, again the EDUs, would continue to be based on the expected Cap-and-Trade Program cost burden and the amount would decline annually with the cap. Specific post-2020 EDU allocation is not included in the current regulatory proposal. Staff continues to discuss the details of the allocation calculation with stakeholders and expects to include specifics in the 15-day change process.

This calculation would be based on projections of load and resource types, and it would account for changes due to retirement of certain resources, and the proposed shift in allocated allowances from the electric utilities to industrial covered entities for emissions associated with electricity purchases. Staff is also considering how to account for increased electrification of transportation and EDU allocation.

Staff initially proposed to discontinue the voluntary RPS adjustment after the 20 -- after 2020, because there has been widespread misuse of the adjustment, and because it is proven to be extremely difficult to track and enforce.

After discussions with the EDUs, staff proposes to either discontinue the RPS adjustment post-2020 and to provide each EDU with an allowance allocation that accounts for the loss of the adjustment, or to continue the RPS adjustment post-2020 as currently included in the regulation with no additional allocation.

We continue to discuss all details of post-2020 allocation with the utilities, including the cost burden calculation and the post-2020 treatment of the RPS adjustment.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: For post-2020 allocation to natural gas suppliers, the main change relates to consignment requirements, consignment of allocated allowances to auction generally passes carbon costs from the program on to the end-users of the natural gas, thus incentivizing conservation and efficiency on the part of the ratepayers.

Natural gas suppliers are currently required to consign a minimum percentage of allocated allowances to auction each year. In 2016, they're required to consign 30 percent of allowances, and that increases by 5 percent each year, reaching 50 percent in 2020.

We seek to accelerate that rate of increase to achieve 100 percent consignment early on in the post-2020 program. Full consignment would bring parity to the consignment requirements of natural gas suppliers, and the investor-owned electrical distribution utilities, and bring equity in the natural gas carbon cost experienced by covered entities and non-covered entities.

The exemption from the program for combined heat and facilities that would be below the program inclusion threshold, but for their use of cogeneration, would be extended until full consignment by natural gas suppliers is achieved. Once 100 percent consignment is achieved, there will no longer be a need for the exemption, because the covered facilities and non-covered facilities should face the same carbon costs.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: The voluntary renewable electricity program is in place to ensure that overall emission reductions are achieved by the voluntary -- by voluntary renewable electricity generation. Demand for allowance retirement from the VRE account has been low.

For 2013 and 2014, over 1.6 million allowances were set aside, but only about 200,000 allowances have been retired. That's about 13 percent.

Staff proposes to not place any additional post-2020 allowances into the VRE account because demand has been low and because the program was intended to be transitional in nature. Any 2013 through 2020 allowances placed into the VRE account would continue to be available for retirement post-2020 until the account is exhausted.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: In developing these amendments, staff conducted economic and environmental assessments that are required by statute, and these are included as appendices to the staff report. First, staff conducted a Standardized Regulatory Impact Assessment, or SRIA, which analyzes the projected economic impacts of a major regulation, such as cap and trade, along with several alternatives.

The SRIA which ARB conducted and subsequently revised based on comments from the Department of Finance and stakeholder input reviewed the proposed amendments and two alternatives, a facility-specific requirements alternative, and a carbon fee and dividend alternative.

The facility-specific requirements alternative would require all covered entities to make on-site reductions to 40 percent below 1990 emission levels by 2030. And the carbon fee and dividend alternative would set the carbon price at the U.S. EPA social cost of carbon which was $36 per metric ton of CO2e in 2015, and was projected to increase to $50 in 2030.

The SRIA evaluated these alternatives and the proposed amendments for AB 32 requirements of cost effectiveness, ability to allow program linkage, and impacts to gross State product, industrial sectors, and individuals as well as other factors.

The SRIA modeling found that the proposed amendments will have a small impact on the California economy, and that they achieve GHG reductions at a lower cost than adopting facility-specific requirements.

It found that the carbon fee, while similar in cost impact, would not ensure the same emissions reductions as the proposed amendments, and would not allow for linkage.

Second, staff also conducted the required environmental analysis under the California Environmental Quality Act. The CEQA document also reviewed a facility-specific requirements alternative, and a carbon fee alternative, in addition to a no-project alternative.

The CEQA review found that the proposed amendments achieved the project objectives. Whereas, the alternatives would not meet several of the project objectives or ensure similar emissions reductions.

It also found that the facility-specific requirements would increase administrative complexity and cost to comply compared to the proposed amendments. The review found further that facility-specific requirements would result in more difficulty fully accounting for imported power emissions compared to the more flexible market design of the Cap-and-Trade Program.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: This slide provides a brief synopsis of the overall CEQA findings. Staff completed a draft environmental analysis for the proposed amendments, and released it for a 45-day comment period on August 5th. The public comment period closed on September 19th, and staff will be preparing written responses to all of the comments received on the draft EA.

Staff will present the final EA and written responses to comments on the draft EA for consideration by the Board in spring 2017.

Staff has determined that the expected environmental impacts for the proposed amendments are consistent with the prior analyses conducted for the program.

--o0o--

AIR RESOURCES ENGINEER SIPPOLA: Regarding the next steps for the rule-making, we will continue to engage with stakeholders as we develop at least one round of 15-day changes. Staff will bring this item back to the Board for final action in early 2017, and if adopted, the amendments would become effective October 1st, 2017.

This concludes our -- staff's presentation. Before we move on to comments and discussion, we're offering members of the environmental justice community the opportunity to speak on these proposed amendments.

So, at this time, I'd invite the EJAC members that are going to speak to come forward to the podium.

CHAIR NICHOLS: There are questions from the Board members for staff, which perhaps you could take before we hear from the Environmental Justice Advisory Committee members, or after, either way.

BOARD MEMBER GIOIA: I'll wait. I'll wait.

CHAIR NICHOLS: Lets wait. Let's have the Committee, and that sort of completes that.

They're not staff, but they are advisors to us, so...okay.

MS. GARCIA: Good afternoon. My name is Katie Valenzuela Garcia. I'm joined today by Martha Dina Argüello, Luis Olmedo, Mari Rose Taruc, Monica Wilson as well as several EJAC members across the State who weren't able to be here, but are watching on-line.

We're hear in solidarity with our environmental justice partners from other organizations to present our specific perspective on this item

Since it's inception, environmental justice advocates have had serious concerns about cap and trade in California. In the 2030 target scoping plan process, we had recommended against cap and trade and encouraged ARB to meaningfully examine alternatives. We were very happy when the draft concept paper was released with 3 of the 4 alternatives, not including cap and trade, and have embarked on a really robust community engagement process that started this summer and will continue through the fall to try to inform that process.

My first point is that, as I said at the last meeting on this topic, that we don't feel it's appropriate to be giving cap-and-trade discussions before the scoping plan is complete, since the entire intent of this process is to determine how and if cap and trade would continue past 2020.

Further, as you talked about briefly this morning, we've all seen the report that was released by the California Environmental Justice Alliance last week. It's findings confirm what environmental justice advocates have said for many years, and it reaffirms my belief that data is sometimes unfortunately a few years behind the live experience in these communities.

We know that polluters are more likely to be located in communities of color and low income areas, and that large polluters are using credits and offsets to be compliant rather than reducing emissions at the source. We can no longer deny that cap and trade is allowing pollution to continue, and at times increase in our communities.

For centuries our world's progress has largely been made on the backs of people of color and low income communities. AB 32 was developed to intentionally confront that dynamic when it linked climate policy with environmental justice. Cap and trade doesn't meet that mandate. And we're here to strongly encourage ARB to consider alternatives that allow us to be breathe healthier air for everybody.

And with that, I will turn it over to Martha.

MS. ARGÜELLO: Good afternoon. My name is Martha

Dina Argüello. Thank you for the opportunity to address the Board and staff. As actually both the oldest and the longest standing member of the Environmental Justice Advisory Committee, I often think back to 2006 -- actually, to 2005 when these ideas were being born, that became AB 32.

And in 2006, environmental justice advocates then understood, especially those of us from southern California, some of the risks involved with the Cap-and-Trade Program. And we've stood before you many times to talk about these.

But there was a point in the negotiations around AB 32, and it was a small word. It went from "shall" include trading to "may" include a market mechanism. That word "may" meant a lot to us and it continues to mean a lot to us. We stood here before you in 2006 and 2008, and in the words of Angela Johnson-Meszaros, who was the Chair of the Committee at that time, there is a better way.

And we have been wanting to work with you since that time to find that better path. And so we were very happy to see, in those concepts around the scoping plan, that we had begun to look at a more hybrid approach that really asked the questions that we've been asking, what's happening in low-income communities?

And now you have what we in public health call 2 early warnings. So you have your own adaptive management data that seems to indicate some increases in some areas. Is that definitive scientific proof that this is happening? No, but it bears out the limited experiences of people who live next to these traded facilities. And the second earlier warning is the report that has just been produced out of USC. And those of you who understand public health know the importance of acting on early warnings.

And those of us from the environmental justice community wanted you to have these early warning datas, so that we can begin to change the program where it needed to be -- where it needs to be change.

We think that the trading program is not -- has not given us the kinds of deep rapid reductions that we need to address climate change, or that we need to address the driver of health disparities that is air pollution.

We warned against separating climate emissions from air quality. And because I'm petty, we told you, right?

(Laughter.)

MS. ARGUELLO: So I don't have a problem telling I told you so. My mother tried to cure me of that, but she hasn't been able to. So we told you then, and so we want to continue to be a partner with you and act on these early warnings, because we have time right now to make a difference in the design of the program, and design a program that actually does what we need it to do. We want a just transition to a new economy. This economy has not worked for most people of color and low-income communities. It has not meant more wealth. And with all due respect to all the discussion about jobs, those jobs are not in the communities and they're not building wealth in our communities, so -- and the other thing I want to say is that the environmental justice community stood up for AB 32.

There are people in this room who walked precincts, who knocked doors, who talked to the press, and we defended AB 32. We ask the Board now to stand with environmental justice communities and fix this program. Give us a program that does direct emissions reductions, funds the just transition to a green economy, so that we afford to breathe and have a job.

Thank you.

CHAIR NICHOLS: Okay. Thank you.

Now, Mr. Gioia.

BOARD MEMBER GIOIA: I just had one question of the staff, just in -- so I know that in looking at the suite of measures to achieve the 2020 goal, cap and trade is responsible for about 20 percent of that. The other 80 percent through various other programs, including regulatory programs like the Low Carbon Fuel Standard. So now looking at the new goal, the 2030 goal, what is the -- what is the estimate, if we know, in terms of cap and trade's contribution to getting to the 2030 goal? It was about 20 percent to get to 2020, so what is it to get to 2030?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So, Board Member Gioia, I have a rough estimate of that, because we're still in the process of modeling that for the scoping plan work.

BOARD MEMBER GIOIA: Right.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Looking at the business-as-usual scenario, if we didn't do anything, other than that we've done today, we would need to achieve approximately 800 to 900 million Metric tons of reductions to hit the 2030 target. So that's cumulative between 2021 and to 2030. Looking at measures that are known commitments like SB 350, which we have to implement, an enhanced LCFS program, the mobile source strategy, which is developed for SIP requirements for federal air quality attainment purposes, all of those get us a bulk of those reductions towards 2030.

What we're left with on the table is about 150 million metric tons in cumulative amount relative to the

800 to 900 that would be potentially made up by cap and trade, or some other suite of measures.

BOARD MEMBER GIOIA: So just to do the math, you're saying so 150 -- I'm trying to do the math just percent.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Yes.

BOARD MEMBER GIOIA: So 150 out of --

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: About 800 to 900 million.

BOARD MEMBER GIOIA: So I'll take 8 out 850, so a similar percent. That's about 17½ percent. So the view is that cap and trade, in round numbers, would be responsible for 20 percent of the reductions that we need for -- to reach the 2030 goal, and the other 80 percent would come from other regulatory measures.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: That's correct.

BOARD MEMBER GIOIA: Okay.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: And when we talk about cap and trade, that's really the actual reductions at the smoke stack and tailpipe in California. So when we're counting against progress towards the 2020 target and 2030 targets, you're not subtracting out any kind of offsets that you're using.

What you're really looking at is the actual emissions at the smoke stack facilities in California, the emissions associated with the tailpipe emissions from mobile sources, and any imported power brought into the state. You're not netting against any offsets used in the Cap-and-Trade Program.

BOARD MEMBER GIOIA: Okay. I just wanted to get that number. Thanks.

CHAIR NICHOLS: Any other questions before we go to the testimony?

Yes.

BOARD MEMBER FLOREZ: Thank you. I have a questions for staff.

Maybe following Mr. Gioia's comments, so we have the 2030 goal. I'd like to ask on the allowances that were mentioned earlier, the 13 percent. So the first goal is 2020. That seems pretty doable. And then we have 2030, and we have a much steeper climb, correct? So we have like 40 percent more. So what happens with the allowances? You kind of mentioned this in your analysis. You know, I kind of call it flooding of keeping prices down, in a way. Does that get harder as we go forward unless we clear some of this? I'm just trying to understand the allowance discussion and how it plays into the tougher goal now, which is from 2020 to 2030 we have a lot of allowances there. You mentioned 13 percent number. What happens going forward with that? How does that program work?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So currently in the Cap -- Cap-and-Trade Program for the allowances, they decline each year between 2 and 3 percent. Post-2020, the decline --

BOARD MEMBER FLOREZ: It sounds like we have a lot of them though, right?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: I'm sorry?

BOARD MEMBER FLOREZ: It sounds like we have a lot of allowances in the current program prior to the next stage.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Oh, that's the allowance price containment reserve, so --

BOARD MEMBER FLOREZ: Yeah. So but even if it's declining, I'm just wondering how do we -- how do we kind of price these in a away that gets us so there isn't shock at the end? There isn't as massive --

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Okay. I think I can --

BOARD MEMBER FLOREZ: -- need to shock the system and everyone comes back and says, it's undoable.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So there are a couple mechanisms here. The first is that you can hold a certain amount of allowances. You can bank them during this period for use in the future. There's a limit to that. So you just can't buy and hold any amount that you want to that you're willing to pay for. There's an absolute limit to that.

Any allowances that are in our accounts, like the strategic reserve, those get available, if needed, for the post-2020 period.

So that cost containment moves forward and is enhanced a little bit by the 54 million in the post-2020 budgets. When we think about the emissions and the way the caps were set now, we used reported data and the best available data to understand where to set the caps for this period. We have modeling from the scoping plan process right now that says that our missions are going to be below the 2020 target in 2020.

So what we did was we -- in setting the 2021 cap, we didn't just do a linear drop from 2020 to 2021, we actually account for that expected lower emissions number in 2020 by taking out allowances from the 2021 budget, and putting those into the APCR. So we recognize that we're coming in lower in 2020 and adjust for that post-2020.

BOARD MEMBER FLOREZ: Okay. So are we going to be moving that number in forward as we head to 2030?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: The amount that we pull out?

BOARD MEMBER FLOREZ: Yeah.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Yes, that goes into the strategic reserve. So if there are any price shocks or any kind of tightening of the market that we're not seeing, those would be available at the higher prices, but not in general circulation.

BOARD MEMBER FLOREZ: Okay. And let me just -- I'll mention this at the -- maybe the end of the testimony, but that remaining amount, the reserve, in order to prevent the shock, if you will, those allowances, in some sense, continue to allow some of our emitters to continue to operate as is?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Only if they're willing to pay that higher price to procure those allowances. We've offered to hold reserve sales for the last couple of years, and there's been absolutely no interest in that.

BOARD MEMBER FLOREZ: Yeah, but is it a higher price, given what you just told me in terms of easing that price mechanism moving all the way out to 2030? And we have this steep climb again, right? We've got a different goal. It's 40 percent.

So I'm just wondering what -- what I'm -- I guess what I'm trying -- I'm missing the mechanism that really makes them do something.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So moving from 2020 to 2021 we still have the reserve price which is the market price for which we sell allowances at in auction, the floor price. That continues to increase 5 percent plus inflation each year. So that same process continues post-2020.

The cap gets tighter post-2020, and the rate of decline gets much steeper post-2020. So there is a scarcity that continues just like now, but at a more rate steep -- a steeper rate of decline. And the prices continue to climb just at the auctions that we have.

If there was some, in some sense, an unexpected demand, then -- unexpected over what we expected it to be obviously, there are still strategic reserve allowances available to still help ease any price shocks that would occur.

So there's a couple of mechanisms that work together to make sure that we have a smooth transition, prices continue to increase on the floor for the auctions, the budgets get tighter at a higher rate post-2020 to make sure that folks are incentivized to continue to take action, or they're going to have to pay more to be able to cover their emissions.

BOARD MEMBER FLOREZ: Okay. And I guess the thing I'm missing is in the original presentation, you know, we have this glut of allowances now, right? I mean it was -- what was the number? You gave it earlier, Mark, 13 percent or -- you were going through your allowances. You had a pole --

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: The 120 million metrics tons?

BOARD MEMBER FLOREZ: Yeah.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Those are in the strategic reserve, so those are not available to the market unless prices get up to the reserve prices, which are about $50 to $60 right now.

BOARD MEMBER FLOREZ: And you don't see moving those forward in order to deal with the cost containment?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So those would be moved forward and then we would add the 54 million to that pool.

BOARD MEMBER FLOREZ: If needed, correct?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: If needed, that's right.

BOARD MEMBER FLOREZ: Okay.

DEPUTY EXECUTIVE OFFICER CHANG: And I think it's really important to point out that strategic price reserve, those are allowances that come out of the cap. So even if they all get used, the environmental integrity of the program is still preserved. So they're not made up out of elsewhere. They actually come out of the caps that we've already set.

BOARD MEMBER FLOREZ: Okay. Thank you.

CHAIR NICHOLS: Questions.

BOARD MEMBER TAKVORIAN: So I think I'm a little bit confused about the process, and I think that some of what I just heard from the Environmental Justice Advisory Committee representatives also reflects some of my confusion.

My understanding was that the concept paper on the scoping plan was offering alternatives that were to be analyzed in relationship to the market mechanism, or whether there's a market mechanism or not. And so I -- and so that's one. And my question is how does this move -- what's the rationale for this moving forward at this time when that body of work hasn't been completed yet? And --

CHAIR NICHOLS: That's a good question.

BOARD MEMBER TAKVORIAN: Okay. Good.

CHAIR NICHOLS: But I mean, do you want -- or you have another question or is it related to the question?

BOARD MEMBER TAKVORIAN: Well, so that's the major question is it -- I'm trying to understand the order of things. And we've had a lot of work on the scoping plans across the State. The staff has done an amazing amount of work, EJAC has done an amazing amount of work, and this feels like it's, for lack of a better term, cutting in line a bit. And so I'd just like to get clear on that.

CHAIR NICHOLS: Yeah, that should be addressed. Who wants to take that one? Edie?

DEPUTY EXECUTIVE OFFICER CHANG: Why don't I -- why don't I start.

So think that the key thing is that the Board is not being asked to take any action today on the Cap-and-Trade Regulation. The process to make modifications to the Cap-and-Trade Regulation is a fairly lengthy process, as you know, you've heard and I think you'll here today with a number of folks that are commenting on this regulation.

And so we're doing this work on the Cap-and-Trade Regulation and making sure that we're ready to go. The Board isn't being asked to act today. In the meantime, we are continuing to work on the scoping plan, and the scoping plan is looking at a variety of different approaches. We laid out some potential concepts -- potential scenarios in the concept paper, and we're continuing to look at different scenarios that we'll be releasing in a draft scoping plan later this year.

So there is -- there is still time for the Board to, you know, choose a different approach before the Cap-and-Trade regulation is finalized.

CHAIR NICHOLS: But just to be clear, the -- some of these amendments deal with the plan that has been adopted, and is in law until -- through 2020. And so that is not under consideration to be changed, abandoned, or whatever. Okay.

DEPUTY EXECUTIVE OFFICER CHANG: Right.

CHAIR NICHOLS: So we have a program that's good through 2020, and then maybe a plan beyond, but we have other work to do before we can extend it.

BOARD MEMBER TAKVORIAN: Right. So we could expect -- just to make sure I'm really clear. We could expect to see the same kind of robust analysis for the alternative mechanisms as we're seeing for the cap and trade --

DEPUTY EXECUTIVE OFFICER CHANG: Right.

BOARD MEMBER TAKVORIAN: -- mechanism going forward.

DEPUTY EXECUTIVE OFFICER CHANG: Right.

CHAIR NICHOLS: Yes. There would be need to.

BOARD MEMBER TAKVORIAN: And we would see that in the spring 2017?

DEPUTY EXECUTIVE OFFICER CHANG: As part of the scoping plan later this year.

BOARD MEMBER TAKVORIAN: So it won't be pulled out? So my next question, so why isn't that getting pulled out separately in the way that this is? And I understand that there's the 2020, and it's getting combined. But it seems like, obviously this is major, that it deserves its own discussion and report, that -- because the scoping plan is going to be very lengthy and comprehensive. So I wonder if you'd thought about that, and whether that might be an option?

DEPUTY EXECUTIVE OFFICER CHANG: Well, I think also this regulation isn't a regulation that is existing right now. And so we know more about it, to the extent that we're looking at new approaches in the scoping plan that might be new regulatory processes, and require additional work to sort of flesh out that whole process, we wouldn't -- we're not in the same place on those -- you know, if we have new proposals for the scoping plan.

BOARD MEMBER TAKVORIAN: Agreed. But as the world changes, as the legislation has come forward, it just seems like we -- we need to kind of jump into that as much as we can in depth. So maybe something to consider for the future.

CHAIR NICHOLS: Yeah. I think the staff is not here today ready to discuss how they're going to comply with 197, but they know they have to comply with 197, and it is part of the thinking about how to address the alternative ideas that were out there in that original scoping plan, because clearly there needs to be, as you said, a more robust discussion, and maybe some different thoughts, I think, anyway.

So actually, Mr. Eisenhut had his hand up first and then Mr. Serna.

BOARD MEMBER EISENHUT: There we go. Thank you. In the context of timing, I also had a concern -- I have a concern that stems from our earlier presentation that Dr. Balmes did. And it's difficult for me to evaluate cap and trade in the context of that earlier report without knowing what adaptive management looks like when it would be utilized, how it will be utilized, what the trigger points are. And I know we have that discussion, or I believe we have that discussion for a later time.

But, in my mind, these two are inexorably tied, and I need some more coordination in order to deal with cap and trade, absent adaptive management, because I think that story that we saw earlier was somewhat compelling and needs to be addressed as part of this discussion.

EXECUTIVE OFFICER COREY: Yes. Let me respond to that, Mr. Eisenhut. Part of the direction, the discussion when Dr. Balmes was talking about the study was we reached out to each of the study authors, in fact, all six of them. We are scheduling time to have an in-depth briefing on that study.

Our plan is to report back to the Board in November towards the end of this year, in terms of adaptive management -- where we are with adaptive management, the approach, any adjustments, what we've learned from work, including this work that Dr. Balmes was talking about, as well as some work that the Office of Environmental Health Hazard assessment is doing. I think Dr. Balmes mentioned they're engaged in a study looking at the impacts of AB 32 from a criteria pollutant standpoint, so an independent study.

So we see the report back to the Board towards the end of this year long before the cap-and-trade amendments come back, as to what those studies indicate, what they suggest, where we are with adaptive management, and whether that suggests some adjustments for us moving forward, including the treatment of different strategies in the scoping plan.

VICE CHAIR BERG: Supervisor Serna.

BOARD MEMBER SERNA: Thank you, Vice Chair Berg.

I hate to do this. I did have my -- I tried to get my hand up as soon as I could following some of the questions and exchange from Senator Florez, because I had some of the similar -- I had some similar questions.

I'm going to dovetail a little bit off of that exchange, because I want to make sure I understand how this table has been set in terms of how -- we're being asked to hear from staff today, and from our speakers about the mechanism -- all the mechanisms that are involved with cap and trade, so I want to make sure I understand.

I guess I'm looking at it this way. What is -- what is the governor involved in cap and trade that gives us some sense of comfort that polluters, greenhouse gas polluters, it will always experience a higher cost to continue to pollute versus exercising the allowance aspect of the process.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So that goes back to the comments about how the amount of allowances that are available decrease over time. And so every one is going to be competing for a lower amount over time, which means some people are going to have to reduce their emissions.

Now, with cap and trade you don't necessarily know where those reductions occur, you just know an aggregate across the State for the covered sources those reductions have to occur.

And then with the escalating floor price, you know that if you're going to invest in something to improve the efficiency on your plant, that you can do the financial cost of that investment today, because you know if you invest today, and you get X amount of reductions that's of this value with this price moving forward.

And so there's signals on the financial side and there's the declining cap that give you, as an industry, information on what action to take and when it's best to take that action. So it's that flexibility that lets you have the timing of it, but it's the program with the declining caps and the increasing floor price that forced that action to occur at some point.

BOARD MEMBER SERNA: So I understand that, and I appreciate, but it sounds to me like there's a hugh reliance on the law of averages, right? I mean, in terms of your -- what I'm hearing is we don't know. We can't go to one particular source emitter and say ah-ha, we've taken -- we've taken -- there's an audit. We've taken inventory of the cost for you to continue emitting greenhouse gas emissions. We're saying industry-wide there's been a smoothing, an understanding that on average, at least in concept, the emissions are supposed to step down because the scarcity of the allowance continues to grow each year, correct?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: In aggregate across the State, yes, of the cover sources.

BOARD MEMBER SERNA: So there is some aspect of faith in this?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: There's actually annually reported greenhouse gas data that let's us track what's going on at each facility every year, and it's verified data. So we can actually tell what's happening with the emissions at any location in the State.

BOARD MEMBER SERNA: Okay. That's what I was looking for. That's helpful.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Yeah, so we have that. That was the MRR regulations. It's that's data.

BOARD MEMBER SERNA: Right, but that's a very important part of the answer.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: That's right, yes.

BOARD MEMBER SERNA: Thank you.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Sorry.

VICE CHAIR BERG: Supervisor Gioia did you have another comment?

Great. Well, I think, Board members, if it's already with you, we'll go ahead and jump ahead. We do have 73 people signed up to testify. And though Chairman -- Chair Nichols did leave the room, I do think that given the time, that looking at the 3-minute that we better set up 2½? Well, we'll -- oh, I'm hearing 2 up here. Two goes so quickly. So what we're going to do is we know how appreciative you are of staff.

(Laughter.)

VICE CHAIR BERG: So really let's right now just give staff an applause.

(Applause.)

(Laughter.)

VICE CHAIR BERG: Okay. So we've just saved 30 seconds of testimony from every person. No thank you to staff. Staff are really appreciative of you, okay?

(Laughter.)

VICE CHAIR BERG: This is your mass thank you.

(Laughter.)

VICE CHAIR BERG: And we really would appreciate, because we do want to hear from everybody. And so we're going to start with 2½ minutes, and then see how we can do. Especially for those that are going to get translated, we'll make sure you have enough time. But get to your point quickly, so that we can really understand with the issues are, okay?

All right. We've got the names up here listed. We would appreciate, and what would be helpful, if you'll queue yourself up. So a couple of people come in the aisles who are next, so we can have the quick transition. And we'll start out with Erica Morehouse.

MS. MOREHOUSE: Good afternoon. Thank you. Erica Morehouse, senior attorney with the Environmental Defense Fund. Thanks for this opportunity.

EDF is here -- sorry. Am I on now? Erica Morehouse, senior attorney with the Environmental Defense Fund. EDF is here supporting the amendments to extend the Cap-and-Trade Program beyond 2020, because we think that cap and trade is an important part of the California climate package. It is the piece that ensures that we meet the -- it places an overall emissions limit for California and ensures that we don't exceed that carbon budget that we've set for ourselves. And for many sectors, cap and trade is the piece that has regulated carbon for the first time and is placing a price on emitting and polluting carbon.

The benefit -- let's see. So the benefits of creating that reduction incentive are important, and they're -- so is providing some flexibility, and a cost effective way to achieve our climate goals. And yes, we do have to consider health costs as we think about what's costs effective.

And so as we've heard today and as we've known for some time, there are too many communities in California that face serious air quality problems. And those impacts are disproportionately born, and we actually have to do something about that.

And what we as EDF would likely like to see is an inclusive set of solutions that includes the benefits of cap and trade, but also allows us to address those reductions in local air pollutants that definitely need to happen.

We think it's also critical that California sets the strongest cap that's feasible. And for that reason, we continue to support a cap for 2021 that would be set based on the expected actual emissions in 2020, rather than the current proposal of the straight line down from 2020 to 2030. And we think that's feasible for businesses to achieve.

We're also supporting moving forward with the linkage with Ontario, as well as moving forward with, although it's at an earlier stage, the -- accepting sectoral offset credits first step through a linkage with Acre, Brazil. And so these are complex issues. They're very nuances, so we look forward to working with the Board, working with the legislature, and continuing dialogues with our colleagues and other stakeholders. Thank you so much.

CHAIR NICHOLS: Thank you.

VICE CHAIR BERG: Thank you.

MS. VANDERWARKER: Good afternoon. My name is Amy Vanderwarker. I'm the co-director with the California Environmental Justice Alliance, a statewide coalition of community based organizations. And we're here in opposition to the extension of the Cap-and-Trade Program, and to urge you as the Air Resources Board to actually halt this process until we can have a more thoughtful and fully engaging dialogue with all sectors, including the environmental justice community about how to meet our 2030 greenhouse gas emission reduction targets.

The results of the report issued by Manuel Pastor, Rachel Morello-Frosch, and others clearly outline major environmental justice issues in the Cap-and-Trade Program. There have not been localized in-State emission reductions. Major greenhouse gas facilities are disproportionately located in environmental justice communities. And there are also serious concerns about the offsets program.

And we would argue along with the allowances as well that are creating loopholes for our largest corporations in the world to continue operating facilities that we know are contributing to climate change and detrimental health impacts in environmental justice communities.

These results need to be taken seriously. I know you all are invested and I appreciate you discussing it. But to move forward with these regulations, without a full discussion about the results of this report is absolutely premature.

It's simply not sufficient to relegate the impacts of cap -- the disproportionate impacts of cap and trade to the adaptive management plan that is not set up to lead to direct program changes as a result of any disproportionate impacts that are highlighted. They're absolutely critical to the health of environmental justice communities.

Many of you have already discussed concerns about the data issues that the report also found, the challenges linking greenhouse emissions to air -- criteria air pollutants. I strongly encourage you all to take action to that. It sounds like you're moving in that direction.

However, there are other data issues that the report process highlighted. Releasing data on trading and allowances is absolutely critical. And I would argue it is absolutely critical to addressing more accurately the questions that Senator Florez and Supervisor Serna were relating about the efficacy of the allowance -- the allowances in particular.

While, yes, there are facility reporting on low emissions, we do not know how those facilities right now are meeting their emission requirements. They can be and the research is starting to show that they are offsetting the vast majority of those emission reductions. And that does not help California overall meet our 2030 targets, and it certainly does not help environmental justice communities who are located next to those facilities.

AB 197, as already mentioned -- just one more -- a few comments --

VICE CHAIR BERG: Not if you -- one more sentence, please.

MS. VANDERWARKER: Sure. AB 197 will help address these data issues. But the piece of that bill that is so critical, and also is -- indicates the premature nature of these amendments right now is the local -- the direct emission reductions. That is absolutely critical for the Air Resources Board to tackle urgently, and it is premature to amend and extend the Cap-and-Trade Program at this time.

VICE CHAIR BERG: Thank you very much.

MS. VANDERWARKER: Thank you.

MR. MENDEZ: Hi. My name is Francisco Mendez. I live on southwest Fresno. I am living on the most polluted areas. I am here against the contaminants. We have to use less fertilizers. If you use fertilizers had to be organic. Next to my house apart of the poisoned air is Foster Farms.

And there is Darling. Company make food for dogs. Next to my house, they park their big trucks with the smell. It's not perfume. It smells. And I am against the cap and trade too. They're getting free passes like free credits. But if they don't use them, they're going to sell them. I wish to have my company and I can buy it and make money, but these places are making money against our health.

I've been working in the dairy farm milking cows. I work at the dairy for about 15 years. I got sick very much. I went to the doctor. Doctor -- 2 or 3 doctors gave me so much medicine, and I have to stop taking the medicine because I get worse.

They say I have to live less time. About that, I had to use the CPAP machine during the night to breathe. And this is a product so much making us -- it's around on our areas, Foster Farms, Darling. And we have to cut the emissions about the use of gasoline. We have to make --

build more parks, green areas, plant more trees, very dusty, very bad transportation.

I am disabled. I have to use Handy Ride for disabled people. Well, Handy Ride sometimes take 2 hours, the same time it take the city bus to get to my place. I have to go to City College. One class a day. Fresno State had to go over to the gym. Had to go to the doctor, my appointments. Take me 1 or 2 appointments for one day for me to complete. And this very much time without driving.

So we need more transportation and less driving. And we need to extend the SB 32 to help our environment, less people in the emergency room, and California will go up with the budget.

Thank you.

CHAIR NICHOLS: Perfect. Thank you. Well done. Well done.

MS. LAZEROW: Good afternoon. My name is Shana Lazerow with Communities for a Better Environment. I want to thank Mr. Mendez and all of the community members who took whatever forms of transportation they could to get here today. They are really the people who you need to hear from.

Communities for a Better Environment was standing here in 2008 as well. And we were saying that you had the option of cap and trade, but you did not have to take that option. And we were asking you very clearly not to.

And since then, our communities where we organize in southeast L.A., in Wilmington, in Richmond, and in East Oakland have been living with the decisions that you made.

Now, the legislature is instructing you to regulate greenhouse gas emissions with -- even more assiduously than you have been doing since 2008, and they have not instruct you to continue a Cap-and-Trade Program. In fact, they've instructed you to pay more attention to direct emissions. That is the opposite of trading.

I appreciated the summary of the new Cushing report before the break. I wanted to highlight the specific impacts of using offsets. And I specifically wanted to look at the electricity sector. You're going to hear from other people about the refineries in California, and in the communities where we organize.

The electricity sector is among the top 10 users of offsets. And that includes Calpine, that includes Southern California Edison, that includes NRG, for their existing electricity generation units for the power plants that are keeping our lights on today. SMUD keeps our lights on here. But for the places where many of our members live, we're seeing more and more reliance on peaking power plants as we are integrating renewables into our grid. And those peakers tend to be the most polluting sources of electricity, and they are not the best way to smooth out the grid. There is better technology.

The only reason that it is not in use today is because it is more economical to keep running the dirty peakers. And that is what cap and trade allows to happen. And if you do not institute technology forcing --

CHAIR NICHOLS: Time --

MS. LAZEROW: -- regulation, it will continue to happen.

Thank you.

CHAIR NICHOLS: Thank you.

MS. GRACIA: Good afternoon. My name is Laura Gracia. I am the Richmond youth organizer with Communities for a Better Environment.

Richmond youth have been exposed to the pollution from the Chevron refinery their whole lives. Some of them have attended Lincoln Elementary School, which is only -- which is in the impact zone, move on to Lovonya DeJean Middle School, which is only a little further, and graduate from Richmond High, which is also near the refinery.

Cap and trade ignores the reality that location matters. Pollution trading let's big polluters, like Chevron, which is actually the largest point source of pollution in the area, off the hook. It let's them buy cheap credits or bank credits they get for free, so they can pollute instead of cleaning up themselves.

Studies have found that children in Richmond are twice as likely to have asthma as compared to children in the rest of California. In addition, the city has also -- the city also has higher rates of low birth weight -- lower -- low birth-weight babies, cancer, and respiratory illnesses.

Chevron is also the single largest user of offsets. And this is a problem considering the tremendous health implications of living and working near a refinery. Richmond and its youth want a transformation. We want a State plan that cleans up State air and local air. We want to actively work towards slowing down climate change, and cap and trade doesn't do this.

We want a just transition. A just transition that builds a green economy, will create and maintain local jobs via community-owned renewable energy. And this shift will ensure that revenue stays within the community and supports the community.

Transformation such as just transition is empowering, equitable, creates resilient jobs, improves local economy, and does not put residents health in jeopardy. Can and trade doesn't do this. We urge the

Board to take its residents well-being into consideration and support a just transition to clean energy.

Yes, cap, and no trade.

Thank you.

CHAIR NICHOLS: Thank you.

MS. LOPEZ-LEDESMA: Good afternoon, Chair Nichols and Board members. Yvette Lopez-Ledesma, Deputy Director at Pacoima Beautiful.

I'm here today to ask that the ARB consider taking a different approach to reducing greenhouse gases. Cap and trade is not working as intended. In communities like Pacoima, we have to see any sustainable benefits from the market-based approach. The health and quality of life of people in Pacoima and many communities like Pacoima cannot depend on trade and auction outcomes.

Organizations like ours and many here today want to work with the ARB to create a comprehensive hybrid strategy that gets us to our goals, while providing really, sustainable, health, job, housing, and greening outcomes.

Thank you.

MR. NEWELL: Good afternoon, Madam Chair, members of the Board. My name is Brent Newell. I'm the legal director at the Center for Race, Poverty and the Environment. We submitted comments on behalf of 30 environmental justice and environmental groups. So I won't restate those, except one of the most important, which Madam Chair, I know you don't want to talk about this point. But it's the fact that this Board does not have the legal authority to proceed with a cap and trade extension after 2020.

During the AB 32 process, a section was inserted into the bill, section 38562 subsection (c), of the Health and Safety Code that limited the Board's authority during a specific time period to implement cap and trade. And that time period ends in 2020. That provision hasn't been amended. The Governor has tried twice, once in 2015 and again in 2016 to get that provision changed.

Senate Bill 32 and Assembly Bill 197 did not change that either. This Board does not have the authority to do this rule-making. That's the plain and simple fact. And I know you don't want to talk about it, but it's the truth.

Moreover, AB 197 specifically directed this Board to prioritize direct emissions reductions. Nothing in this rule-making does that. Of course, that law just was signed, and this proposed rule came out before the law was signed. However, staff didn't mention this thing at all during its presentation. They haven't discussed that point at all.

You have to prioritize direct reductions, even assuming cap and trade gets extended. There's something fundamentally wrong with the way that the Board is moving forward -- my timer isn't counting down, does that mean I have unlimited time?

(Laughter.)

CHAIR NICHOLS: Please look at that.

MR. NEWELL: All right.

(Laughter.)

MR. NEWELL: There's something fundamentally wrong with this process. The scoping plan process is going forward, yet this Board is moving forward with cap and trade as if that is exactly what it wants to do.

And finally, for many now, the revenue generated by this program is the reason to continue its existence. There is a far better way to price carbon than cap-and-trade auction revenue. Direct carbon pricing is what we support --

CHAIR NICHOLS: Thank you. Your time is up.

MR. NEWELL: -- combined with direct emissions reduction as the law requires.

CHAIR NICHOLS: We heard you.

MR. NEWELL: That is the way --

CHAIR NICHOLS: Thank you. Thank you.

MR. NEWELL: -- to implement this program.

CHAIR NICHOLS: Thank you.

MS. SULLIVAN: Good afternoon again, Chair Nichols and Board and staff. I won't thank them.

My name again is Shelly Sullivan representing the Climate Change Policy Coalition representing businesses -- business entities and taxpayer groups.

And we wanted to thank you for the opportunity, and we've also written -- submitted written comments that go into more depth about this current cap-and-trade amendment regulation that we're talking about. I do have a couple of items that we would like to share with you that we think would help improve or move the current amendments along further that you might want to consider.

The first one is it was regarding slide 6, CCPC urges the Board and staff to expand industry -- the industry assistance factor of the second compliance period to the third compliance period to protect regulated communities, and to keep costs lower in the program.

Another suggestion we have is that we're concerned about the proposed provision to transfer unsold allowances into the APCR. We believe this could lead to a very large APCR, which would decrease liquidity in the overall market. And so ARB should continue to return unsold allowances back to the auction.

And finally another suggestion that we have, which we think will really help improve everybody to work on a more collaborative basis is that we would encourage ARB and staff to establish an industrial advisory council very similar to the environmental advisory council to meet on a regular basis to evaluate and provide feedback to ARB staff during the regulatory development process in a formal capacity. That way us, you know, regulated communities would be able to come in and speak to staff members and provide more collaborative feedback, I think, on the rule-making.

And that's it. Thank you for your time, and we look forward to working with you in the future.

MS. PARINO: Good afternoon. Before my time starts, I actually have a procedural question. We have community members who got up at like 5:00 o'clock this morning to be here early to sign -- 3:00 -- to be here early to sign up, so that they could speak and then make their way to that long way home. And I know for a fact that their names were in before mine, because I turned it in, and mine was at the bottom of that list, and I don't see them there at all. And I need to make sure that they get to say their peace, because they have been here for a -- I mean, 3:00 o'clock in the morning, and then they still have a 4 or 5-hour ride back.

So I just -- I need to -- I need to make sure that that happens. And I'm not sure how this was arranged, but I do know for a fact that they should be at least near me or before me, and I don't see any of the names at all.

CHAIR NICHOLS: Is this all the people in the green T-shirts?

MS. PARINO: Yes.

CHAIR NICHOLS: I mean, are they -- are all those people that you --

MS. PARINO: They're not all speaking, but they are --

CHAIR NICHOLS: Yes.

MR. PARINO: -- but there are a handful of the residents who are speaking.

CHAIR NICHOLS: Could I see the hands of how many people there are who are planning to speak of the green T-shirt group? 1, 2, 3, 4, 5, 6, 7? Are you -- not a green T-shirt, but are you part of that group? Yes, no yes.

Okay. Okay. So you're talking about 8 people, as I see it from here.

BOARD MEMBER DE LA TORRE: There's more.

CHAIR NICHOLS: Pardon me?

BOARD MEMBER DE LA TORRE: There's 4 more.

CHAIR NICHOLS: And then there's others on the other pages. Yeah. Do you all want to speak at the same time? I mean, one by one, do you all want to get up together? It's okay with me. Let's just do it. All right. Come on. Come on down. Yeah, let's just do it.

BOARD CLERK JENSEN: Madam Chair?

Madam Chair?

CHAIR NICHOLS: Yes.

BOARD CLERK JENSEN: Can I just ask, be sure to please say your name when you come to the podium, so we can make sure that we get the witnesses noted correctly.

MR. PARINO: And there will be translation needed

CHAIR NICHOLS: Yeah, for somebody at least.

BOARD CLERK JENSEN: They're coming down.

CHAIR NICHOLS: The translator is here.

There is a translator. If we had known this is what you wanted to do before, we could have -- we would have organized it. We've done this before. So, sorry that we were not aware.

MS. PARINO: So I will start off, I guess, quickly. So I'm Sofia Parino with the Center on Race, Poverty, and the Environment. And I'm here today, as I was in 2008, urging the Board not to move forward with cap and trade.

Basically, it's as simple as the fact that cap and trade ignores the fact that location does matter.

Climate change is global, but there are real localized health issues with how we decide to move forward with how we're dealing with greenhouse gas emissions. We cannot ignore the data that has come out from the report. It is clear that pollution trading is allowing big polluters that are concentrated in environmental justice communities off the hook with allowances and offsets.

And what -- what I'm here, and I'm just going to say quickly, so that there's time for everyone, is that I'm urging the Board to really take a look at that data, take a look at that report from Pastor and others. And while that might be some shocking information, and new information to some of you, it is sadly not new information to our communities. It is what they knew in 2008, and it is what has been happening since then.

And now is not the time to close our eyes, to close our ears, to, you know, dig in our heels, because we don't want to hear this information. Now is the time to admit that there were mistakes, and to learn from them, and to continue down a path that's going to get real reductions. There is no legitimate reason to continue with cap and trade.

MR. FLOREZ: Juan Florez, resident of the Delano, California, Kern County.

In low-income communities and communities of color, we know one truth about cap and trade, it does not work and it is not working for us.

The reductions that we see of greenhouse gas emissions come from offsets outside the State, an in some cases, outside of the country. If we truly want to reduce greenhouse gases, we need to invest in clean renewable energy, on our most impacted communities on the State of California. Remember, location, location, location.

It is true that California has set up the example to fight climate change, but we also have to remember the airplane rules help yourself first, and then help your neighbor.

Our communities are in extreme health at this moment to better help their environment and their health. In my county, this month alone, our children had spent about 40 percent of their time inside of their classrooms because of the poor air quality. We're not receiving any benefits of cap and trade. And if you think we are, let us know, because we're not seeing them.

There's people benefiting from this, and most of the times it's the industry and their pockets, but not the health and not the children that are in the emergency room almost on a daily basis because of their asthma attacks.

Thank you.

MS. VASQUEZ: Good afternoon. My name is Sandra

Vasquez, and I am from the City of Fresno.

So far cap and trade has not been working. We no longer want pollution trading. My community health is being impacted because of all the pollution that industries located near homes are bringing. Pollution trading allows big polluters by cheap credits or banked credits they got for free so they can pollute instead of cleaning up themselves.

Oil refineries, power plants, and oil productions, and other polluters concentrated in communities of color, and low-income communities have bought offsets like planting forests out of State instead of cleaning up in California.

Another important point I would like to make is that I believe dairies should be regulated, since my community who are low income and people of color are the most affected. We deserve every right to be in a healthy living environment.

Thank you.

CHAIR NICHOLS: Thank you. Excuse me. Would you mind just going to the clerk and giving her your name, because I don't have it on the list that we have. And we want to make sure that we have everybody correct in the record. So just -- if you wouldn't mind just walking over there. Thank you so much.

MS. PEREZ(through interpreter): Good afternoon, esteemed members of the Board. My name is Gema Perez, and I come from Bakersfield. I come from the County of Kern, one of the most contaminated in the United States. That's why I'm concerned about the industries that are in the cap and trade are found in low-income communities. And those communities are usually people of color. Personally, I suffer from asthma. I don't have medical insurance. At times, I have to make payment plans, and I am surprised that when the auctions are made for carbon dioxide tons, it costs $12, an exhaler/an inhaler will be $60 -- cost me $60.

I would like there to be programs that would reduce contamination, such as solar panels and electric cars.

Thank you for your time.

MS. HERRERA: Good evening, members of the Board. My name is Gloria Herrera and I come from Delano, California in Kern County.

And some of you are familiar with our area. And you can see we talk about people of color or low-income communities that get affected mostly of these contaminations, but actually all of the upper class people get sick too.

Because if it's not in the vegetables, it's in the fruit and the air too, so we all breathe the air. And we have to realize and conscious that we, the people, contaminating the whole world. The colored people, low-income people get sick right away, and fast impact, crash course, I would say.

And I could see -- no cap and trade began 2020, instead we need direct pollution cuts in our communities and we need to just transition to clean energy just -- and cap no, and trade.

Cap trade ignores the reality that locations matter. Pollution and trading let's that begin polluters that are concentrated in environmental justice communities off the hook. It lets them buy cheap credits or bank credits they got for free, so they can pollute and instead of cleaning up their own mess.

Oil refineries, power plants, oil production, and other polluters Concentrated in communities of color and low-income communities that have offsets like planting forests out of state instead of cleaning in California.

And I hope you're listening to all this. It's time that you follow the law or the rules. We need your help. We are here. Like it was mentioned a little while ago, we travel along ways, because I think we are the people that feel more of the impact because we are the ones that have more children with asthma breathing problems, cancer, where you see little kids maybe just born three months hook up to this big old breathing machines, bloody nose, and it comes for all those contaminations

So listen to more to the people there is affected than to these big industries. They all -- they're up there to make money -- more money. They're already rich enough. Thank you.

MS. MARQUEZ(through interpreter): Good afternoon. Thank you for having us. My name is Anabel Marquez.

MS. FERNANDEZ: My name is Eloisa Fernandez.

MS. MARQUEZ(through interpreter): We come from the City of Shafter Eloisa Fernandez and Anabel Vasquez[sic].

There are better options than can and trade to reduce greenhouse gases that hurt our health. We know that these other methods work, because clean energy is growing, but we need more support. Instead of blocking the growth of clean energy, when you permit fossil fuel energy plants, we need to support the growth of clean energy, because it's good for our communities.

The plan for clean energy says that the State's says the states may only approve programs that have been authorized for them, but ARB does not have the authority to extend it for beyond 2020, especially after the law that opposed it during these two years.

This Board should allow more deeper analysis for the cleaning of our -- of the cleaning of our environment, of our communities. I'm surprised by the thousands of dollars that are explained by the gentlemen, but I would like you to go to Memorial Hospital in San Joaquin, and you look at the people that are outside, and there is no place to put an IV, and they have them sitting down, because there aren't any beds available.

It's unjust that some gain and some lose. There's a fever warning fever of the valley. Aside from asthma, there's also bronchitis that the children suffer and the senior citizens. I know here it's very comfortable in your offices, but if you work in the fields or in the streets, after 8:00 PM, you can't breathe.

Children are not allowed to go out and play in their yards, because here and 100 meters from here there are petroleum puddles. Who can say that we're eating good pistachios when the petroleum puddles are among the trees, pistachio trees.

I'm sorry if somebody -- if we sometimes say things, but it's just enough. It's too much time to try to extend it once again. How many people have to die or get sick so that you can open your eyes?

Thank you. Good afternoon.

MS. TRUJILLO(through interpreter): Good afternoon. My name is Felipa Trujillo and I come from Shafter community. The trade of contamination is the wrong way in which California reaches the -- meets the requirements -- the federal requirements for the plan of clean energy.

We need reductions of direct contamination and a just transition of energy in our communities. Please, we don't want you to negotiate with our health. It is something that has no price. The clean energy plan requires that communities of environmental justice will get involved in a positive way.

That means that the opinions of community must be taken into consideration when decisions are being made. Cap and trade was adopted several years ago, and it does not have the voice of the most affected communities.

We need a true voice for us that will tell you how energy plants must be regulated, and also have better quality of air. We would like to have solar panels, instead of petroleum puddles. Thank you for your help.

MS. RUIZ(through interpreter): Okay. Good afternoon. My name is Rosalva Ruiz an Estela Garcia and we come from the City of Arvin.

Cap and trade ignores the reality that

locality -- that location does matter. The trade of contamination leaves the great contaminators, great polluters who are found in the communities of environmental justice without any responsibility. They don't take any responsibility. It allows them to buy credits at a very cheap rate or save credits that they obtained freely, so they continue to pollute instead of cleaning up their dirt -- their mess.

The petroleum refineries, the energy plants, the petroleum producers and other polluters concentrated in communities of color and low income have bought the right compensations, okay, such as the reforestation of the forests outside of the State, instead of cleaning California.

Thank you.

MS. GARCIA(through interpreter): Thank you for your time and I hope that you will listen to the people who are now suffering.

MS. STANO: Good afternoon. My name is Madeline Stano, and I'm an attorney with the Center on Race, Poverty and the Environment. Thank you for your time. I'm here today to speak against pollution trading, because pollution trading, as many have mentioned, has an impermissible racially discriminatory impact on California's communities of Color, who have been long overburdened by pollution, not just air toxics like we're talking today, but always other forms of pollution. So please take into consideration the cumulative impacts that these communities face.

Pollution trading allows the State's largest emitters, who are already concentrated disproportionately in communities of color, to buy cheap credits. As Gema mentioned, it costs 5 times the amount to buy an Albuterol inhaler than it does to buy a ton of carbon.

A new report that folks have mentioned from the California Environmental Justice Alliance shows that while overall greenhouse gas emissions are down from peak in 2001, many sectors, like oil and gas, which many folks have spoken about already, greenhouse gas emissions are actually up under the trading program.

Communities within 2.5 miles of a greenhouse gas emitting facility have a 22 percent higher proportion of people of color, and a 21 percent higher proportion of low income people. Respectfully, the Board should reject pollution trading, because it continues to exacerbate the legacy pollution in low income and communities of color.

All Californians deserve and are entitled to clean air. And our climate policy must reach and prioritize those already most impacted by pollution.

Thank for your time and consideration.

MS. FARRELL: Good afternoon. My name is Caroline Farrell and I'm the executive director at the Center on Race, Poverty, and the Environment. I live in Bakersfield and we just had some very unhealthy air. So I'm happy to be up here, where I can breathe comfortably.

I wanted to just highlight a couple of the Cushing report's findings, particularly around co-pollutants. The first compliance period reporting data show that cement in-State electricity generation and oil and gas production and supplies, and hydrogen plant sectors have increased greenhouse gas emissions over their baseline period within California.

And while GHG emissions are not of a particular health concern, what is of concern is that there's a correlation, as the report finds, between particulate matter and greenhouse gas emissions in the largest facilities.

And that is a health concern for localized communities, particularly the low-income communities, and communities of color that are at the fence line of those facilities.

And also, unfortunately not surprising, but the correlation between where those facilities are sited and the top 20 percent of CalEnviroScreen communities is also something for the Board to look at, because our goal is to decrease the number of impacted communities, not increase them with localized pollution.

And so I think the correlation between the CalEnviroScreen communities and the facilities that are under the Cap-and-Trade Program is also really important.

I think there are many tools available to California to look at what a holistic just transition would be for these communities. CalEnviroScreen is one, but there's a whole host of things that the State is looking at.

SB 32 and AB 197 provides a framework. And I think Diane's question to the Board is very well taken is how are these being prioritized, how are they being integrated, and how are we creating a plan that moves everyone in California forward? Particularly the communities that have historically been hit first and worst by the fossil fuel economy, how do we make sure they're at the front of the line as we transition to a new community -- a new California, new fuel, new energy, new ways of producing food that benefit everybody.

Thank you.

MS. DIETRICK: Jan Dietrick from Ventura, California. I run a small business there, Rincon-Vitova Insectaries to -- I have -- I enjoy white privilege, but I still -- to get to the mailbox from my house, I walk by the most productive oil well in the ventura oil field in view of about a dozen new wells.

I'm a health ambassador with Physicians for Social Responsibility, and as a master of public health, I can speak about the health risks of bad air and climate change, but I want to talk to you about my perspective as a small business person. Why am I opposed to the extension of the cap and trade past 2020? It is because it doesn't sufficiently require polluters to absorb the full social and environmental cost that are associated with commodity production.

An example that Shana Lazerow gave of the electricity sector is a big case-in-point with the out-of-state offsets. And that continues to enable the pollution of low income and communities of color. Another example is the price of the carbon, $10 to $13 a ton is absurdly low.

Professor Drew Shindell documented the cost of CO2 at $110 a ton. And I really appreciate Supervisor Serna's comment that that just doesn't force the way it's being done for all polluters to pay their costs.

My business is growing beneficial insects for biological pest control. We pay taxes. We like to pay taxes, so that we have a street next to our building, so that you UPS has an airport to deliver my product, so that, you know, there's a bus top there for my employees, most of who ride the bus or walk or ride a bicycle.

All of these things that we promote in our business that we're trying to make carbon neutral could have done it a lot faster with better policy.

Our taxing system absorbs many, but not all, of the costs of production. I should enjoy a more comprehensive tax that includes all greenhouse gas polluters.

CHAIR NICHOLS: Thank you.

MR. WHITEHURST: Hello. My name is Ron Whitehurst and my wife and I run Rincon-Vitova Insectaries located in the oil field in Ventura County. We grow beneficial insects for biological pest control. I'm a registered pest control advisor. I'm a health ambassador for PSRLA. I'm a member of the Ventura County Climate Hub, and the Holistic Chamber of Commerce.

I oppose cap and trade, because it's an ecological and economic shell game. Viewing with a broad perspective, we must have a federal price on carbon. That trigger will -- that will trigger comparable national carbon pricing around the world.

A carbon tax works better, because trading systems are easy to scan, which we see that that's what has happened. In India, for instance, will be forced to have an effective carbon pricing mechanism in order to sell us their stuff. We want to be a model for countries like India.

A simple transparent policy instead of one that costs a great deal, takes years to set up, and does not bring down emissions as hoped, and allows toxic hot spots near poor people from a pay-to-pollute policy.

The California legislature passed a resolution urging Congress to enact a revenue neutral carbon tax. I urge the ARB to consider a similar carbon tax. California is accumulating revenue for investments in technology and environmental justice, because politically we don't have to have a system that is revenue neutral. However, the economic impacts of a revenue neutral system warrants study.

Our carbon fee and dividend is an economic stimulus that provides comprehensive economic production for more than half of the population.

So as you develop a program that protects environmental justice communities, I'm confident that a federal carbon fee and dividend will be operating to protect the poorest of the poor.

Thank you for your time.

MR. SHUMAN: Greetings. My name is Todd Shuman. I live in Camarillo, California. I work as a teacher and as an analyst for a group called Wasteful Unreasonable Methane Uprising. I'm going to put on my sixth eye, so I'm less incoherent.

I am opposed to an extension of the cap-and-trade beyond 2020. Mostly I'm opposed to the trade part of the equation. I'm fine with caps that become increasingly more restrictive over time and which apply to all sources of pollutant emissions. I believe that the trade part of the equation has undermined the effectiveness of the whole system. Modifying pollution as an allowance and allowing market exchanges of carbon credits has resulted in numerous unintended consequences.

It has contributed to a substantial utility related leakage of greenhouse gases to other states. It has resulted in continuing and substantial localized air pollution in poor communities of color.

It has given rise to a carbon emission monetary valuation that's way below the actual most -- the actual cost of carbon-related emissions to the broader community, both human and non-human alike.

I'm especially concerned about how the trade provision kind of prioritizes market transactions over science based standards. Where I see this most prominently concerns offsets. Offsets that involve methane. Methane is increasingly given higher global warming potentials by the inter -- by the scientific community, and they need to be incorporated in offsets, so that the offsets are honest about what is being -- what is actually happening with regard to greenhouse gas elimination, and we're not seeing that.

The offsets that are produced by the American Carbon Register, they continue to use very outdated, very long-time interval methane global warming potentials that distort the whole process and basically undervalue and de-value the actual impacts that methane is causing on the environment.

So this is the kind of thing -- and why does this happen? It's because of fungibility. They don't want to disrupt. The American Carbon Registry does not want to modify its protocols, because that would affect the fungibility of carbon credit trading that takes place in the market. They basically are prioritizing a market value over what should be there.

So in short, I'll be -- quickly. We should replace the system with one that retains caps and replaces trade with taxes on carbon dioxide and methane.

Thank you.

MS. GOROSPE: Good afternoon. My name is Valerie Gorospe. And I am a community organizer with the Center on Race, Poverty, and the Environment.

A first grader by the name of Joshua Ceja[phonetic) was really excited to talk to his mom after school this week, because that day when she picked him up school, he got to tell her that his class, and the rest of his school, got to play outside for the first time in 2 days.

In Delano and the San Joaquin Valley, we've had major air alerts. We've been at level 5 color purple for the schools that still use the colored flags, and it's been dangerous to be outside.

We had a couple of schools in the Bakersfield City School District who handed out masks to their students. There are several pictures of -- on social media all over from kids in Bakersfield that are walking home with masks on because of our air quality being dangerously high.

And we just started school. We usually start school earlier than a lot of other schools in -- around the United States. And with our school supplies, with my own children's school supplies, with backpacks, binders, pencils, binder paper, school clothes, shoes, we are adding to the process of going back to school, inhalers, doctor's forms, physician's forms that the school needs so that our kids can have their inhalers while they're at school and when they go away for school activities, like my daughter.

Speaking of my daughter, we had a conversation the other day, her and her friend and I, about expressing opinions. And when you're going to express your opinion and make your case about something, it's stronger when you back it up with facts. It's great to share personal experiences, but you've got to back it up with facts. This is what I was trying to relate to my daughter and her friend.

And you have evidence, you have a strong research study, you have years of research that shows why trading is not the best route. And you had community members years ago who urged you, pleaded with you that this was not the way to go, to put the health of their children, to put the health of their families and their communities before trading. And you had the urging of the community members, but not just that, but now you have these really great research studies -- let me just finish this one sentence.

So if you move forward with this -- with this trading, you're basically ignoring the people. You're ignoring the research, you're ignoring the data, and you're ignoring the better alternatives.

Thank you.

MR. MARTINEZ: I haven't started yet.

(Laughter.)

MR. MARTINEZ: Hold on. It's only five pages.

Good afternoon, Madam Chair, Board members. Lupe Martinez with CRPE also. But I come from Delano, and I work in Tulare County and Kern County. And I see that everybody has pretty much covered a lot of -- a lot of ground. I want to be very specific on the communities that I -- where I have friends, family members that live in these rural communities that are taking this pretty difficult. It's serious. The impacts are hard in such communities like Allensworth, Teviston, Ducor, all of these small communities that are very rural communities where they're seeing the impacts of what's taking place with cap and trade, not giving them the benefits, and giving us the benefits in these communities.

These communities -- a lot of these communities are suffering from, of course, as we know right now, the drought. And so we know that if we continue to contaminate our atmosphere, and we continue to contaminate our earth, it's going to get worse, and we're seeing it. And so talking about facts, it's very, very clear. It is getting warmer. It is getting hotter.

In my time when I was a farmworker, and I don't recall the climate being as hot. It was hot, but not to the point where it is today, where we have people who are dying because of heat-related issues.

And so when I talk about these communities that are suffering from all of these things, some of them are having difficulty where they don't even have natural gas in these communities. So they have to deal with propane to heat their homes, and it's coming. And most of these homes have to -- I mean, most families have to pay anywhere from $400 to $600 a month for propane gas to heat it up.

Then the question becomes, how do we get gas to the communities. But is that the best thing to do is to get natural gas into the communities or is it about solar? And it's a Catch 22, how do you get solar into these communities that don't have infrastructure, that don't have the way of getting these monies or monies from anywhere, whether it's from the -- oh, it is over -- to these communities. So the impact is not just the jobs and the climate, but it's also the health of our children who are the ones who have the bigger impact, their health.

Thank you.

CHAIR NICHOLS: Thank you.

MR. MARTINEZ: I'm done.

CHAIR NICHOLS: Okay. That was a very effective and moving set of presentations. I want to thank all of you for coming. I understand what it's like to get up very early in the morning to come to a meeting, because even though I get to fly up here, I still have to get up very early in the morning to get the plane. And I know you're probably tired. Of course, you're welcome to stay, and listen to all the rest. But if you choose to go, we just want to say now that we appreciate you coming. So thank you.

I think we should probably listen to the rest of the people who also signed up and are waiting. So --

BOARD MEMBER GIOIA: Can I just make an observation --

CHAIR NICHOLS: Yes, you may.

BOARD MEMBER GIOIA: -- before maybe some folks leave.

CHAIR NICHOLS: Yes.

BOARD MEMBER GIOIA: If you're going to stay, I'll keep my comments at the end. If you're leaving, I was just going to maybe make a couple comments, whatever the Chair prefers.

CHAIR NICHOLS: I don't know who -- is there sort a spokesperson or a ring leader or -

MS. PARINO: They're about to leave in five minutes.

BOARD MEMBER GIOIA: Okay. Maybe I'll just make a couple of observations. I know I'll say a lot more at the end, because I think -- let me first start by saying, I, you know, we appreciate and thank everyone that has come today, including those who have come long distances. And there's a context, because I appreciate and I hear a lot of frustrations.

I live in Richmond. I've been fortunate to represent Richmond for 28 years. I live near a refinery. I'm on a local air district and deal with regulation. And I think what I'm hearing -- I think what I'm hearing is that from the environmental justice advocates that are here today, a frustration that the rules that are currently in place to fight climate change are not resulting in decreased emissions in those pollutants that impact local health, like toxics, and criteria pollutants.

And I think -- and I'm going to quote from the study for a second, because I think the study sort of -- the EJ study framed this issue, which -- and so I'm going to just quote from it, that, "While CO2, the primary greenhouse gas indirectly impacts health by causing climate change, but is not directly harmful to health in communities where it is emitted, however, GHG emissions are usually accompanied by releases of other pollutants, such as particulate matter, and air toxics that can directly harm the health of nearby residents".

So -- and the suggestion in the study is that the public health -- and again, I'm quoting from the study, "That the public health and environmental equity co-benefits of cap and trade could be enhanced if there were more emission reductions among the larger emitting facilities located in disadvantaged communities".

So it seems to me that last point is sort of the key point. The goal that we all share is how do we decrease emissions that improve localized health conditions in communities around these large stationary sources.

And I think we know and acknowledge, I mean, cap and trade is not designed specifically to regulate toxics and criteria, right? It's designed to regulate GHG. So it seems to me the question for all of us going forward is what are the direct regulations, either at the State level or at the local air district level or both, that can achieve the goals of specifically reducing toxic and criteria pollutants to result in better air quality and better health?

And we have a role in that, local air districts have a role in that. And I -- it seems to me that sometimes the strategy is to address climate change, and the strategy is to improve air quality in local communities while they overlap, that they're not always the same.

And so I think we can still figure here at a State level working with local air districts a way to directly regulate those emissions to improve air quality and health, which again complement climate change, but are different. And I just wanted a perspective in the -- at the Bay Area -- at the Bay Area District that I serve on. We are looking at -- we're looking as a backstop, even to any State program, direct regulations to cap emissions at refineries. It's still in the process of discussion. And it would cap potentially greenhouse gas emissions, criteria pollutants, some particulate matter, and we've also set a goal of reducing emissions at local refineries, by 20 percent. And we're passing some rules to achieve that.

So I think -- I guess the point I'm making here is that whether or not cap and trade goes forward, the separate issue is what are those regulations that are needed State and locally to improve health in local communities, which could -- so it doesn't mean that cap and trade in and of itself goes away. It's how is cap and trade designed, and what in addition to cap and trade achieves the health impacts or health improvements in local communities?

So I just wanted to point out that a lot of it is about the other regulations, both at this level or local air district levels that can -- to protect local communities, like the community that I live in.

So I know we're going to talk a lot about cap and trade. But again, I think they're somewhat overlapping, but some separate issues here going on. A long comment, but sort of something I wanted to at least point out.

CHAIR NICHOLS: That's okay. That's good. Thank you. Appreciate it.

I think we will hear now from Nicholas van Aelstyn, is that correct?

MR. VAN AELSTYN: Yes.

CHAIR NICHOLS: Number 10 spoke if you're working on that chart there, yes.

MR. VAN AELSTYN: Good afternoon, Chair Nichols and members of the Board.

CHAIR NICHOLS: Good afternoon.

MR. VAN AELSTYN: I'm Nico van Aelstyn. I don't have a green shirt, but I do have a son with asthma.

(Spoke in Spanish.)

MR. VAN AELSTYN: But I'm here today on behalf of Sealaska Corporation. Sealaska is the Alaska Native Regional Corporation for Southeast Alaska, established pursuant to the Alaska Native Claims Act, the ANCSA. The forests and coastlines of southeast Alaska are the traditional homelands of the Tlingit, Haida, and Tsimshian people extending from Yakutat on the north to the Queen Charlotte Islands of British Columbia on the south.

Sealaska represents the interests of roughly 22,000 shareholders of Tlingit, Haida, and Tsimshian Indian decent.

Sealaska is guided by its values to build excellence in its native enterprise and take action that strengthen its people, culture, and homelands. The first of these values is our land, which has four principles, and I quote, "The land is the basis of our collective identity and culture utilizing the land while protecting for future generations, sustainable relationship with our lands, sustainable community economies".

I invite you to visit Sealaska's website for more information about its values and its work.

Under the ANCSA Alaska -- Sealaska secured ownership of approximately 360,000 acres of forestland in southeast Alaska. Sealaska has engaged in natural resources development on a majority of its legal -- of its land holdings predominantly in the area of timber harvest and management for second growth.

Today Sealaska also sees benefit in California's forest offset program and has registered a project. Sealaska strongly supports California's commitment to addressing climate change. Northern communities are experiencing the impacts of climate change more acutely than many others. Sealaska supports extending the Cap-and-Trade Program beyond 2020, and specifically the forest offset program. It sequesters carbon, which benefits the planet by locking up GHGs. It helps to contain costs for all in California indirectly, and it provides economic and environmental co-benefits.

Alaska's rural villages are some of the most economically depressed in the country. Sealaska's forest project will bring economic developments to the native peoples of South East Alaska. The project also will preserve and protect large forests, including some that were selected because they border sensitive marine habitats and thus will help to protect those as well.

CHAIR NICHOLS: Thank you. That is the end of your time. And I understand you're advocating for --

MR. VA AELSTYN: And we did submit written comments in which we went more detail on our comments.

CHAIR NICHOLS: -- an offset. Yes. Understood. We will welcome your submission.

Fariya Ali.

MS. ALI: Good afternoon, Chair Nichols and members of the Board. My name is Fariya Ali and I will be speaking today on the natural gas section on behalf of PG&E.

My first point is about continuing allocation to natural gas suppliers, for ratepayer protection, and transition assistance. PG&E recommends that ARB continue to use the existing cap adjustment factor of approximately 2 percent for natural gas post-2020. Secondly, ARB should maintain the current consignment requirement for natural gas.

Staff has proposed and acceleration of the rate of consignment post-2020. PG&E opposes this acceleration for several reasons. Given historical trends and experience, PG&E believes that an increase carbon price signal for natural gas will not actually motivate changes in behavior. This type of mid-course change could instead increase uncertainty in customer rates and it suggests that ARB can make other significant changes without allowing for the time needed to adapt accordingly.

Staff also cites wanting to create a level playing field between gas and electricity. However, this fails to recognize the fundamental differences between the sectors and the ability of publicly owned utilities to choose their own consignment level. These differences will persist, regardless of full consignment, and so parity will not actually be achieved.

In addition, natural gas customers have not had as much time to adjust to carbon regulation as others.

Therefore, the transition to a more sustainable natural gas sector needs to be more gradual.

Unlike the electric renewable market, the renewable gas market is much less developed and offers far fewer options. Higher incentives, rather than higher carbon pricing will be more effective in promoting commercially-viable renewable natural gas.

In conclusion, PG&E supports the current allocation methodology and the existing cap adjustment factor and supports maintaining the existing rate of consignment for natural gas post-2020.

Thank you.

CHAIR NICHOLS: Thanks.

MR. CARMICHAEL: Good afternoon, members of the Board. Tim Carmichael, Southern California Gas. I echo the comments that Fariya just shared. We submitted written comments. I'll just add two points -- or elaborate on two points. We are also very concerned about increasing the consignments and/or reducing the allowances. Staff has been clear with us that they think one of the impacts of that will be to increase investment in renewable natural gas. We don't believe that's the case. And, in fact, we think there are much better ways to increase -- more effective ways to increase investment in renewable natural gas, and that conversation is ongoing with staff.

And then we also are very concerned, as Fariya spoke on PG&E's behalf, we concerned about the potential impacts on our ratepayers as well. One of the goals that we believe we've had with ARB staff for some time now is a gradual increase in rates for ratepayers. And that's what we, as utilities, are trying to achieve in this environment. And again, the conversation with Rajinder Sahota and her team is ongoing.

Thank you very much.

CHAIR NICHOLS: Thanks.

MR. BENGTSSON: Good afternoon, Chair Nichols, members of the Board, lead off batter for the electric distribution utilities, Nathan Bengtsson with PG&E. As I said I'm one of many utilities you're going to hearing from that support a well designed Cap-and-Trade Program as a critical element to help California achieve its ambitious post-2020 goals. And I want to -- I want to reiterate that it serves as an important de facto backstop to our climate program here in California.

I'm going to address 2 issues that are really important to many of these utilities. The first is allowance allocation and the second is program design or cost containment.

On the issue of allowance allocation, PG&E

strongly supports continued allocation for the benefit of Californian utility customers, and staff's proposed customer cost burden approach. It's a great start. But we would like to see that cost burden umbrella expanded to more completely recognize the carbon reduction costs that are borne by utility customers.

These include energy efficiency investments, renewable distributed generation investments, like rooftop solar, increased electrification, and most significantly voluntary investments in renewables beyond RPS mandates.

This last point is important, and it's especially important for utilities that are moving away from coal or nuclear generation and replacing those generation assets with renewables beyond the RPS mandate. This should be encouraged through allocation to make those environmental commitments.

So PG&E submitted detailed comments on how these investments in GHG reductions should be recognized through allocation. And we ask the Board direct staff to work with the joint utilities to find a way to make that happen.

Regarding design of cap and trade going forward, we strongly support the continued availability of offsets and encourage ARB to continue with the effort to include sector-based tropical forestry offsets in the program.

This is going to keep program costs within reasonable bounds, while keeping carbon out of the atmosphere, period.

Additionally, we support staff's proposal for a linear cap decline from 2020 onward rather than a steep adjustment. However, other proposed adjustments to the program will likely -- will -- they won't likely. They will result in allowances being moved to the allowance price containment reserve, as Rajinder explained earlier.

These market-tightening measures might seem reasonable in the wake of 2 undersold auctions and low allowance prices, but there is wide spread agreement from cap and trade stakeholders that external legal uncertainty is artificially depressing this market.

These amendments need to put us on track to 2030 rather than provide a short-term fix. And considering the distorting signals of litigation, it's just to soon to implement this suite of market changes.

An alternative way to encourage market demand without making permanent constrictive changes is to increase the holding limit for compliance entities, which need to begin now planning for -- and hedging for 2030 anyway. Thank you very much for your time.

CHAIR NICHOLS: Thank you.

MS. SUTLEY: Wow. Good afternoon, Nancy Sutley, the L.A. Department of Water and Power. And I wanted to just say first of all that we are making progress in our greenhouse gas emission reduction goals. And you may be aware we divested our interest in the Navajo Generating Plant on July 1.

In this -- I wanted to draw your attention to one issue that's very important to us, and that's the treatment of the RPS adjustment in the proposed amendments and in guidance. And the California electric utilities have come together on this issue and we've been in discussions with staff for many months, and we've yet to come to a resolution.

Now, we certainly understand the concern about potential double counting around certain existing out-of-state renewable electricity contracts where there may not be direct delivery into California, but the proposed treatment will have real cost impacts for our ratepayers. In our case, these are contracts that were signed before cap and trade. We acquired the renewable energy credits and they count towards our RPS obligations. They represent early actions and early investments by Los Angeles, and other utilities are in a similar situation.

In 2011, ARB allocated GHG emission allowances to the electric distribution utilities for the protection of our ratepayers. The formula that was used to set the allowance allocation for all -- for the electric utilities treated all renewable energy, the 33 percent, by 2020 as zero emission.

California ratepayers are paying for renewable energy to be generated and this is reducing greenhouse gas emissions within the western electric grid. The electric utilities received no allowances to cover these GHG emissions for the imported RPS eligible electricity that wasn't directly delivered into California, and the RPS adjustment addressed the associated compliance issues.

So the joint utilities group has proposed 2 solutions. One is to allow the REC owner to claim the RPS adjustment credit for that RPS-eligible electricity that's imported and assign the GHG emissions to the imported null power. And we've already paid for the environmental attributes of those contracts. And the second to provide a supplemental -- or to provide a supplemental allocation to the REC owners.

For us, these contracts represent about 4½ percent of our retail sales. And if we have to purchase allowances to cover, it would cost our ratepayers an additional a six to seven million dollars a year with no additional environmental benefits. So we'd like you to consider one of those solutions.

Thank you.

CHAIR NICHOLS: Thank you.

MR. BIERING: Good afternoon, Chair, members of the Board. My name is Brian Biering. I'm here on behalf of Turlock Irrigation District. I'm going to speak to the RPS adjustment. But before I do so, I do want to point out that Turlock Irrigation District represents 9 communities. And of those 9 communities, 7 are considered disadvantaged communities.

We see the cap and trade as the most effective means of minimizing the costs for those customers. And we also see that SB 32 provided clear legislative authorization for a cap and trade post-2020.

On the topic of the RPS adjustment, I'm not going to repeat all of what Ms. Sutley expressed concerns about, you know, the removal of the RPS adjustment. We're also concerned about that.

What I wanted to point out was how this would affect Turlock in particular. We made an early investment in RPS resource, an out of state wind farm that's 136 megawatts. We did that before there was any requirement to do so.

And we rely on the RPS adjustment to ensure that we can get that power to our ratepayer owners at, you know, a basically a zero carbon cost. Removing the RPS adjustment would result in a considerable cost to us. It would be on the order of a million dollars a year. And that's based on current allowance prices.

You have 2 proposals basically before you right now. One is to retain the RPS adjustment. The other one is to deal with -- remove the RPS adjustment and replace it with an allowance allocation. And the problem with the latter is that it will make PCC2, or Procurement Content Category 2, imports much less cost effective going forward.

And it won't address the fact that companies like Turlock Irrigation District made substantial early investments in out-of-state resources, and rely on that to basically meet more than the minimum PCC2 requirements. They use it for all their RPS obligation.

So we would urge you to not remove the RPS adjustment, and we look forward to continuing to work with staff towards a resolution of this issue.

Thank you.

MS. KRIPKE: Good afternoon. My name is Adrianna Kripke, and I'm senior environmental counsel for San Diego Gas and Electric.

CHAIR NICHOLS: Could you move the microphone down, so we can hear you better. Thank you.

MS. KRIPKE: I'm here to explain why the RPS adjustment is so important to SDG&E and to ask that the

Board retain its original approach to the RPS adjustment, to continue to recognize the early investment that utilities have made on behalf of their ratepayers in renewable electricity.

For SDG&E that's meant contracts that have started as early as 2008 and that extend as far as 2033. These contracts assign renewable energy credits, RECs, to SDG&E that under the current approach represent a compliance cost reduction for our ratepayers of seven to eight million dollars per year. These RECs also represent up to 20 percent of SDG&E's renewable portfolio.

If the Board were to depart from its original approach to the RPS adjustment, our invest -- our ratepayers would no longer be able to get the benefit of these investments. Instead, a windfall would go to the out-of-state importers that brought in the electricity that then had stripped of these RECs and imported into California.

As noted in written comments submitted by SDG&E, other utilities these, and the California Public Utility Commission's Office of Ratepayer Advocates, that does nothing to reduce GHG emissions, and the penalty to ratepayers is not good policy.

Ideally, the Board would continue with its original approach to the RPS adjustment and adopt the clarifying regulatory provisions that SDG&E and other utilities have proposed. These clarifications would address the double-counting certain by confirming that any electricity that's imported into California that has been stripped of its RECs by contract is brown electricity.

And the clarifications also confirm that the only entities that can claim the RPS adjustment are those that hold RECs as tracked by a well proven system to track the serial numbers for those RECs.

If the Board is willing to adopt those clarifications and continue this approach, it will ensure that the Cap-and-Trade's Program continues to apply consistently and fairly to all ratepayers including SDG&E's.

Thank you.

BOARD MEMBER ROBERTS: Could the staff comment on that?

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Sure. So the RPS adjustment is a voluntary option under the Cap-and-Trade Program. What the Cap-and-Trade Program allows you to do is if you are a utility and you have invested in renewable energy, and that energy is outside the state of California and for some reason cannot be brought into California to serve California load, then if you own a REC for that, you can have that REC count for an adjustment to your compliance obligation.

But if you're an importer into the state of California, and you know that you're bringing wind or solar into California, you must report it as wind or solar. So if you have wind reporting as wind, but the RECs have been stripped off for the RPS purposes, just because you own the REC does not mean you get to adjust your compliance obligation because it leads to double counting because now, you're recognizing that power once from the original source as it comes across the border, and then again as that REC, which is that renewable energy credit that's associated with it.

To the extent that any of your renewable investments outside of the state of California come into California and serve California needs, you get a zero compliant obligation for those. In the regulatory amendments that we've been working on, we are not proposing to make any changes on the policy related to the amendments for the third compliance period.

Post-2020, we've put 2 options on the table. One is to keep the RPS adjustment as it was intended and written in 2011, which is how it is implemented today, or we can take the RPS adjustment off the table, do a one-time calculation of what that would mean for additional allowances from us, and then you get to have some benefit as part of your allocation for this investment outside the state of California.

We've been working with the join utility group for about 7, 8 months now, and we were still trying to figure out if there was a united position on which option they prefer a post-2020. And so it's an ongoing conversation, and we just want to figure out what the right path is once we get post-2020.

CHAIR NICHOLS: Okay. Thanks.

MR. GRIFFITHS: Good afternoon again, Chair Nichols and members of the Board. Dan Griffiths from the California Municipal Utilities Association.

As highlighted by some of the other speakers today, we ask that the ARB continue the RPS adjustment. The RPS Adjustment is essential to the long-term success of the Cap-and-Trade Program, and furthers California's environmental policy goals by keeping renewables affordable in California.

Continuing the RPS adjustment will provide much needed regulatory certainty that will guide investments and utility planning efforts. Removing the RPS adjustment may result in unintended impacts to imported renewable electricity, and the RPS. And the ARB should ensure the Cap-and-Trade Program and the RPS continue to work in tandem.

Related to allowance allocation methodology, CMUA does agree that relieving cost burden is the correct approach for post-2020 allowance allocations. CMUA does, however, believe that the cost burden principle should be applied more widely to assure customer costs for early actions and better achieve California's climate policy objectives.

For example, cost burden considerations should include recognition of early GHG reductions from increased investment in energy efficiency programs in GHG reductions due to distributed renewable generation.

Also, they ARB should continue direct allocation to EDUs for electricity sold to industrial-covered entities. Allocation to EDUs was chosen as the preferred method to return the allowance value to customers, as was noted in the 2011, FSOR. And EDUs remain well situated to utilize allowance value for ratepayer benefit.

CMUA also supports allocating allowances to a public wholesale water agency in the post-2020 period using the same methodology used in the existing regulation.

Lastly, widespread electrification, including the growth of electric vehicles, will play an important role in meeting the State's greenhouse gas targets. The ARB should enable allowances for increased electrification, which is consistent with SB 350's call for widespread vehicle electrification and acknowledgement of the corresponding impact on POUs from such electrification.

CMUA believes these modifications will better enable the success of the Cap-and-Trade Program.

Thank you very much.

CHAIR NICHOLS: We're going to have to take a very short break, like five minutes. Okay. Five minutes. Don't go anywhere, except the bathroom, if you need to go to the bathroom. That's it.

Okay.

(Off record: 4:33 p.m.)

(Thereupon a recess was taken.)

(On record: 4:41 p.m.)

CHAIR NICHOLS: Okay. Mr. Corey, whoever is -- who is talking? We're -- Richard -- Hector. It's Hector. Hector. All right.

All right. We are going to be starting to lose people. We already are, because of flight schedules. We know that. We understand that. We're going to do the best we can to plow through this. I'm increasingly pessimistic about the next item however. And I'd like to know if anybody has any thoughts about what we can do to proceed in an even more abbreviated way on the compliance plan for the Clean Power Plan.

How many people signed up for that one? Do we know?

BOARD CLERK JENSEN: Five.

CHAIR NICHOLS: Five.

Okay. So we can do 2 easily on that one. Okay. I think, as long as we can retain a quorum of the Board, we will stay. And so let's just resume.

Hi, Ms. Taheri.

MS. TAHERI: Good afternoon. Sarah Taheri with Southern California Public Power Authority. I just want to touch on a few issues today. As many of my utility colleagues are also touching on the same issues. But first I wanted to start with the RPS adjustment.

Similar to concerns raised by others, SCPPA does to support the proposal to remove the RPS adjustment from the Cap-and-Trade Program. We feel that this change would be fundamentally inconsistent with some of the existing State policies, and ongoing efforts by the Governor's office to regionalize the market.

Imported renewables are going to be critical to meet the increasing RPS targets, and particularly, given land-use constraints that limit our ability to develop in-State large renewable projects. So removing the RPS adjustment would really increase the cost of compliance with that program.

We have been working with the joint utility group on this issue, and we've developed a proposal there. We support the comments from Ms. Sutley earlier with LADWP to essentially work with staff to evaluate these alternative proposals.

Next, I'd like to touch on allowance allocations. And with respect to those, SCPPA does not support the shift of allowance allocation to essentially move directly to allocations for industrial entities. In practice, this would require POUs to go forward with lengthy rate-making processes. And sometimes these are multi-year processes. So our concern is that in getting there, we would be impacting all of our customers and not just a small number of covered entities.

We recommend that at this time ARB not pursue this shift for industrial allocations, as it would have costly impacts, and may not actually effectively address staff's concerns with that proposal.

Lastly, I'll quickly touch on greenhouse gas emission accounting. And this issue was added to the process rather late. So here, we essentially just ask to hold off on this proposal. We think it's premature at this time to consider it with this regulatory package, since there are ongoing discussions at the Independent

System Operator, and stakeholders need some more time to evaluate essentially the magnitude of the issue, as well as possible solutions for it.

So with that, I'll wrap-up my comments. Thank you so much for your time.

CHAIR NICHOLS: Thank you.

MR. NEAL: Thank you, Madam Chair and Board. My name is Sean Neal. I'm here on behalf of the Modesto Irrigation District or MID. MID, as others, similarly do not support the elimination of the RPS adjustment for the 2021-2030 time period. MID's contracts that are currently eligible for the RPS adjustment are 45 percent of MID's 2020 33 percent RPS requirement.

The anticipated impact to MID customers and MID over that period, the entire period, for elimination of that adjustment as proposed would be -- you know, with the concepts proposed on the table are $31 million over that period.

Approximately 12,000 of MID's roughly 115,000 customer accounts qualify for rate assistance. And in Modesto, all except for one small community, qualifies as a disadvantaged community. So the concern of the elimination of the RPS adjustment and financial impacts are important to MID.

MID also echoes the comments made by Ms. Taheri regarding the not supporting the direct allocation of allowance -- allowances to industrial customers. The -- that elimination would create the potential for a special rate for a handful of industrial customers. And that project and that approach would be difficult and create potential legal and implementation hurdles.

So we urge reconsideration of that proposal. I thank you very much.

MS. BRYAN: Good afternoon, Chair Nichols and members of the Board. My name is Leslie Bryan, and I represent the city of Redding Electric Utility. Thank you for this opportunity to comment.

Redding is committed to doing our part in helping California achieve its greenhouse gas goals and objectives. Redding supports the comments submitted by NCPA, MSR and the JUG. At this time, I'd like to emphasize our concern regarding the proposed elimination of the RPS adjustment.

In 2006, as an early adopter, Redding contract for wind energy from the Pacific northwest that is firmed and shaped before being delivered to Redding. And this resource accounts for approximately 85 percent of our RPS.

Eliminating the RPS adjustment would cost our customers over $600,000 per year or a one -- I'm sorry, a half percent rate increase. And this would critically restrict our ability to procure new renewable resources to meet California's 2030 renewable and greenhouse gas goals.

So we urge you to retain the RPS adjustment in the Cap-and-Trade Regulation, and direct staff to please work with affected utilities on amendments that can ensure consistency among California RPS and greenhouse programs.

Thank you.

MS. HUGHES: Good afternoon, Madam Chairman and the Board. Thank you for this opportunity to comment. First of all, I want to say I'm Kathleen Hughes from Silicon Valley Power, City of Santa Clara. We are in support of the comments submitted by the Joint Utility Group, MSR, and the CPA.

There's been a lot of talk today about cost burden, cost containment. And one thing about the RPS adjustment, or the removal of it, or even the adjustment of it to offsets, it's not optional for us. They say it's voluntary. It's not. It really has cost implications. I just looked at the 2014-2015 RPS -- I mean, MMR reporting and tried to extrapolate that. What would that cost be if I could not count that as renewable or as carbon free. It would be about a million dollars a year.

Now, this is a contract we entered in early ahead of the game. We still have 10, 15 years left on this contract. That would translate to a 3 to 5 percent rate increase over the next 10 years for our -- and this is just RPS adjustment alone.

Then I started looking at the opportunity costs. We pay a premium for this energy. We pay a lot of money just for that little bit that would be not considered adjustable, or greenhouse gas free. We paid about $9 million in 2015 for that.

If I would have bought it on the market as an unspecified, I would have paid 4 million for it. And that cost difference is huge for our customers. That's an opportunity to cost, and I'm not including like RPS cost on top of that.

So it really can have impacts of what we could have done with our money and what we could go -- do going forward. Another -- you know, it's one thing that comes to mind is when you say it was optional, we have -- you know, on our house we can take off our interest. That's optional, but most of us take that off of our long-term thing. So to us, again, it's not optional.

We also have a lot of confusion among our ratepayers. We very large industrial commercial customers that are saying what's our carbon intensity. They can't go by what CARB is, especially if you take out renewables that is supposed to be greenhouse gas free. We also have others that sit -- do the greenhouse gas protocol, and they can't go by CARB's numbers, because that doesn't adhere to the Kyoto Protocol and everything else going forward with that kind of reporting.

We have the power content label. We have the RPS. And they're all different in how we have to explain this and this message to our customers.

So it would be nice to see some conformity between the State of California and what kind of message we can send to our customers and have that addressed as well.

And I thank very much for the comments.

MR. SMITH: Hi, Chair Nichols, members of the Board. Adam Smith with Southern California Edison. I'm not going to use my entire time. The Joint Utility Group has submitted comments. Southern California Edison has submitted comments. I just want to highlight our continuing and strong support for the Cap-and-Trade Program. That's point number one. So you can see I only have 3. I'm moving along quickly.

Point 2, the allowance allocation. We agree with the Joint Utility Group's proposal that the cost burden principle is the right one to be focused on. However, we do agree that we think it should be broadened, point 2.

Point 3, we think it should be broadened specifically, and it's been kind of discussed lightly in the work that staff has done so far, but we don't really have a firm methodology for how to do it, and that's to account for increased emissions due to transportation electrification, and other forms of electrification.

As you saw in the -- kind of -- I think it was the first presentation to kick us off today, South Coast has a significant amount of work ahead of it. Electrification will play a key part in attaining, not just attainment, but also some of our GHG goals. And I think that, you know, ensuring that utilities and utility customers specifically are insulated from any kind of increased cost of compliance with the Cap-and-Trade Program is crucial to ensure that there's no disincentive to allow that transition to electrification as an end-use -- you know, electricity as an end-use fuel to occur.

So therefore, just in general summary, clear support for cap and trade moving forward. The allowance allocation we think is going to be a critical component, and we need to make sure we're getting that right. There's a placeholder on transportation electrification, and how we're going to account for that in the allowance allocation. We look forward to continuing to work with staff on that.

Thank you.

MS. PARSONS: Good afternoon. Cindy Parsons with the Los Angeles Department of Water and Power.

First, I'd like to address the proposal to decrease the allowance allocation to the electric utilities and give those allowances to the industrial facilities. The publicly-owned utilities they use those allowances to avoid rate increases to their customers. And so all of our customers benefit from the allowances that ARB allocates to the publicly-owned utilities.

We ask that ARB not adopt the proposal to shift those allowances away from the electric utilities, because the redistribution to the industrial facilities will not make those facilities whole. According to our calculations, the proposal would result in a net cost increase of over $1 million per year to the handful of industrial -- covered industrial facilities that are within our territory. And that is contrary to the objective, which is leakage protection.

So you're supposed to be protecting these customers from leakage, but yet the proposal from staff would actually increase their cost of doing business in California. So we request that you not adopt that.

We do support an allowance allocation to the electric utilities to support electrification. As was mentioned by CalETC earlier, the utilities will play a key role in making -- achieving the goals of SB 350. And so that allowance allocation would help to pay for the infrastructure and the additional generation that would be needed to support that load.

And with regards to the RPS adjustment, there -- staff provided a couple of options. But the problem with staff's options was that they don't fix the problem. And the problem is the additional cost to the ratepayers. So in the original allocation, it was assumed that all RPS-eligible electricity was zero emission. So the RPS adjustment was supposed to cover the portion for which you have to report emissions. So it is not optional. So I just wanted to clarify that.

And lastly, we'd like to streamline the process for submitting updates to the registration -- woops.

Thank you.

CHAIR NICHOLS: That's it. Okay. Thanks.

You know, I don't know if there's anybody left speaking for electric utilities, but we can all just assume you don't like the RPS adjustment.

(Laughter.)

CHAIR NICHOLS: You don't really have to say it again.

(Laughter.)

MS. BERLIN: Express it all here.

(Laughter.)

CHAIR NICHOLS: Yeah, I wouldn't bother. We get it.

(Laughter.)

CHAIR NICHOLS: Okay.

MS. BERLIN: Okay. So I will take that off my list.

(Laughter.)

MS. BERLIN: My name is Susie Berlin and I represent the Northern California Power Agency, and MSR Public Power. You heard from MSR's 3 members earlier, MID, Santa Clara, and the City of Redding, and I won't reiterate their very important points about the RPS adjustment.

(Laughter.)

MS. BERLIN: I will just, on that point, make one comment that in the past, there -- the Final Statement of Reasons for one of the MRRs stated that there should not be a compliance obligation under the Cap-and-Trade Program for RPS-eligible resources. And retaining the RPS adjustment ensures that that carries through.

And NCPA and MSR support continuation of the Cap-and-Trade Program. We support continued allocation of allowances to the EDU to cover the cost burden of the program, and for the benefit of their electric customers.

And we support the comments made by the earlier utilities on the definition of that cost burden, which includes compliance with myriad other greenhouse gas emissions reductions programs that directly fall on the utilities and the electric customers of those utilities.

We urge that transportation electrification be considered at this time during this rule-making, as part of an allowance allocation to the EDUs. We support the continuation of cost containment measures as long as those linkages as part of the cost containment measure are meaningful and optimize the benefits to California entities, and don't compromise the availability of compliance instruments for California compliance entities.

We support the use of the Cap-and-Trade Program for CPP implementation. But cap setting, we believe that it is premature to include any kind of calculation for what the 2030 cap should be. We think that instead we should wait and see what some of the scoping plan results are from scoping plans that are developed between now and the time that we need to set the post-2030 cap.

Oh, an overarching issue that we would like to address is the notion of interagency coordination. Not necessarily sitting down in every single workshop or meeting between various agencies, but the extent to which actions and implementation of the Cap-and-Trade Program, for example, impact entities that have to comply with the RPS, program mandates, or the way they impact electricity markets in general with regard to issues such as changes to address the EIM.

On that latter issue, we think it's premature to have any amendments to the regulation to address the EIM until they've been more thoroughly vetted both in the context of the magnitude of the problem, and whether the proposed fixes would even address the problem.

Thank you.

CHAIR NICHOLS: Thank you.

MR. JACKSON: Good afternoon, members of the Board. Alex Jackson, with NRDC. For those watching on-line, I am not a younger version of Tim Tutt.

(Laughter.)

MR. JACKSON: He has generously agreed to switch with me so that I can get home for my son's day care parent night. And now that I said that out loud, I'm not sure why I switched.

(Laughter.)

MR. JACKSON: But from the outset, I just want to say, in response to the important issues and perspectives we've heard today from the environmental justice community, from where I stand, I think -- I just want to urge the Board, you know, not to fall into this notion that we have to choose between economy-wide programs of scale that can help extend the reach of California's programs beyond state lines in the face of a global problem and doing more at the local level to redress the real impacts we've heard about today, from air pollution at industrial sites and mobile sources that continue to be disproportionately impacting disadvantaged communities.

I don't think it is an either/or proposition. I think it must be a both/and. We must do both to continue to advance California's leadership on a global scale and continue to do more, which this Board has the power and prerogative to do at the local level.

For a host of reasons thus far, the Cap-and-Trade Program has really served as a supporting cast role on the way to 2020, some by design, such as the need for complimentary policies that have moved markets, broken down barriers, and some by happenstance, in that what we thought were going to be the emissions we were going to have to reduce in 2020 have been lower than we thought due to the recession and other factors. So the gap that the cap has had to close has been less than we thought, coupled with legal uncertainty of various favors that has meant low demand for allowances, low allowance prices.

That will likely change on the road to 2030, which will require reductions more than double the pace that we have achieved thus far. Without a hard limit on emissions, there's more risk we will not hit that mark. Without a strong market signal, it will likely be more difficult, more costly to achieve that goal. And without significant investments that this program generates to ensure clean energy takes route in communities most in need of them, our program won't have the resources to promote equity.

But that is not an endorsement of the status quo, by any means. As this new resource really underscores, low-income communities, communities of color continue to bear the impacts of our economy's externalized pollution costs, which is unjust and absolutely needs to change.

And while any pathway to achieve a 40 percent reduction goal will invariably involve steep reductions, there are ways that we can design that approach which will put the appropriate emphasis on equity. And we encourage the Board to continue to look at those.

Thank you.

CHAIR NICHOLS: We're all eager to hear those ideas from you and others, but now go pick up your kid, okay?

MR. JACKSON: Okay.

MS. STROMBERG: Good afternoon Chair Nichols and members of the Board. My name is Janet Stromberg. I'm a very recent retiree after 28 years of working for U.S. EPA Region 9, and the Bay Area Air Quality Management District as an engineer.

By design, California's Cap-and-Trade Regulation denies public access to the details of greenhouse gas emission trades. This is an unprecedented and indefensible feature of California's climate program. For other pollutant trading programs, emission credits used by specific facilities are a matter of public record.

The State's climate program should be just as transparent as other air pollution programs. This is necessary to retain public support and strengthen political will. There's a growing public perception that cap and trade is failing. The program doesn't incorporate the true cost of carbon pollution in credit purchases.

The availability of cheap out-of-state forest and other credits kicks the can down the road avoiding direct reductions from the industries most responsible for the climate crisis and air pollution. We know we need to end dependence on combustion for power. I've read comments by Chair Nichols saying exactly that.

Cap and trade delays sending the strong policy signal needed to move toward ending reliance a combustion. Plus, greenhouse gas reductions funded by cap and trade proceeds cost far more per ton than the original cost of the credits. California's Cap-and-Trade Program is not cost effective, in my opinion.

AB 197 sets a clear direction for the future of California's climate program to prioritize the social cost of carbon and direct emission reductions that will protect both the public health and the climate.

California's Cap-and-Trade Program should not be extended to 2030, because it is modeled on an outdated mindset that prioritizes industrial cost savings over public health -- removing public health burdens, and it's beset by too many other contentious problems.

It is not achieving the actual emission reductions from the largest sources. It allows greenhouse gas emissions increases in California. It's not cost effective, and it's harming public health in already burdened communities.

Thank you.

MR. NOLD: Board, staff, I'm Ken Nold. I'm with the Turlock Irrigation District. I'm going to try to be brief. If you don't know, Turlock Irrigation District, we are our own balancing authority, we're a POU, and we're in the Central Valley. So we do appreciate a lot of the comments that we've heard all day, because that's us.

I'd like to correct an earlier statement. It's 7 of 11 of our areas are disadvantaged communities, not 7 much 9, so it's in that bad.

We would like to say that we are in support of continuation of the cap and trade. We think it's the most efficient and most cost effective method of lowering greenhouse gases.

I'd like to note that we've been an early adopter, and we don't want to get punished for that. And not to cross the Board Chair, all I'm going to say is RPS adjustment, and I'm going to leave it at that.

(Laughter.)

MR. NOLD: We also -- are worry -- are concerned with the switching of the industrial allocation to -- from the utilities to the industrial sector. Especially for POUs, that doesn't adequately compensate or work for our ratepayers.

I'd also like to note that a lot of the regulation we're look -- staff is looking at paints all of the utilities with the same brush. Our area has low growth. And I know that hasn't been spoken of yet today, but we're going to -- our load is going to keep growing. And in part of the allocation process, the staff is proposing that everyone has a flat load growth. Well, that has an effect on us, along with RPS adjustment, along with switching of the EITE.

And I'd just like to be in that allocation process. It is a bottoms-up process this time around, and I'd like to be -- have you guys aware that, of course, you should look at all of us individually, not as one big same group.

I'd also like to mention that we think it's really important as the utility sector is going to replace much of the transportation sector, that we're also given allowances for, or at least an allocation process.

Thank you.

CHAIR NICHOLS: Thank you.

MR. LARREA: Good evening. John Larrea with the California League of Food Processors.

First of all, I want to thank the Board. With the recent release of the food processing study that you ordered back in 2011, you know, we are very much pleased with that, and we believe that it shows that we are in line for a possible adjustment in third compliance period for 100 percent allowances, and we want to work with the staff on that to see that that goes forward. It really would take a lot of pressure off our members.

As for the 4th compliance period, I'm going to keep this very tight, as tight as I can on transition, assistance, elimination. We think that the transition -- transition assistance should be tied to the development of new technologies for companies under the cap and trade.

By doing that, what it does then is instead of just eliminating it out of hand, if any new technologies come along that result in a significant reduction in GHGs, then the -- then by sector, then you can look at the transition assistance and determine whether or not that needs to be lowered.

Otherwise, new technologies going into the post-2020 are going to be absolutely key in terms of making this a successful program. And we're going to need the types of investments that are going to be able to support us in that. And as I've said before, I think you should seriously think about bringing back ETAAC, the Economic and Technology Advancement Advisory Committee. That -- with the Board's heft and weight behind that, you can direct that committee to be really focused on developing new technologies that will help us to be able to reduce our emissions directly.

And I think that also complies with 197, because if we had new development in technology, we would be able to have those types of direct emission reductions associated with the facilities. So please, you know, really consider about ETAAC.

And again, thank you for the food processing study.

MS. SEATON: My name is Phoebe Seaton with

Leadership Counsel for Justice and Accountability. Ingrid left and ceded her time to me. And I am listed later on the agenda so I won't speak again, unless you'd really like me to.

(Laughter.)

MS. SEATON: I simply want to align my comments with Center on Race, Poverty, and the Environment. CEJA, CBE, and Pacoima Beautiful, and most importantly the many residents who joined us today, and, you know, adding to that group of residents, we work with CRPE with a cohort of climate justice and environmental justice champions in from Kern through Merced counties. And half of them did not join us here today, because they're leading the conversation with EPA and OEHHA in Fresno on CalEnviroScreen. But they would also, I think, echo the concerns with cap and trade around its disproportionate impacts on communities of color and lower income communities.

We look forward to working with you and many others on a better solution to climate.

Thanks so much.

MS. WILSON: Good afternoon. My name is Monica Wilson. I'm the U.S. Director of GAIA, the Global Alliance for Incinerate Alternatives. And I'm also honored to serve on the Environmental Justice Advisory

Committee.

I'm here today on behalf of my organization to show support for the EJAC's recommendations, and to oppose the extension of cap and trade beyond 2020. I'm going to defer comments on that point to the excellent and data-driven information we've already heard today.

I also am here to speak on a specific point that our organization works on in California and around the world, which is incineration. Deep in the staff proposal in front of you on the Cap-and-Trade Program is a proposal to extend the exemption that incinerators currently enjoy under the Cap-and-Trade Program in California.

These polluting facilities have already gotten off the hook for the first compliance period. And at that time, we were told, along with EJAC and other people who were -- organizations who were concerned about this, that this would be a one-time exemption. So it's a shame that we still have to spend time talking about this when we have so many more systemic issues to be focusing on today.

So I'll be brief with 3 reasons of the many reasons why I would encourage you for -- that ARB keep its promise on putting incinerators under the cap.

The first is that the State's incinerators are polluting environmental justice communities with co-pollutants, in addition to greenhouse gases. The second is that the Clean Power Plan clearly states that compliance mechanisms should apply to incineration. That's pretty clear. The third is that a lot of what gets burned in the State's incinerators is organic material like food waste and urban wood waste, things like that. That's material that we should be using in compost facilities and then applying to California's lands in order to sequester carbon in the long run, not putting in these incentives which actually incentivize burning it.

So, you know, it's a little bit hard to understand why we still have to address this issue when the State, including ARB and other agencies, have done a lot of work moving us forward on the nexus of waste, policy, and climate policy. So to move -- to agree to another extension for incinerators would be a step backwards. So I'd encourage us to keep on the path that we're on around composting and carbon sequestration.

And, you know, in sum overall of my comments, I want to say please give California a plan past 2020 that does not include trading, and through 2020 as long as there is Cap-and-Trade Program incinerators should be under that cap.

Thank you very much.

CHAIR NICHOLS: Thank you.

MS. CLAASSEN: Good afternoon, Chair Nichols and members of the Board. Thank you for hearing our comments today. My name is Rebecca Claassen with Food and Water Watch. We are a national nonprofit working to protect our common resources for the public good, and we have about 170,000 supporters in California.

We respectfully urge the ARB to prepare implementing direct source control measures, post-2020. We see the recent passage of SB 32 and AB 197 and their stated priority for direct source emissions reductions as the best case scenario for California.

Because cap and trade places additional burdens on front-line communities, and is less effective at reducing emissions than tried and true direct source regulations. Also, the legislature has not authorized this Board to extend cap and trade post-2020.

Cap and trade undermines the most important tenet of the Clean Air Act, which is that companies do not have the inherent right to pollute our airways. By allowing polluters to purchase the right to continue polluting our airways, we harm our communities, public health, and our climate.

The growing urgency of climate change means that we cannot afford another decade experimenting with unpredictable market-based approaches to our climate problems. We respectfully ask the ARB to turn away from cap and trade with all of its volatility, potential for fraud, lack of transparency, and implement direct emissions reductions at the source for a transparent, accountable, and equitable approach.

Thank you.

MS. ROBERTS: Chair Nichols, members of the Board. Tiffany Roberts from Western States Petroleum Association. Thank you for the opportunity again to comment. We submitted a letter on September 19th, so I'll just highlight some of the issues from that letter.

First, while we support proposals that would add flexibility to the regulation, we are on balance disappointed that the proposals increase uncertainty by using placeholders for core program elements. We're concerned that ARB's approach to adopt some amendments in the current 45-day package, and then address placeholders later on in a 15-day package, really creates a great deal of uncertainty and limits the ability of stakeholders to evaluate the packages as a whole.

The placeholder elements are critical and are a critical part of the program implementation. And so we don't think that it's appropriate for a 15-day package, and we would ask that placeholder design elements be evaluated in future workshops and a full 45-day notice and comment periods.

Let me turn now to another issue that potentially creates some market volatility. Specifically, staff as part of the reg package makes a couple of assumptions. Number one, that the oversupply of allowances is a permanent condition, which needs to be addressed by the regulation rather than market.

And then number two, that allowance prices are going to continue to remain low. ARB really should avoid basing major regulatory design elements on the notion that the future of the program is going to look just like it is in the present. Both of those assumptions are going to lead to unnecessary regulatory intervention and potentially increase market volatility.

Let me turn quickly to trade exposure. California's market is subject to imports from markets without carbon regulations. There's still no policy or economic justification for reducing industry assistance factors. ARB's current proposals threaten both the environmental integrity of the program by promoting emissions leakage and loss of economic productivity and jobs to unregulated jurisdictions. It's also disregarding the fact that regulated entities are going to face increasingly stringent cap and trade compliance obligations because of the declining cap.

And so we would recommend that ARB extend the current assistance factors into future compliance periods.

Thank you.

CHAIR NICHOLS: Thank you.

MR. RAY: Chair Nichols, members of the Board and the staff, good evening. My name is Bruce Ray, and I'm with Johns Manville - we're Berkshire Hathaway Company - making, among other products, energy efficiency measures, including insulation -- fiberglass insulation that we make at our plant in Willows in Glenn County, about an hour and a half north of here.

Johns Manville is a member of the North American Insulation Manufacturers Association, or NAIMA. NAIMA did submit detailed written comments on Monday. And I would recommend you look at those for the detail. I just wanted to raise a couple of issues to kind of highlight a couple of issues, first, on the assistance factor and the leakage for the first 2 compliance periods, and then, of course, for the 3.

Our industry was assigned 100 percent assistance factor based on a high leakage risk, primarily from domestic instead of international. We would certainly urge the Board to continue that post-2020.

We're still at a high leakage risk, especially domestically, because there's still excess manufacturing capacity in the building insulation industry, because the housing market simply has not yet returned full. We do have, attached to the NAIMA comments, a separate report by the Brattle Group that analyzes the two leakage reports and does confirm that fiberglass insulation is still at a high leakage risk.

The other one I want to raise essentially is just the continuing importance of energy efficiency in helping meet the State's climate, energy, and environmental goals. And certainly, if you look at the scoping report, energy efficiency is going to be called upon to achieve at least the amount of greenhouse gas emission reductions as the renewable portfolio standard.

And certainly, that means that insulation is going to have to play a very large role in helping the State achieve its greenhouse gas emission reduction goals overall. And that's especially true in disadvantaged communities, where you have tens of thousands, if not hundreds of thousands, of poor performing under-insulated homes that -- where a retrofit could be a climate resilience and adaptation measure.

And then finally, I want to draw your attention to a study that we helped -- a 2003 Harvard study, we helped update recently called Carbon Reductions and Health Co-benefits from U.S. residential energy efficiency measures. I'll make sure that staff gets a copy of that.

It basically shows that the very large public health benefits from insulating under-insulated homes.

Thank you very much.

MS. EMERSON: Good evening. I'm Deb Emerson with Sonoma Clean Power, a community choice aggregator.

Chair Nichols and members of the Board, thank you for staying late this evening and giving us the opportunity to speak. On behalf of Sonoma Clean Power, MCE Clean Energy, Peninsula Clean Energy, Silicon Valley Clean Energy, and Lancaster Choice Energy, we support the continuation of the RPS adjustment as currently implemented, as well as the existing allowance allocation, and the Cap-and-Trade program and mandatory reporting rules.

Community Choice Aggregators are local government entities created by statute for the purpose of providing customers expanded choice within the retail electricity sectors. When CCA's form, customers consider service attributes, such as the percentage of renewable energy content and the greenhouse gas emissions impact. Many CCAs have adopted RPS goals that far exceed the standards set by SB 350.

For example, in the most recent integrated resource plan, MCE's board of directors adopted the goal to have an 80 percent RPS-eligible and 95 percent GHG-free portfolio by 2025. Sonoma Clean Power has committed to reaching 50 percent RPS eligible portfolio by 2020. That's 10 years ahead of the State's requirement.

In order to achieve this noteworthy clean energy procurement objectives, it is imperative that CCAs retain access to cost-effective renewable energy products within California and throughout the western United States.

Eliminating the RPS adjustment could make the ability to supplies renewable, energy to our customers cost prohibitive. I'm not going to go into all the reasons of why that is and how that would directly impact our business, as I think we've heard that from many others.

CCAs also oppose the proposal to replace the RPS adjustment by allocating allowances to EDUs. Although, this credit would be allotted to the ratepayers, this allocation does not go directly to the CCA or allow us to use it to meet compliance obligations. Thus, this alternative mechanism excludes CCAs. And we've invested heavily in renewable resources as a major component of our portfolio, and as an unintended consequence CCAs would suffer a competitive disadvantage.

Given that CCAs continue to grow in the State of California, and given that the strides that we have made in reducing GHG emissions, we ask the Board not to accept these proposed changes, and to hinder our future progress for a cleaner California.

Thank you again for opportunity, and it's important to speak about these matters.

Thank you.

MR. FACCIOLA: Hello. Nick Facciola from Oakland. At origin climate we manage more than a dozen livestock compliance offset projects. I'm a professional engineer with a background in air pollution control. And I've been working to combat climate change for more than 10 years now.

Skip thank staff.

(Laughter.)

MR. FACCIOLA: Actually, Thank you, Supervisor Gioia, because some of your comments that were in response to the folks in the green shirts, my testimony echoes some of those sentiments.

Greenhouse gases, and CO2 in particular, are unlike other air pollution in that they do not lend themselves to mitigation through traditional air pollution control technologies, whereas particulate matter, NOx and SOx, can be reduced through the use of filtration, scrubbing, and other techniques to clean up the exhaust from combustion point sources. Carbon dioxide is a primary result of complete combustion. No matter how many air pollution control technologies can be outfitted on a stack, cleaning all these unintended byproducts of combustion to perfect and ideal conditions will still leave us with the same amount of CO2 per unit of carbon in the fuel.

It follows that GHGs like CO2 need to be targeted for reductions in a different manner altogether. Our livestock offset projects reduce GHGs in a manner that is scientifically quantified, proven and identify -- independently verified as real and permanent.

If you factor these into those charts, these emission reductions in Cushing's report, you'd see probably net reductions in GHGs. It's important to keep separate the significant health effects of criteria air pollutants that they have on our local communities from the global consequences and strategies to reduce GHGs. When it comes to greenhouse gases, science has shown that location does not matter.

These gases disperse throughout the atmosphere where they will affect our climate for dozens of years, regardless of where they were emitted.

I know that most people, including myself, would rather see fuel combustion reduced altogether. But as far as greenhouses gases goes, the Cap-and-Trade Program offers the most immediate, realistic, and cost-effective solution to meet the ambitious targets set out in SB 32. And, of course, it's already set up. We hope to see the Board approve the program post-2020, so we can continue to spur new GHG emission reductions.

Thank you.

MS. GRIZARD: Good evening, Chair and members. Erin Grizard with Bloom Energy. Thank you for the opportunity to comment on the staff proposal to reverse the treatment of fuel cells under the current Cap-and-Trade Program. Bloom Energy is one of 5 stationary fuel cell companies that are operating today in California.

Fuel cells are non-combustion technology. We convert fuel, either biogas or natural gas, electrochemically into energy. By doing so, we achieve GHG reductions, criteria air pollutant reductions, and do not use a lot of water. So there's a lot of co-benefits to the use of fuel cells.

Since the Cap-and-Trade Program began, ARB has recognized those environmental benefits and the energy system benefits of fuel cell technologies, and accordingly has not imposed a direct compliance obligation on fuel cells -- or their customers. Sorry, fuel cells or the customers.

Instead, fuel cell customers will see a GHG price signal, and are a part of the Cap-and-Trade Program through the inclusion of the natural gas sector in the program. Per the definitions of the program, natural gas suppliers is inclusive of the entities that serve fuel cell customers who chose natural gas as their fuel supply.

This is further verified by the CPUC inclusion of the compliance fee in natural gas supplier tariffs that our customers use. Therefore, natural gas fuel cell emissions and obligations payments are already captured upstream through the natural gas utility.

Further, the removal of fuel cells from the list of emission sources without a compliance obligation will have the unintended consequence of discouraging this technology, and the State will forego the net reduction of GHG emissions attributable to fuel cells.

In order to encourage innovative GHG-reducing distributed generation technologies, the ARB should retain the existing treatment of fuel cells in the Cap-and-Trade Program.

Thank you so much for your time.

MR. IKERD: Good evening. Thank you Madam Chair and members. Jason Ikerd with Edelstein, Gilbert, Robson & Smith on behalf of GPI, the Glass Packaging Institute.

I just wanted to briefly address the issue of transition assistance and leakage prevention for the container glass industry post-2020. As you probably know, the container glass industry is a very trade exposed industry. They are at a very high risk of leakage. The Board has always recognized this. Current regulations classify the container glass industry as a highly leakage risk industry. And as such, we enjoy 100 percent industry assistance factor for our industry.

We think that going forward that's very important, because as the Board's own assessment pointed out, the container glass industry among EITE industries is more -- is facing the largest impact of all the industries that were analyzed in the study.

We think that continuing 100 percent industry assistance factor going forward is a really easy way to mitigate some of the impacts that are discussed in this assessment to our industry, and in no way jeopardizes the integrity of the program and the greenhouse gas emission reduction goals of the State.

So we appreciate the time, and look forward to working with staff going forward on the issue.

MS. OLIVEIRA DE LIMA COSTA(through interpreter):

I don't speak English, so I'm going to ask my friend to translate. I'm going to talk here from the perspective of an indigenous woman about our expectations and hopes for a partnership between State of Acre and the

Brazilian Amazon and California. And I'm very glad to be here, because I know that California has really excellent work on environmental issues, just like the State of Acre.

It's very important that this work goes on and respect human rights, indigenous rights, indigenous land rights, health and well-being of local communities, and indigenous land rights.

In Acre we are not de-foresting. We are maintaining standing forest. And we need the support of California to continue doing this important work for Acre and for the world. I think that's both California and Acre can be important examples internationally and help bring other countries along. The world is sick and we need to raise our consciousness about this, because these problems are affecting everyone.

That's my message.

CHAIR NICHOLS: Thank you very much. It's not exactly a short trip from Acre to Sacramento. Appreciate your being here.

MR. SHAW: Thank you, Madam Chairwoman and members of the Board. Michael Shaw with the California Manufacturers and Technology Association. I did not have to travel nearly as far, though I do have a back-to-school night to get to.

(Laughter.)

MR. SHAW: I wanted to thank you -- California Manufacturers and Technology Association represents the interest of 30,000 manufacturers in the State of California with 1.2 million employees, hopefully growing, and about $2.3 billion in State gross domestic product.

We do support a well-designed cap-and-trade system. And we look forward to working with the administration, with the legislature on development of a well-designed cap-and-trade system for post-2020. We believe that this is the most cost-effective way to reduce our GHG emissions and to help address global climate change.

One thing I wanted to -- a couple things I want to address specifically, industry assistance. In the proposal, we appreciate staff stepping back from the initial discussion regarding addressing -- or reducing industry assistance in the third compliance period beyond what's already on the books.

In fact, we would argue -- we would request that ARB look at extending the 100 percent industry assistance through the third compliance period, as we have yet to see the full adoption and partnership with a number of other jurisdictions in our Cap-and-Trade Program that we had promise -- been promised and expected to see those years ago when AB 32 was originally passed.

So we do believe that it will be appropriate in -- the interests of protecting against leakage, in the interests of protecting California manufacturers against the competitive disadvantage that would be generated by a much significant increase in compliance costs.

We'd also argue that the -- doing any further adjustments for a post-2020 industry assistance -- or assistance factor should be done in a 45-day comment period, and that to do so in a 15-day amendment that's intended to address minor changes, technical changes, respond to comments would be, I think, inappropriate in this setting, given the economic impact and the millions and millions of dollars at risk.

We'd also ask that unused allowances from the third compliance period -- first and second and third compliance period be carried forward into post-2020, so that those allowances that companies have acquired either through reductions or through acquiring otherwise be continued forward.

Thank you.

CHAIR NICHOLS: Thank you.

MS. O'BRIEN: Madam Chair, members of the Board, Rachel O'Brien, manager of government affairs for the Agricultural Council of California.

Ag Council is member-supported organization advocating for over Council 15,000 farmers across California ranging from small farmer-owned businesses to some of the world's best known brands. We have submitted formal more comprehensive written comments, but I wanted to highlight a few of our concerns today.

Emission leakage of food processors is our central concern. Agricultural products are sensitive to trade exposure from low-cost competitors in domestic and international markets. For example, U.S. canned peach exports for 2015 and '16 fell by 42 percent, which amounts to the industry's lowest export sales volume since 2002. Meanwhile, canned peach imparts for 2015-16 marketing year reached a third consecutive all-time record high up 9 percent from the previous year.

China continues to be the leading importer with 54 percent of the total volume, while imports from Greece have increased 57 percent over the previous year.

California has also experienced 20 consecutive months of milk production declines due in large part to the high production costs. Meanwhile, Wisconsin broke state production records in 2015, and has experienced 27 consecutive months of production increases.

With this, it is becoming increasingly evident that the ongoing cost structure in California will adversely impact milk production, and processors may ultimately be unable to meet contractual commitments.

This has us very concerned. And despite the market realities, in the third compliance period of this program, staff is proposing to keep food processors in the median leakage category. To meet lower compliance obligations, our member companies will have to purchase additional allowances. A leakage analysis of the food processing sector showed that many food markets -- showed that in many food markets price increases cannot simply be shifted onto consumers, so even minimal increases will displace markets for food product subject to this regulation.

The study came to this conclusion notwithstanding that it had a number of issues including outdated information on agricultural programs. We hope that ARB will reevaluate its current position and work with us to assign food processors to high leakage.

Additional concerns, include changing definitions and product-based benchmarks, the elimination of transition assistance, and changes to allowances allocated to the APCR.

Thank you.

CHAIR NICHOLS: Okay.

MR. LOPES: Good afternoon, MadaM Chair of the Board Mary Nichols, distinguished members. I'm Ludovino

Lopes. I'm coming from Brazil. Also, the country received recently the Olympic games. And I want to highlight the importance of this meeting here in the same week where our global leaders are discussing in New York in the United Nations meeting the climate change issues. So thank you for the opportunity to be here to discuss so important issue for our common future.

I would like to speak in this minute of have about climate change, and forests, leadership, international cooperation, and steps for our common future. We know that forests are critical for the climate change challenge we have today. And we know that they need to be part of the equation. So the integration of those sectoral forest climate change programs are critical also to the challenge that we are facing in our futures.

So when we think about sectoral forest programs, we don't think only about forests, we think about people and we think about changing the drivers of economy. That's the essential of this movement.

And about this movement, we know that it's essential that we do it together. It's not possible to do it alone, so we need cooperation, and we need our international cooperation.

And we need the right signs to be given to the right people that are now at this moment trying to create those new laws, those new principles, those new policies. I think California is giving that leadership. We support that and I think we -- it's important to give that leadership, but we cannot do it alone. We need to do it in cooperation and with ends, highs with highs. We need to work together for that common goal.

So in that sense, it's very good to me to listen that you are continuing to do efforts to continue to work on the sectoral approach in the future approach. And I think that a huge amount of leaders now listen to us. It's not only this room. It's not only the people who are watching us on the Internet. The leaders are listening to us and are listening to your message for them.

So I think the main challenge now is -- and I would like to ask, is what do you think are the next steps essential to do? What do you think are the main messages that we need to deliver to them, and what do we think you are -- the main actions that we need to do in cooperation at this moment?

And thank you for your courage to do this and to go forward.

MS. SHROPSHIRE: Good evening, Chair Nichols and members of the Board. I'm Robin Shropshire. And today, I'm here on behalf of Panoche Energy Center, a 400 megawatt natural gas-fired peaking power plant located in the San Joaquin Valley.

Panoche operates under the exclusive terms of a Power Purchase and Tolling Agreement, a PPA, with PG&E, which was executed in 2006. You can appreciate that in 2006, it would not have been possible to understand how the mechanics of AB 32 would play out when the Cap-and-Trade Regulation was finally adopted 5 years later in 2011.

As a result, Panoche currently has legacy contract status under the Cap-and-Trade Regulation. Like other legacy contracts, Panoche's PPA does not include a mechanism by which Panoche can recover AB 32 greenhouse gas compliance costs. Because PG&E is the scheduling coordinator for the facility, they control when and how frequently the facility runs.

The disconnect here is that the party in control of dispatching the facility, PG&E, is not who pays for the cost of carbon. That's Panoche. This creates a situation where Panoche is being bid into the market without a price for carbon, making it appear to be a lower cost, more efficient generation source than it actually is.

By implying that Panoche is more efficient than it actually is, PEC is running significantly more than it would if the carbon price signal were present. This in turn has caused an avoidable increase in CO2 plant emissions and other criteria pollutants, increased water usage, avoidable increase in cost to ratepayers, and increased operational costs.

The best and preferred outcome is to resolve this without utility counterparty. We're continuing to work diligently on this front and are motivated to fix it there. Absent of that, or until the time occurs, we're seeking regulatory help.

Because the legacy contract provisions in the regulation are sunsetting, until the issue is resolved in a contractual matter, we request that the Board recommend that the current regulatory amendments include language similar to what was proposed by staff in the public workshop in June of this year.

To that end, Panoche respectfully requests that the Board direct staff to include the June 24th, 2016 staff workshop proposal and a future 15-day amendment package. Thank you for your time and attention to this important issue.

MS. MMAGU: Good evening, Chair, members of the Board. I'm Amy Mmagu on behalf of the California Chamber of Commerce. We've submitted written comments, therefore I will keep this brief given the hour.

Cal Chamber has long maintained that if designed properly a cap-and-trade program is a more cost-effective approach to achieving emissions reductions and is less likely to unfairly discriminate against certain industry sectors.

In the current regulations, we do believe that trade protection -- trade exposure protection is necessary. And we encourage the Air Board to extend the industry assistance factor for future compliance periods.

Also, we do encourage the Board to develop a more robust offset program. We feel that that's a great way to achieve cost containment within the program.

Thank you.

MS. MAY: Good Afternoon. I'm JuliA May. I'm a senior scientist with Communities for a Better Environment. I'm an electrical engineer working on long-term electricity planning, but I've also spent the last 25 years evaluating oil refinery air pollution, supporting as a technical support for community members, including CBE members.

So I see both the heavy fossil fuel polluters like oil refiners and the burgeoning solution we have which is clean electricity, and renewable electricity. We have oppose cap and trade, but staff did identify good alternatives that it found feasible in the concept paper, including a high transportation option, electrifying transportation, and also another one that focused on industrial pollution.

We propose that you combine these using direct cuts in economy wide pollution reduction in fossil fuel phase-out, which your own modelers found is feasible using existing technology without lifestyle changes and found to be economical. This would use aggressive energy efficiency, electrification of transportation and de-carbonization of the grid.

Regarding the first question the Board made to staff about what percent cap and trade cover, staff implied, as a preliminary matter, that cap and trade would only be a smart of these State measures, but you should know that for industrial measures, in the last scoping cap and trade was the whole shebang. We didn't get anything else for industrial pollution cuts, except cap and trade. Most of the other measures were transportation. So it's not very comforting for us to know that cap and trade would be just a small piece. For industrial measures, that's all we got before.

Despite decades of exposure to refineries, I still get shocked when I'm rime in the community, for example, Wilmington where there's 5 oil refineries. People have oil drilling literally in their backyard, diesel trucking, ports, smells flaring. It's truly intolerable with high asthma rates, and that's just one community.

On the ground, the air districts do a lot. We applaud and work with the air district. But they're set up to limit emissions, not to do energy transformation. And CARB has the mandate for energy transformation, and that's what we really need to do.

In conclusion, I don't think we're going to clean up the smog without the energy transformation.

CHAIR NICHOLS: Thank you.

MS. MAY: And we can't clean up the greenhouse gas cuts without ditching cap and trade.

CHAIR NICHOLS: It's late in the day, I know, but that buzzer is not a signal to say, "in conclusion". It's actually a signal to stop.

MS. MAY: I apologize. I was trying to finish the sentence.

CHAIR NICHOLS: Okay. Thank you.

MR. HOROWITZ: Good evening. Jack Horowitz here with Earth Innovation Institute. On behalf of EII I'd like to commend the Air Resources Board on proposing the cap-and-trade amendments. I would particularly like to point out the text on page 21 of the Initial Statement of Reasons document, which reflects that ARB staff will continue to explore the sector-based offset program, and its linkage with Acre, Brazil.

Implementing this program will not only get California on the right cost-effective track to reach SB 32's new 2030 target, but it can also provide real ben -- provide real benefits to forest steward communities in Acre, while simultaneously mitigating the global impacts of climate change through tropical forests.

The 5th assessment report of the IPCC concludes that up to 60 percent of global abatement measures could come from the land sectors by 2030. This linkage with Acre can play a significant role in tapping into the true potential that land use can play in avoiding the impacts of climate change.

With this said, on behalf of the EII, I'd like to state that there is great value in the -- excuse me -- the Board adopting further regulations that allow for the sector-based offset program to become active in the 3rd compliance period of the Cap-and-Trade Program.

Thank you.

MS. BUSSEY: Good evening, Madam Chair and Board people. My name is Julia Bussey. I'm Chevron U.S.A..

First of all, of the policies that California can choose from, cap and trade most certainly provides the most efficient and effective means of achieving real and long-term emission reductions. We support efficient programs.

Indirect reductions are also key as part of cap and trade. And the greenhouse gas emissions offsets enable California to promote real and sustainable reductions both here in California and beyond our borders They also promote innovation from other sectors, and we think they're very important.

We support the ARB's ongoing efforts both to increase sector-based offsets and consider tropical deforestation, as well as addressing other supply -- offset supply issues.

We do face a steep decline to 2030, and we urge that the Board reconsider the staff changes that would tighten the market, and would increase cost to industry over time, because we see that steep decline as making us face a serious challenge. This will happen because of the funneling of unsold allowances to the APCR, and also by taking part of the cap to the APCR.

I would remind the Board that in the past when we did an APCR, we actually increased the amount of offsets that industry was allowed to use. We just believe that these are premature changes given the steep decline we face in the future.

Some elements are also missing from this package and we would like to point out that industry remains trade exposed, that we still face competition from other jurisdictions that do not have carbon costs. Therefore, we would recommend that the Board at least direct staff to reconsider reopening the 2018 trade exposure requirements so that industry does not face a 25 percent reduction in its allowances.

And again, we would try to point out that those allowances, although they may seem like a lot, represent less than 3 percent of cap-and-trade revenue, and yet they make a huge difference to the competition of industry in California.

Thank you very much, and we also look forward to working with your staff going forward.

MR. TEMPLEMAN: Good afternoon. I'm going to read this following testimony today:

And I'm just kidding. This is actually the regulation, but --

(Laughter.)

MR. TEMPLEMAN: -- I think it's nice, because I can bring it home to my interns and tell them to summarize it into one page or less, and see them panic.

(Laughter.)

MR. TEMPLEMAN: So my name is Andre Templeman. I work for CMCA and I'm representing CMCA today with some testimony. I'd like to, first of all, say that we support CARB's proposed regulatory changes, and specifically the proposal to put the unsold allowances into the APCR.

We understand the comments that have been made in writing and in person today about the concerns about that proposal. We have believe that CARB could address those concerns by maintaining the current price -- 3 price tiers in the APCR, and expanding the gap between the price tiers from $5 to $15 or maybe even $20 with the lower price tier starting below the current APCR price.

An enlarged PCA populated by the unsold allowances will serve as valuable commodity and price mitigation tool to slow down any drastic upward price volatility.

Due to the success of the current regulations and the complimentary measures, California does not have enough fast-acting carbon -- available carbon emission reductions at prices below the APCR that could slow or quickly react to higher prices. And an enlarged and expanded APCR with 3 tiers would do that.

In essence, the enlarged APCR with a wider range of price tiers would create speed bumps that should, if the market prices rose in the future, would allow volatility to be mitigated.

CMCA supports CARB's proposal to move on sole allowances that remain in the holding account and believes that this mechanism will add to the environmental integrity, and bring confidence to the market. We estimate that as much as 250 million tons may go unsold over the next 2 years.

This potentially large volume of allowances is a real risk to the environmental integrity of the program, and also undermines and distorts the market. The unsold allowances in the holding account, in essence, create a new cap at the floor is what we call it. So 250 million tons, essentially twice the current price containment floor -- price containment reserve at the floor and we see that as very dangerous.

The market distortions brought on by the unsold allowances and failure of auctions to sell is damaging, and could also damage linkages to places like Ontario and others that are looking at this market as they see a potential lack of revenues and lack of unsold -- and lack of sold allowances, and so we support the CARB proposals.

Thank you.

CHAIR NICHOLS: Thank you.

MR. HOCHSCHILD: Good evening. My name is Lenny Hochschild from Evolution Markets. And I'm here today in my role as western co-chair of IETA, a non-profit organization representing over 160 businesses across the U.S., Canada, and globally.

As the State -- sorry. As the world's leading international business community on climate, markets, and finance, IETA continues to be a staunch supporter of California's leadership and commitment to cap and trade and tangible market links with other jurisdictions.

As the State makes decisions on the future role and shape of California's Cap-and-Trade Program, we strongly urge the Board to support the clear and robust continuation of California's Cap-and-Trade Program post-2020.

Today, over 40 national and 20 subnational jurisdictions representing 13 percent of the globe's carbon emissions have a price, and currently use carbon pricing. Cap-and-trade programs with compliance offsets have become the predominant and preferred policy choice behind this growth. By this time next year, China, a country with deep climate partnerships and MOUs with California will launch its national Cap-and-Trade Program. And according to the World Bank by then 25 percent of the globe's GHG emissions with have a carbon price.

This growth is 3 times more than we've seen in the last 10 years. More and more countries continue to employ and deploy carbon pricing. These figures and trends tell the story. And the message is clear, harnessing the power of markets to efficiently reduce GHG emissions is working.

Stifling the market or abandoning this carefully crafted mechanism along with orphaning current and potential partner jurisdictions simply cannot be an option for California post-2020. The climate costs are too high, the socioeconomic costs are too high, and the leadership costs are too high.

Lastly, we'd like to align ourselves with the comments of Supervisor Gioia before, as well as Alex Jackson from NRDC.

Thank you.

CHAIR NICHOLS: Thank you.

MR. SKVARLA: Good evening. My name is Mikhael Skvarla. I'm here on behalf of the California Council for Environmental and Economic Balance. IETA made some great points and we'd like to associate our comments with them.

In addition to that, CCEEB is supportive of cap and trade as an economically efficient mechanism to achieve California's 2020 and 2030 goals.

Cap and trade is a long-term program. We can't allow temporary short-term market wobbles to influence a tightening of the market at this time. We need to stay the course, as this will allow us to achieve the international partnerships and mechanisms needed to advance climate change mitigation throughout the world beyond the California borders, which is incredibly important. This isn't just about this State. This is about averting world climate change.

That said, we think it's important to examine some of the various mechanisms, such as trade exposure while other jurisdictions are not following, and to continue that course. And we'll continue to work with staff as we move forward on that.

We also support offsets including the sector-based offsets, and the comments made by folks from Acre, Brazil.

And finally, on a political note, we did have an interesting session. AB 197 has been mentioned a couple of times. I asked the clerk to distribute a letter from Assembly Member Eduardo Garcia. Last line of that letter indicates it's not his intent to preclude the ARB from adopting a market-based mechanism, such as cap and trade. He testified to not wanting to eliminate the cap and trade.

And to that end, we support that and will continue to work with the legislature moving forward in future sessions and the administration.

Thank you.

CHAIR NICHOLS: Thank you.

MR. TUTT: Good evening. I'm Tim Tutt from the Sacramento Municipal Utility District again. And batting clean up into -- batter for the utility industry, I won't go over all the other comments that they've made, even though there's been a significant rain delay gap, and I could actually bring it all up again.

(Laughter.)

MR. TUTT: What I would like to use my time to say is that I'm going to go out on a limb and guarantee you that you will see direct emission reductions at in-state electric generating units by 2020. I can say that because I'll be retired or fired by then, so you won't be able to call me on that.

(Laughter.)

MR. TUTT: But here's my rationale. The period of the study that we've just looked at is simply too short and too unusual to make long-term conclusions of. It's only a few years. We had a huge drought, which increased emissions from the electricity sector. We had an unplanned loss of a large zero emitting resource, which increased emissions from the electricity sector. And we had a period where one of the direct measures that we are also subject to are -- has -- that we haven't as the industry, the RPS, was essentially at 20 percent requirement through the -- that entire period.

We'll have to be at 33 percent by 2020, and 50 percent by 2030. We have increasing energy efficiency requirements, which are -- our load is already decreasing and it's going to decrease more. We simply cannot continue making emissions from our power plants with those kind of direct requirements on us.

The cap and trade provides actually a price which allows us to say, okay, rather than emitting, can we sell this asset? Can we put that into the market? And SMUD has done that and used some of the proceeds to fund electric vehicle fast-charges in our service territory, to fund deep energy efficiency retrofits for our low-income customers and disadvantaged communities.

You don't want to cutoff that source of funds for us or for the State. So support for the cap and trade, and support for utility allocations, particularly to support the electrification transformation that we're all going to see.

Thank you.

CHAIR NICHOLS: Thank you.

MR. BLACK: I want to thank the staff and the Board of ARB for allowing me to speak today. My name is Neil Black and I'm with California Bioenergy, and we're a dairy digester developer partnering with dairy farmers. I want to express my strong support for cap and trade, and also for the Low Carbon Fuel Standard.

Earlier today, we heard moving testimony that I greatly appreciated from the EJ community. Many of them come from Kern County, which is the center of our initial project. And upon careful analysis, I think we'll find that we have a lot more in common than is initially perceived. And I'll cover a couple of those examples as I speak.

We started California Bioenergy 10 years ago, and we are focused on capturing methane for beneficial use, which is electricity generation or vehicle fuel generation. We have 3 existing electricity projects, and we have 3 more electricity projects that we'll begin construction on later this year.

We have benefited and greatly appreciate funding from CDFA and from the CEC. We are also the winner -- one of the finalists, excuse me, in the California Sustainable Freight Action Plan. We just had our cluster in Kern County, including 3 of the projects that are slated to generate electricity to take some of that biogas and put it in a centralized facility, put it into the pipeline and have it be used to replace diesel for freight transportation in the State. That will reduce NOx emissions in the Central Valley, while electricity generation will increase NOx emissions.

I'm here because we're very supportive of efforts by the staff to change the requirements on regulatory compliance. However, they're not sufficient, and I'll give you one example.

The staff takes an important step to limit the loss of carbon credits to the period of the violation, and we strongly support that.

However, often violations won't be recognized for a long period of time. Furthermore, the proposal also addresses all violations, as if they are of equal consequence. The severity of a violation should also be taken into account, since many will be viewed by the regulatory agency as a minor impact.

NOVs, notice of violations -- I'm all done.

CHAIR NICHOLS: Your done.

MR. BLACK: Okay. I want to thank everyone. Thank you. Good night.

CHAIR NICHOLS: That's it. Thanks for coming and thanks for your work.

MR. BLACK: Thank you.

CHAIR NICHOLS: TNC wraps it up again.

MR. BLUMBERG: Good evening, Madam Chair and members of the Board. Thank you for your stamina and your -- and the opportunity to speak here today. You know, I knew there was a cap on 2 minutes on talk, but I didn't know until Tim Tutt and Alex Jackson were here that there is a trade option too for a slot here.

(Laughter.)

MR. BLUMBERG: So maybe you want to include that in your next auction.

(Laughter.)

MR. BLUMBERG: So the Nature Conservancy submitted a letter. I'm going to briefly just highlight just a few points. We are here to support the proposed Cap-and-Trade Regulation, and the continued use of it to meet the State's 2020 and 2030 reduction goals.

We've heard a lot about the benefits of cap and trade. One of those I want to highlight is the safeguard mechanism. It's the backstop. If the regulatory measures don't produce the reductions, the cap and trade will pick them up. It's also cost effective, and it can capture emission reductions from uncapped sectors like forestry.

And while the clearer goal of the program is to reduce greenhouse gas emissions, it is not specifically intended to generate revenue. But the auction proceeds from the program have provided additional greenhouse gas benefits and very many critical and important public benefits, including urban forestry, a low-income weatherization, affordable trance-oriented development, forest health, low-carbon transit, and wetland restoration among others.

We also support the proposed decline in the cap.

We think the 3.5 percent annual reduction is reasonable. We also support the staff proposal to continue program linkages with other jurisdictions. As acknowledged many times today, and also on the -- in the staff report, climate change is a global problem that California cannot solve on its own. Regional and global partners are needed.

And that brings me to our next point, we do support the inclusion of sector-based offsets from tropical forest protection at the earliest possible moment.

We believe that the staff has done an exceptional job of building the record for this with 4 workshops and a very comprehensive staff report. And there will -- many benefits will accrue to California, including helping Governor Brown achieve the reduction pledges from states in the under 2 MOU, that Acre and other tropical forest states have pledged reductions, and reductions here will do it.

One area we'd like to see clarified is on what is non-compliant. We think for forest landowners need a little more clarity in the rule to encourage them to participate.

Thank you and good night.

(Laughter.)

CHAIR NICHOLS: It's one of those drop the microphone moments.

Okay. I am going to ask the indulgence of my fellow Board members, because we do have one more item and we also have a court reporter who has been working diligently and tirelessly, but probably needs a break.

But rather than taking a break, if we could just have the staff very briefly, very, very, very briefly summarize where you think you are headed next with this, based on what you heard? We can role right into the last item that needs a quorum. I am worried that one or more of my members might have to leave due to circumstances beyond their control. And people have been listening well and carefully and thoroughly, but, you know, it's been a long day, so...

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: Sure. So the next steps for staff are to go back and look at -- look at the comment letters to make sure that we haven't missed anything, because we did put out a couple of slides towards the end of the presentation that identified areas where we're going to keep working with stakeholders on 15-day changes.

And so we're going to keep working with the stakeholders on those areas, include more workshops, and I know we heard that folks would like to see a comment period longer than 15 days. Fifteen days is the minimum, and if we can accommodate longer, we will try to do that.

So that's just the legal jargon about the comment period, the APA process, 15 days, but that really is just a minimum and we can do longer. The RPS adjustment, allocation pieces, those are the big pieces that are sitting out there. We're continuing to have those conversations, and work with stakeholders to bring them along.

There's going to be a couple of workshops this fall, and probably early next year. To the extent that any of the Board members are interested in the progress, we will make ourselves available to make sure that we can brief you on things as they evolve in these key areas. To the extent that you all have follow-up questions, we'll be available to answer those as well.

CHAIR NICHOLS: Yeah, I think it would be good if you would reach out affirmatively to the whole Board, through the Board Secretary, with the schedule of upcoming events and opportunities where they might want to plug in to listening to some of those.

And I also want to just reiterate something. There was a little conversation about this early, but I want to underscore this. This process began -- this process meaning the updating of the Cap-and-Trade Rule in response to the requirements from the Governor's executive order that we work on 2030, and also then SB 350.

But SB 32 has come along since that time, and so has its associated bill, AB 197. And although we have not had a comprehensive briefing yet from our legal counsel on the obligations that that imposes. Clearly, there was an intent to see a more robust analysis of some of the alternatives to continuing business as usual, including continuing with the current -- with all of our current programs at their current levels.

There is some new thinking I know going on. The scoping plan suggested some of that already. I've heard some ideas here today that have intrigued me and possibly others as well about ways to build on or change the Cap-and-Trade Program. I personally would like to go back and take another look at the advice that we had from the very beginning of the program from the Economic Advisory Committee, which was to auction most of the allowances, and to use the revenue affirmatively to deal with issues about the kind of transition that we all know needs to happen.

But any way you slice it, this is going to be a challenge, we know that. There is no sort of simple easy solution, but I am impressed by the seriousness of thought and purpose that have been displayed here by all the people who came to talk to us. And I think that if we can continue to enjoy the same level of public interest and involvement that we did when we first started down this path back in 2007-8 and so forth, that we will -- we will also adapt and learn from what's happened to date.

So I do want to encourage you to keep us posted, but I don't think there's anything we need to do, other than to recognize the many issues that have been raised here today, all of which need to be answered -- all of the substantive comments that need to be -- that need to be answered.

So if you would indulge me, I'd like to quickly get Craig up here. Craig is one of the fastest talkers on the planet.

This is literally true.

However, in this case, he is going to simply briefly summarize the relevance of the compliance plan and bring up whatever other staff he needs with him to do this, so people understand that there's another element. There's another reason why we group these items together.

SENIOR ATTORNEY SEGALL: Well, hello, everyone.

And I'll actually be doing this exceedingly slowly in speech, but very tersely. So let's see how quickly we can go through one of the more critical federal climate programs with as few words as possible.

(Thereupon an overhead presentation was Presented as follows.)

SENIOR ATTORNEY SEGALL: Let me skip what I was going to tell you and just tell you what I'm going to tell you. We're dealing here tonight surprisingly late in the day with the federal Clean Power Plan, which is the Obama Administration's flagship stationary source power sector greenhouse gas reduction program, and something California has long supported. We helped develop it. We helped lead the coalition of states defending it in court.

This is a really critical step in seeing sensible green energy policies move into the power sector nationwide. So some of the things that we and other progressive states have learned can help spread across the country.

--o0o--

SENIOR ATTORNEY SEGALL: This Clean Air Act requirement is fulfilled via State planning. You'll be familiar with this from criteria pollutant SIP world. It's a similar process. We worked with U.S. EPA to ensure that the State plans could be submitted under a wide range of mechanisms, including providing flexibility for the use of existing successful State programs, something U.S. EPA calls a State Measures program.

And what I'm talking with you tonight, it's about how we built a proposed program, indeed the first one in the country, so we've been trying to show leadership here, on -- as part of the larger process we're engaged in of envisioning a post-2020 future for California and federal climate programs.

Those programs will be submitted to U.S. EPA at the conclusion of litigation. There's currently a stay, in cases where we're defending the federal agency's efforts.

And I'll go through that plan now.

--o0o--

SENIOR ATTORNEY SEGALL: So our key plan is based on a simple insight, which is that California is more aggressive in climate policy, and specifically on power sector greenhouse gas reductions than the federal program requires. That means our critical task is figuring out ways to strengthen and implement the federal program, even as we move forward with our own work.

We've proposed, consistent with proposals you've heard today, to work in federal compliance into the existing State cap and trade and mandatory reporting regulations.

--o0o--

SENIOR ATTORNEY SEGALL: So let me tell you a bit about how we've built this plan. Our first task was developing a clear account of the covered power plants in California. These are essentially the facilities you would assume would be covered. Essentially, all of them are already in the cap and trade and mandatory reporting programs.

There are 249 electrical generating units. This is power-sector jargon. Think of these individual units within a power plant across the State. Most of them in our larger area districts. We finalize that list with extensive stakeholder engagement to the owner/operators, then worked with the federal agency before the stay, and with our partners to calculate appropriate mass limits based on the formulas in the Clean Power Plan.

And really the key bullet point is the last one there. California covered EGU emissions are around 41 million metric tons CO_2e. Well, in 2030, the Clean Power Plan would have us be around 45 million metric tons CO_2e. That's not a trivial target. We expect our economy and our population to grow. But it does mean that we're well placed for continued compliance if we continue with our historic commitments

To demonstrate and build the legal case for our State plan, including the structures we'd need, we then worked with an interagency team. Those folks were actually here earlier toad, but there were trains to catch, but I do want to acknowledge them directly, the Energy Commission and the Utility Commission donated an incredible amount of staff time and expertise to this, and we're just very grateful. This could not have happened without their efforts. It's been really a very positive experience.

So using that modeling, and especially using the Energy Commission's integrated energy policy report, which is a stakeholder-driven public process that predicts demand and supply in California well forward into the 2020s. And their modeling system, which basically let's us represent the western power grid, we tested our compliance with federal targets.

Not wanting to presume a particular course to fulfill deeper emissions cuts, we modeled conservative cases, first looking at what would happen if we held the 2020 target going forward, and also looking at a stress case that emphasizes very considerable use of natural gas plants in California to a degree we don't think is likely that helps test and stress the system.

This includes things like a drought indefinitely, very high demand for power due to electrification, low CO2 prices, and so on. In the same modeling, we look carefully to make sure that our plan would not leak. That it is that folks wouldn't try to evade it by building new power plants or just by generating out of State.

At the same time, we tested electrical system reliability under these conditions and worked with the various balancing authorities in California, the reliability coordinators to make sure our assumptions were right.

--o0o--

SENIOR ATTORNEY SEGALL: What did we learn?

And I'll point out, I'm already more than halfway through this presentation.

(Laughter.)

SENIOR ATTORNEY SEGALL: This seemingly long table can be summarized in about 2 sentences. Under our reference case, which is even before implementing SB 32, we are in 2030 about 15 million metric tons below the federal target level. Even under our stress case, we're about 2 million metric tons below it. Our programs really are working to decarbonize the power sector.

--o0o--

SENIOR ATTORNEY SEGALL: That means that we are able to use a State measures plan design. Now, there are important legal reasons in the federal program that for each electrical generating unit to have federally enforceable requirements under the Clean Power Plan, that means we had to translate our State target down to each of the individual plans.

By far, the most efficient way to do that is by building it in to the trading base platform we have, rather than attempting to set a limit for each of those 249 plants individually.

To do that, we've proposed amendments, both to the mandatory reporting rule and to cap and trade, that can deliver the accountability and enforceability as to smoke stack reductions that U.S. EPA needs to hit the federal targets, while allowing for the continued functioning of an economy-wide program.

--o0o--

SENIOR ATTORNEY SEGALL: What are those amendments?

The mandatory reporting regulation amendments are very straightforward. They disaggregate data in ways consistent with federal reporting, ensure that record keeping checks the various federal boxes and helps us report consistent with their obligations.

Since all these units are already in the program and collect this data, we expect no controversy on that point.

--o0o--

SENIOR ATTORNEY SEGALL: The proposed Cap-and-Trade program amendments are somewhat more complex. Mark Sippola described them in some detail earlier. In essence, they require the following things:

First, they require all the federally covered units to participate in and comply with the cap-and-trade process, as a federally enforceable matter.

Second, they align our program compliance periods with the federal compliance periods. This ensures that we can meet the federal targets on the schedule U.S. EPA has set forth.

Third, we embedded the various targets we have to hit in the rule for fairly obvious reasons.

And finally, we established a backstop program. This is an insurance program for U.S. EPA required by the Clean Power Plan. In essence, it requires that in the extremely -- and I want to underline extremely -- unlikely case that we exceed federal targets in that sector as a matter of smoke stack emissions, then the smoke stack emissions of those EGUs must be reduced to the federal level.

We do that by requiring them to continue Participating in the Cap-and-Trade Program, so in other words not diluting the stringency of our State requirements at all, but also introducing a secondary trade program just for those units, calibrated to allow them to come back into compliance.

So essentially, issuing compliance instruments just for them that they can trade amongst themselves limited to a quantity consistent with the federal targets, less whatever overage occurred.

--o0o--

SENIOR ATTORNEY SEGALL: And this brings me to my last time. I want to talk a little bit about where we go from here.

Although, the federal emissions targets are not difficult for California to hit, implementing the federal program is Critical for our overall goals as a State. This is one of the major ways that power sector emissions will fall nationally.

We'll move forward at the State level to make sure we've got the right plan, in light of both the comments we'll receive and much of the discussion we heard today around the cap-trade program generally. So there will be a great more comment review and outreach coming.

We'll, also be coordinating with the air districts. As these are federal requirements, there's some permitting implications. We've already begun that workgroup and will continue to work with them as we go forward

And we'll work with the whole regulatory team here on MRR and cap and trade to align those. We'll present this all to you again next spring, along with the final EA.

And I just want to use my last 30 seconds or so to again say thanks to the team that worked on this. This has been an interdivisional effort at ARB that a lot of folks put time into, and interagency effort that took a lot of time from folks who were doing a lot of other things.

I think it's really been a pleasure to work with everyone and also to deliver the first plan in the country, as a result of their efforts.

So thanks to everybody who worked on it.

CHAIR NICHOLS: Thank you, Craig. Thank you. That was really helpful. I think most people know this, but the cap and -- the Clean Power Plan is in litigation. There's an oral argument expected soon --

SENIOR ATTORNEY SEGALL: Tuesday.

CHAIR NICHOLS: Tuesday -- with another Judge; to; hear; it. So 10 judges from the D.C. Circuit will be deciding on the fate of the plan. And there's much speculation, as there always is in litigation, but California chose to presume that the plan would be upheld, in at least something like its current form, and to again take a leadership role in developing a compliance plan.

So we have been very supportive overall of what the Obama Administration has been trying to do, and we continue to be supportive of that. So this is a -- this is a great effort. Again, unless anybody needs to give -- oh, we four witnesses. I could probably give their testimony for, them but I'm not going to do it.

(Laughter.)

CHAIR NICHOLS: I will call upon them. The list is up there, so come on down.

MS. MAY: Julia May, Senior Scientist CBE. I'll start with the conclusion. Please instruct the staff to propose for your action a non-cap-and-trade compliance strategy for the Clean Power Plan developed through public participation that ensures co-pollutant benefits of the greenhouse gas reductions and co-pollutant benefits that go to communities where the power plants are located.

Two issues. The EPA does allow a lot of flexibility, but it also requires good public participation, especially in EJ communities. EPA will ask how did the public participation process provide transparency, meaningful participation for minority populations, low-income populations, tribes, indigenous people? How did you identify and address existing disproportionate impacts? And most importantly, how did these actions impact the final decision?

Given the widespread, almost, I would say, complete opposition to cap and trade in communities of color and low-income communities, we believe that if you propose to EPA cap and trade as the way to comply, then you will have to say to EPA you did not take into account the participation of EJ communities in your final decision. That's the first point.

The second short one is that the CPA -- CPP requires that you regulate incinerators. California's 3 incinerators are in EJ communities generating electricity and emitting huge amounts of GHGs and toxics and criteria pollutants. We would ask you to bring forward a proposal to regulate them.

Thank you very much.

CHAIR NICHOLS: Thanks. I think the power -- the proposed amendments to the Cap-and-Trade Program did that, didn't they, eliminated the exclusion for the waste to energy plants? Or am I making that up?

Something happened.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: So in the Cap-and-Trade Program -- in the existing regulation as it sits today, waste to energy is under the cap starting in 2016.

CHAIR NICHOLS: Okay.

INDUSTRIAL STRATEGIES ASSISTANT DIVISION CHIEF SAHOTA: The staff proposal is to exempt waste to energy through 2017.

CHAIR NICHOLS: Oh, I see. Okay. All right. So we need to look at that. Thank you.

MS. MAY: We did submit comments and the next speaker is gone.

CHAIR NICHOLS: Okay. Next speaker. Gone.

All right. And Laura is also gone?

How about Nathan.

Nathan is here.

MR. BENGTSSON: Fourth time today.

I actually accidentally even left my testimony up here. It's great.

(Laughter.)

MR. BENGTSSON: I will be real fast.

Okay. So first of all, PG&E supports staff's proposal to use State measures cap-and-trade backed plan. I think that's a great idea. I also want to say that we think the backstop proposal is much improved. We think it will fulfill the requirements while preserving some flexibility for EGUs. Let's please make it trading ready, extend our leadership even further, and encourage those other states to get on Board.

Thanks very much.

CHAIR NICHOLS: Thank you.

Okay. Any final closing thoughts or comments from -- yes.

MS. TARUC: I might beat her to you.

I'm Mari Rose Taruc, and with the Environmental Justice Advisory Committee. I just wanted to -- two of the environmental justice advocates that were supposed to speak are not here, but I thought I'd take the prerogative of representing the Environmental Justice Advisory Committee and other environmental justice groups to say that we are opposed to using cap and trade to comply with the Clean Power Plan for the many reasons that community members are saying, that cap and trade is bad for the health of our communities.

And then specifically, what Ms. Shana from CBE had pointed out earlier, the offsets program within cap and trade that are mostly out of state are actually forcing larger dirty generation from peaker plants into environmental justice communities.

And so we oppose using the Cap-and-Trade Program and the Clean Power Plan as another reason to pollute and harm the health of environmental justice communities.

And I know that in the staff proposal, there is a mention of the Environmental Justice Advisory Committee in there being consulted. We think that one hour of consultation with the environmental justice community and not mentioning that we oppose using cap and trade to comply with the Clean Power Plan is disingenuous to what the Environmental Justice Advisory Committee is seeing.

So please make sure that in the -- in future versions of the report that you actually state what the Environmental Justice Advisory Committee is saying about this, and even better is if you do an environmental justice analysis of environmental justice impacts of using cap and trade to comply with the Clean Power Plan.

Thank you

CHAIR NICHOLS: Okay. Duly heard.

Now, I believe I have to close the record with this on this item. So I am doing so. And we'll then next move into the review process. And this will be back again also.

SENIOR ATTORNEY SEGALL: Chair Nichols?

CHAIR NICHOLS: Yes.

SENIOR ATTORNEY SEGALL: I'm just reminding you that you may want to close the record on cap and trade as well.

CHAIR NICHOLS: Absolutely. I should have done that before, but I will -- some of the comments clearly merge back and forth from one item to another. So they can be taken as being comments on both items. But we will close the record on the cap and trade item as well.

Okay. We are now, as I understand it, about to be done, except that we have one person who signed up for public comment. If this -- if he is still here. Damon Conklin, are you still here?

Yes. You may speak. I just -- I want to make sure that we're teed up. I didn't want anybody to leave before we had done the public comment.

BOARD MEMBER TAKVORIAN: I understand.

CHAIR NICHOLS: Okay. Yes. Please do. Go ahead.

BOARD MEMBER TAKVORIAN: There's just so much to say, and not any time to say it, which is totally understandable. So when you're closing the record, it's --

CHAIR NICHOLS: Well, that's the formal record of the proceeding. If you're -- as a Board member, you can speak at any time and at any length you want to.

BOARD MEMBER TAKVORIAN: No, no, no. I'm not trying to take time. I'm just trying to understand the process.

CHAIR NICHOLS: Oh. Okay.

BOARD MEMBER TAKVORIAN: Because we're closing the record on cap and trade. My understanding was that this being the first hearing --

CHAIR NICHOLS: Yes.

BOARD MEMBER TAKVORIAN: -- that we were taking on all this information. As you said, staff is going to come back with responses to lots of what they just heard.

CHAIR NICHOLS: Yes.

BOARD MEMBER TAKVORIAN: Right?

CHAIR NICHOLS: Yes. Correct.

BOARD MEMBER TAKVORIAN: So that record is -- remains open. That record will continue to be commented on?

CHAIR NICHOLS: Yes. What happen is there's a new comment period that opens when the Board -- when the staff comes out with a revised version.

BOARD MEMBER TAKVORIAN: Okay.

CHAIR NICHOLS: That opens up a whole new comment period. So we close the record for this meeting --

BOARD MEMBER TAKVORIAN: Got it.

CHAIR NICHOLS: -- with the comments on this version of the plan. Then the staff goes back, they do meetings, they do workshops, they come out with proposals, and a new proposal, and then there's another comment period that gets opened up.

BOARD MEMBER TAKVORIAN: Okay. So when we talked about when -- I think Rajinder you talked about a 15-day comment period on all of that, would -- just off the top would seem not very adequate, because I'm guessing it's going to be pretty large. So if I'm understanding it correctly, forgive me if I'm not, but that just seems like a big --

CHAIR NICHOLS: No, they just call it a 15-day comment period, because that's the minimum -- the minimum comment period.

BOARD MEMBER TAKVORIAN: Got it.

CHAIR NICHOLS: It's not the maximum.

BOARD MEMBER TAKVORIAN: But you said you would try to have more than that is what I heard. And I think we have to do more than try. It has to be more than 15 days. That's -- that's what I'm hearing you say, Mary. Thank you.

CHAIR NICHOLS: Yes. Yes.

BOARD MEMBER FLOREZ: Can I add to that?

CHAIR NICHOLS: Please.

BOARD MEMBER FLOREZ: Knowing how long we were going to go, Madam Chair, I actually have my comments written. I'd like to submit them to the Chair and to the members for consideration of staff to take a look at in preparation for the next upcoming conversation we're going to have on it. Not go into detail, but just let me outline 5 points.

First is to request for more data, and trying to look at the CEJA report and try to figure out how those two fit. The other options, really considering is this

I -- think the Chair was very gracious saying we've heard a lot. I'm not going to say anything more. I'm glad that, you know, looking at other compliance programs as a start point.

The other is the design of the program. I think we talked a little bit about that briefly in the hearing.

The other point I have is the allowances we talked about. I think I'm pretty thorough on that now. So you'll read some things in this, just basically the conversation we had.

And the last is the regulatory impact and analysis. The question there is simply have we costed this out? How do we cost that out, and how do we compare programs?

That being said, I will submit that to the Chair. And hopefully, staff, we can converse offline. But basically, I wanted to not leave the hearing until you have those portions. And I'm going to just leave it at those recommendations only. There will not be any other comment written to you, other than those 5 points.

Thank you.

CHAIR NICHOLS: Okay. Thank you.

Yes. I think all Board members should realize that they are welcome and encouraged to participate in the process and to convey their views. I really do appreciate it if you do that, you know, through the Chair's office, just so I can make sure that everything gets to everybody that it needs to go to. We're not allowed to obviously violate the public meeting laws, so we can't circulate, you know, to each other as a group and sort of have a discussion about how to go. But the staff is really the place where all this stuff ends up anyway, so I think we're -- we'll be well protected and that regard.

Any other comments?

Yes.

VICE CHAIR BERG: Just to make sure that we have the procedures down, that it is the intent when we come back in January that we will be voting on this?

We won't be sending --

CHAIR NICHOLS: On these 3 items, that was the original intent, but there may be some adjustment based on further consideration in terms of the time frame?

EXECUTIVE OFFICER COREY: Yeah, and the timing is March to return to the Board.

CHAIR NICHOLS: It's March.

VICE CHAIR BERG: Oh, it's March. It's not January.

EXECUTIVE OFFICER COREY: That's correct.

VICE CHAIR BERG: Sorry.

EXECUTIVE OFFICER COREY: But just one thing to add, because I think it was relevant to questions that several of you asked. Well before that March date, the draft scoping plan will come before the Board.

CHAIR NICHOLS: Right.

EXECUTIVE OFFICER COREY: And there will clearly be discussion on the strategies, the options that include the cap and trade, the non-cap-and-trade path. And that will be an opportunity to provide an update in terms of where we in the 15-day cap and trade, an informational status report.

VICE CHAIR BERG: I think that will be very helpful as well --

CHAIR NICHOLS: That's very important. Thank you.

VICE CHAIR BERG: -- because they'll give us a strategy. Thank you.

CHAIR NICHOLS: Yeah, it's a -- that will be a higher level strategic discussion.

VICE CHAIR BERG: Great. Thank you very much.

CHAIR NICHOLS: Good point.

Any other -- yes, Hector.

BOARD MEMBER DE LA TORRE: I'm going to do what Dean is doing. I'll submit it in writing, but I'll give you the gist of it, which is what I picked up from the comments today and from the CEJA study, is what we've always known, ports, power plants, railyards, airports, highways are the places where this is happening. And those are the places we need to zero in on. And if we need to make cap and trade tougher -- we're always getting pushed in the other direction, but I felt I was getting pushed in a tougher direction, and I'm okay with that. And so that's the gist of my comments.

CHAIR NICHOLS: Yeah. Okay. Without further ado then I think this meeting can be adjourned. Thanks everybody and we'll see you next month.

(Off record: 6:34 PM)

(Thereupon the meeting recessed into closed session.)

(Thereupon the meeting reconvened Open session.)

(On record: 7:00 p.m.)

CHAIR NICHOLS: The Board met in closed session until 7:00 o'clock, and we received a briefing from our legal counsel about pending litigation. No action was taken. No decisions were made.

So with that, I'm going to formally declare this meeting adjourned.

(Thereupon the Air Resources Board adjourned at 7:01 p.m.)

C E R T I F I C A T E OF R E P O R T E R

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 5th day of October, 2016.

JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063