MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

RIVERSIDE COUNTY ADMINISTRATIVE CENTER BOARD OF SUPERVISORS CHAMBERS FIRST FLOOR 4080 LEMON STREET RIVERSIDE, CALIFORNIA

THURSDAY, MARCH 23, 2017 9:11 A.M.

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

APPEARANCES

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Assembly Member Eduardo Garcia

Senator Ricardo Lara

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supevisor 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

Ms. Veronica Eady, Assistant Executive Officer

Ms. La Ronda Bowen, Ombudsman

Ms. Emily Wimberger, Chief Economist

STAFF:

- Ms. Nicole Dolney, Chief, Transportation Planning Branch, AQPSD
- Ms. Joe Fischer, Air Resources Engineer, Oil and Gas Section, ISD
- Mr. Glenn Gallagher, Staff Air Pollution Specialist, Research Division
- Mr. Rob Habel, Division of Oil, Gas and Geothermal Resources
- Mr. Wes Ingram, Chief, Project Assessment Branch, ISD
- Ms. Nesamani Kalandiyur, Manager, Transportation Analysis Section, AQPSD
- Ms. Lezlie Kimura Szeto, Manager, Sustainable Communities Policy and Planning Section, AQPSD
- Mr. Scott King, Air Pollution Specialist, South Coast Air Quality Planning Section, Air Quality Planning and Science Division(AQPSD)
- Ms. Kirsten King Cayabyab, Air Pollution Specialist, AQPSD
- Ms. Karen Magliano, Division Chief, AQPSD
- Mr. Ryan McCarthy, Science and Technology Policy Advisor, Chair's Office
- Ms. Christina Morkner Brown, Senior Attorney Legal Office
- Mr. Jim Nyarady, Manager, Oil and Gas Section, ISD
- Ms. Elizabeth Scheehle, Chief, Oil and Gas and Greenhouse Gas Mitigation Branch, ISD
- Mr. Craig Segall, Assistant Chief Counsel, Legal Office
- Ms. Marcelle Surovik, Staff Air Pollution Specialist, Energy Section, Industrial Strategies Division(ISD)
- Ms. Carol Sutkus, Manager, South Coast Air Quality Planning Section, AQPSD

STAFF:

- Mr. Jonathan Taylor, Assistant Division Chief, AQPSD
- Ms. Sylvia Vanderspek, Chief, Air Quality Planning Branch, AQPSD
- Mr. Floyd Vergara, Division Chief, ISD
- Ms. Amy Volz, Staff, Sustainable Communities Policy and Planning Section, AQPSD

ALSO PRESENT:

- Mr. Alan Abbs, California Air Pollution Control Officers Association
- Ms. Adenike Adeyeye, Earth Justice
- Dr. Felix Aguilar, American Lung Association
- Ms. Fariya Ali, Pacific, Gas & Electric
- Mr. Stephen Anderson
- Mr. Bruce Baizel, Earthworks
- Ms. Marina Barragan, My Gen
- Mr. William Barrett, American Lung Association
- Ms. Louis Bedsworth, Office of Planning and Research
- Mr. Michael Boccadoro, Dairy Cares
- Mr. Raphael Brugueras
- Ms. Irene Burga, Environmental Defense Fund
- Mr. Chris Cannon, Port of Los Angeles
- Mr. Frank Caponi, Los Angeles County Sanitation District
- Mr. Mike Chattom
- Mr. Curtis Coleman, Southern California Air Quality Alliance

ALSO PRESENT:

- Mr. Paul Cort, Earth Justice
- Ms. Kathleen Dale
- Mr. John Davis, Mojave Desert and Mountain Recycling Authority
- Mr. Paul Delaney, Southern California Edison
- Mr. Harvey Eder, Public Solar Power Coalition
- Mr. Evan Edgar, Clean Fleets Compost Coalition
- Ms. Estela Escoto, Committee for a Better Arvin
- Dr. Phillip Fine, South Coast Air Quality Management District
- Ms. Channell Fletcher, Climate Plan
- Ms. Ericka Flores, Center for Community Action and Environmental Justice
- Mr. Juan Flores, Center on Race, Poverty, and the Environment
- Ms. Genevieve Gale, Central Valley Air Quality Coalition
- Mr. Miguel Garcia, Committee for a Better Arvin
- Mr. Pedro Garcia
- Mr. Ruben Garza, My Gen
- Mr. Sheraz Gill, San Joaquin Valley Air Pollution Control District
- Ms. Corie Goldman, American Lung Association
- Ms. Margaret Gordon, California Cleaner Freight Coalition
- Ms. Libby Groutt, Families for Clean Air
- Ms. Irene Gutierrez, Natural Resources Defense Council

ALSO PRESENT:

Mr. George Hague

Mr. David Hamilton, Shecco America

Mr. Kevin Hamilton, Central California Asthma Collaborative

Mr. David Harris, San Diego 350

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

Mr. Peter Herzog, NAIOP

Mr. Santiago Hernandez

Ms. Bonnie Holmes-Gen, American Lung Association in California

Mr. Charles Hon, True Manufacturing

Mr. Hasan Ikhrata, Southern California Association of Governments

Ms. Fran Inman, Majestic Realty

Mr. Thomas Jelenic, Pacific Merchant Shipping Association

Mr. Hakan Jackson, My Gen

Ms. Asher Jones, My Gen

Mr. Gerald Katz

Ms. Sadia Khan, My Gen

Mr. Ken Kirkey, Metropolitan Transportation Commission

Rev. Earl Koteen, California Cleaner Freight Coalition

Mr. Mark Krausse, Pacific, Gas & Electric

Mr. Bill La Marr, California Small Business Alliance

ALSO PRESENT:

- Ms. Garciela Larios, Center for Community Action and Environmental Justice
- Ms. Bryn Lindblad, Climate Resolve
- Mr. Joe Lizarraga, U.S. Growers Cold Storage
- Mr. Bill Magavern, Coalition for Clean Air
- Mr. Jesse Marquez, Coalition for a Safe Environment, California Clean Freight Coalition
- Ms. Jennifer Morris, SoCalGas
- Mr. Beto-Lugo Martinez, California Clean Freight Coalition
- Ms. Lauren Nevitt, SoCalGas
- Mr. Brent Newell, Center on Race, Poverty, and the Environment
- Ms. Penny Newman, Center for Community Action and Environmental Justice
- Mr. Graham Noyes, Noyes Law Corporation
- Ms. Rachel O'Brien, Agricultural Council
- Mr. Jimmy O'Dea, Union of Concerned Scientists
- Mr. Peter Okurowski, Association of American Railroads
- Ms. Carmen Patlan, Center for Community Action and Environmental Justice
- Ms. Kristen Pawling, Natural Resources Defense Council
- Ms. Jenifer Pitcher, Western States Petroleum Association
- Ms. Esther Portillo, Center for Community Action and Environmental Justice
- Mr. Bill Quinn, California Council for Environmental and Economic Balance

ALSO PRESENT:

- Mr. Willie Rivera, California Independent Petroleum Association
- Ms. Lorena Rodarte, Center for Community Action and Environmental Justice
- Mr. David Rothbart, Southern California Alliance of Publicly Owned Treatment Works
- Mr. Bill Sadler, Safe Routes to School National Partnership
- Mr. John Scherer, Los Angeles Cold Storage Company
- Mr. John Shears, Center for Energy Efficiency and Renewable Technologies, California Hydrogen Business Council
- Mr. Chris Shimoda, California Trucking Association
- Ms. Jennifer Shipman, Manufacturers Council of the Central Valley
- Mr. Andrew Silva, San Bernardino County
- Ms. Joana Silva, My Gen
- Mr. Mikhael Skvarla, United Technologies Corporation, Carrier Corps
- Ms. Christina Starr, Environmental Investigation Agency
- Mr. Jim Stewart, Sierra Club, Center for Community Action and Environmental Justice
- Ms. Taylor Thomas, East Yard Communities for Environmental Justice
- Ms. Heather Tomley, Port of Long Beach
- Mr. Kirk Trost, Sacramento Area Council of Governments

ALSO PRESENT:

Ms. Ada Trujillo, Center for Community Action and Environmental Justice

Ms. Helen Walter-Terrinoni, The Chemours Company

Mr. V. John White, California Hydrogen Business Council

Ms. Nancy Whitehorse

Ms. Susan Wood, American Carbon Registry

Mr. Frank Wright, World Logistics Center

Mr. John Yi, American Lung Association

Ms. Josephine Young, Center for Community Action and Environmental Justice

INDEX PAGE Pledge of Allegiance 1 Opening remarks by Chair Nichols 1 Riverside City Mayor Bailey 3 Item 17 - 3 - 17 Chair Nichols Motion 8 Vote 9 Item 17 - 3 - 28 Chair Nichols Motion 8 Vote 9 Item 17-3-3 & 17-3-4Chair Nichols 9 Executive Officer Corey 1.0 Staff Presentation 11 Dr. Fine 37 Ms. Shipman 40 Ms. Nevitt 42 Mr. Coleman Mr. Rothbart 44 47 Ms. Young 49 Ms. Newman 49 Mr. Gill 53 Mr. Cort 56 Ms. Flores 58 Mr. O'Dea 61 Ms. Trujillo 63 Ms. Patlan 68 Mr. Hamilton 69 73 Ms. Gordon Rev. Koteen 75 77 Ms. Rodarte 77 Ms. Hasson Mr. Magavern 79 Ms. Portillo 81 Ms. Jones 84 Ms. Khan 87 Mr. Garza 89 92 Ms. Silva Ms. Adeyeye 94 Mr. Marquez 95

I N D E X C O N T I N U E D PAGE 98 Ms. Larios Mr. Martinez 100 Ms. Barragan 103 Mr. Jackson 107 Mr. Stewart 109 Mr. La Marr 111 Ms. Tomley 112 Mr. Cannon 122 Mr. Quinn 132 Mr. Aquilar 133 Ms. Goldman 135 Ms. Dale 138 Mr. Hague 140 Ms. Whitehorse 142 Mr. Eder 143 Ms. Inman 145 Mr. Shimoda 149 Mr. Herzog 151 Ms. Thomas 153 Mr. Silva 155 Mr. Anderson 157 Mr. Newell 158 Ms. Gale 159 Mr. Hernandez 161 Mr. Wright 162 Mr. Okurowski 164 Mr. Chattom 165 Mr. Jelenic 167 Mr. Bruqueras 168 Mr. Garcia 171 Mr. Katz 172 Board Discussion and Q&A 174 Motion 195 219 Vote 219 Item 17-3-5 Vice Chair Berg 220 Executive Officer Corey 221 Staff Presentation 223 Senator Lara 236 Assembly Member Garcia 240 Mr. Delaney 240 Mr. Scherer 243 Mr. Lizarraga 245 Mr. Skvarla 246

I N D E X C O N T I N U E D PAGE 247 Mr. Caponi Mr. Eder 248 Ms. Gutierrez 250 Ms. Groutt 252 Mr. Krausse 254 Mr. Yi 257 Ms. Walter-Terrinoni 259 Ms. Gale 262 Mr. Hon 264 Mr. Boccadoro 265 Ms. O'Brien 267 Mr. Newell 1 269 Ms. Starr 271 Mr. Hamilton 273 Mr. Davis 276 Ms. Morris 277 Mr. Hamilton 278 Mr. Stewart Mr. Edgar 280 2.81 Ms. Flores 283 Mr. Garcia 284 Ms. Escoto 285 Ms. Wood 286 Mr. Abbs 288 Mr. Noyes 289 Mr. Magavern 290 Ms. Shears 292 Mr. White 294 Board Discussion and O&A 296 Motion 305 Vote 305 Item 17 - 3 - 7Chair Nichols 305 Executive Officer Corey 307 Staff Presentation 307 Ms. Bedsworth 319 Mr. Trost 324 Mr. Gallegos 334 Mr. Kirkey 339 Mr. Ikhrata Mr. Hamilton 343 349 Ms. Eder 359 Ms. Holmes-Gen 360 Mr. Stewart 362 Mr. Harris 363

I N D E X C O N T I N U E D PAGE 364 Mr. Magavern Ms. Gale 365 Ms. Pawling 367 Ms. Lindblad 368 Mr. Sadler 369 Ms. Fletcher 370 Board Discussion and Q&A 372 Item 17 - 3 - 6Chair Nichols 398 Staff Presentation 400 Mr. Abbs 410 Mr. Habel Mr. Baizel 413 416 Mr. Eder 418 Ms. Thomas 419 Ms. Ali 420 Ms. Phillips Mr. Barrett 421 422 Mr. Marquez 423 Ms. Pitcher 425 Mr. Rivera 427 Ms. Morris 428 Ms. Burga Mr. Magavern 429 431 433 Motion Vote 435 Public Comment 434 Mr. Eder Mr. Shears 435 Adjournment 435 Reporter's Certificate 436

PROCEEDINGS

CHAIR NICHOLS: Good morning, ladies and gentlemen. As you can see, we're learning a new system here. Thanks to the Riverside County which has lent us their beautiful meeting room. We also have a sound system which is very sophisticated, and so I want to make sure that all of our Board members know that they can control their own microphones with a button that says microphone on. I get to see all of you and call on you in the order in which you pressed your request-to-speak button. And other -- but you still get to speak when you want to. It's just a -- it's easier for me if I can actually see who's in what order and call on you as I -- as I usually do.

So with that, I'm going to call this meeting to order and ask that we begin, as we always do, with the Pledge of Allegiance to the flag.

Would you please rise?

(Thereupon the Pledge of Allegiance was

recited in unison.)

CHAIR NICHOLS: I have to say that those words mean more now than they have in a long time. So thank you.

I want to make a couple of quick announcements. First, I have to do the tech -- request to testify. We

are going to be using our usual process where we ask everybody to fill out a card, if they want to speak. The cards are available outside the Board room. We appreciate it if you turn it into the clerk of the Board, who's down here in front, before your item that you're here to speak on comes up.

There will be and three minute time limit as usual. And we appreciate it, if you have written testimony, if you just summarize the testimony in your own words, and don't try to read it, because we'll have the written testimony anyhow.

For safety reasons, please note that there are exits at the rear of the room. And in the event of a Emergency situation, we're required to evacuate this room immediately, through those doors, exit the building, and wait until we get and all-clear signal. And I think that does it for all the preliminaries.

I want to immediately recognize the Mayor of Riverside, Mayor Bailey, who we've learned to call Rusty -- good morning, Mayor Bailey -- to say a few words to welcome us here for our first meeting in Riverside.

CITY OF RIVERSIDE MAYOR BAILEY: Madam Chair, I am truly honored to represent Riverside in welcoming the California Air Resources Board to its first meeting here in our city, which just happens to be the winner of your

Coolest California City Challenge in 2014 -- (Laughter.)

2.4

OUT State Department of Conservation Emerald City
Designation, the first ever given for sustainable
initiatives and renewable energy, and Audubon
International's Green Community award just this last year.
And I mention these awards to reinforce our common vision
and goals to improve the quality of air and quality of
life for our communities and for generations of
Californians to come.

This is indeed an historic occasion. Thank you for holding your meeting in our city today and for giving our residents and the residents of Riverside County an opportunity to see firsthand the who, what, and how of the Air Resources Board.

My welcome today is, of course, part of a much larger welcome to our community that has been under way for several ways. We look forward to creating even stronger bonds between our community and the ARB and its employees, who will be working right here in Riverside just down the road as many of us saw yesterday soon enough.

I'd like to personally thank all of the ARB Board members, executive leadership, and staff working so

closely with our local government, the Greater Riverside Chambers of Commerce and our partners in the business and higher education communities.

We talk a lot about the power of partnerships in Riverside, and how these partnerships make us stronger, make us smarter, and make us a more capable community.

Thank you to everyone in this room for being a part of the partnerships that not only in transitioning ARB to Riverside, but in working to provide cleaner air to all Californians. We know that we are better together in Riverside.

Our city government strives to be the most responsive and responsible local government in California, but we can't do it alone. We find strength in our collaboration with the Chamber, the City's community college and three universities, our many civic and service groups and our larger Riverside Community.

So as we continue to welcome ARB employees into our city family, through personalized tours of Riverside to showcase all that we have to offer, and as we look forward to construction of the new testing facility just a few miles from this building, we know that commitment to collaboration is more important than ever.

I know I speak for all Riversiders when I say that this last year has been a very rewarding journey for

all of us, but we still have a long way togo. So I challenge everyone who has been involved the local ARB effort to dig a little deeper every day to make certain that we are providing the absolute best customer service and experience that we can show, as we move closer to the groundbreaking but the end of this year, and eventually the ribbon cutting in 2021.

2.4

So we look forward to working with our new partners, and we thank you for your public service to our State. God bless you all, and God bless Riverside

CHAIR NICHOLS: Thank you very much, Mr. Mayor.

As all of you can probably tell, I'm a little bit short on voice today, but I feel a lot better than I sound. And hopefully with the aid of the microphone, you'll all be able to hear me.

But if I turn out to be unable to speak at some point, I am just going to turn the proceedings over to my trusty Vice Chair Sandy Berg who's sitting right next to me.

Unless anyone feels a need to begin with any statements, I think we should just start out with our consent calendar --

BOARD CLERK McREYNOLDS: Madam Chair?

CHAIR NICHOLS: Yes.

BOARD CLERK McREYNOLDS: Would you like me to

6

```
1
   call roll?
 2
             CHAIR NICHOLS: Oh, sure.
 3
             (Laughter.)
             CHAIR NICHOLS: That sounds like a good idea.
 4
    Please, Madam Clerk, call the roll.
5
6
             BOARD CLERK McREYNOLDS: Dr. Balmes?
7
             BOARD MEMBER BALMES: Here.
8
             BOARD CLERK McREYNOLDS: Mr. De La Torre?
9
             BOARD MEMBER DE LA TORRE: Here.
10
             BOARD CLERK McREYNOLDS: Mr. Eisenhut?
             BOARD MEMBER EISENHUT: Here.
11
             BOARD CLERK McREYNOLDS: Senator Florez?
12
             Assembly Member Garcia?
13
             Supervisor Gioia?
14
15
             SENATOR LARA: Here.
16
             BOARD CLERK McREYNOLDS: Senator Lara?
17
             Ms. Mitchell?
             BOARD MEMBER MITCHELL: Here.
18
19
             BOARD CLERK McREYNOLDS: Ms. Riordan?
20
             BOARD MEMBER RIORDAN: Here.
             BOARD CLERK McREYNOLDS: Supervisor Roberts?
21
             BOARD MEMBER ROBERTS: Here.
22
23
             BOARD CLERK McREYNOLDS: Supervisor Serna?
24
             BOARD MEMBER SERNA: Here.
             BOARD CLERK McREYNOLDS: Dr. Sherriffs?
25
```

7

```
BOARD MEMBER SHERRIFFS:
1
                                      Here.
             BOARD CLERK McREYNOLDS: Professor Sperling?
 2
 3
             BOARD MEMBER SPERLING:
                                      Here.
                                      Ms. Takvorian?
             BOARD CLERK MCREYNOLDS:
 4
 5
             BOARD MEMBER TAKVORIAN:
                                      Here.
 6
             BOARD CLERK MCREYNOLDS:
                                      Vice Chair Berg?
7
             VICE CHAIR BERG: Here.
8
             BOARD CLERK McREYNOLDS:
                                      Chair Nichols?
9
             CHAIR NICHOLS: Here.
10
             BOARD CLERK McREYNOLDS: Madam Chair, we have a
11
    quorum.
12
             CHAIR NICHOLS: Great. Thank you.
13
             Okay. Can we now turn to the consent calendar?
14
             The first item that's on consent this morning is
15
    Item number 17-3-1, the 2016 Ozone State Implementation
16
    Plan for Ventura County.
17
             Madam Clerk, has any witness signed up to testify
   on this item?
18
19
             BOARD CLERK McREYNOLDS: (Shakes head.)
20
             CHAIR NICHOLS: No. Are there any Boar members
    who would like to have this item removed from the consent
21
    calendar
22
23
             Seeing none.
24
             Then I will close the record on this item.
25
             Have all the members had an opportunity to review
```

8

1 the resolution? 2 VICE CHAIR BERG: Chair, I move to adopt Agenda Item 17-3-1. 3 BOARD MEMBER BALMES: Second. 4 5 CHAIR NICHOLS: All in favor, please say aye? 6 (Unanimous aye vote.) 7 CHAIR NICHOLS: Any opposed? 8 Okay. Thank you. 9 CHAIR NICHOLS: Then we will move to our second 10 consent item, 17-3-2, which is the 8-hour Ozone Attainment 11 Plan FOR San Diego County. 12 Madam Clerk, have any witnesses signed up to 13 speak on this item? 14 BOARD CLERK McREYNOLDS: No. 15 CHAIR NICHOLS: No. 16 Any Board members who would like to see this 17 removed from the consent calendar? 18 Then seeing none, again we'll close the record 19 and ask for a motion and a second. 20 VICE CHAIR BERG: Madam Chair, I move to adopt 21 Agenda Item 17-3-2. BOARD MEMBER RIORDAN: Second. 22 23 BOARD MEMBER BALMES: Second. 24 CHAIR NICHOLS: All right. We have several

25

seconds.

Again, all in favor, please signify by saying aye?

(Unanimous aye vote.)

CHAIR NICHOLS: Any opposed?

Any abstentions?

Okay. Great.

Then we begin the work that will occupy us for some time here this morning, two items which are closely related to each other, the 2016 Air Quality Management Plan for ozone and PM2.5 for the South Coast Air Basin, and the Coachella Valley, and the Revised Proposed 2016 State Strategy for the State Implementation Plan.

Taken together, the South Coast Air District measures in their 2016 AQMP, and the ARB measures for mobile sources in the State strategy represent a comprehensive action plan for meeting federal air quality standards for ozone and fine particles over the next 15 years.

While the South Coast is one of the two extreme nonattainment areas in the nation, the actions of our two agencies have produced significant air quality improvements. Today, over 40 percent of residents in now live in communities that meet the current ozone standards, so we're getting close to half of our folks being able to breathe air that is officially defined as

being healthy, and our levels of fine particles have dropped by over 50 percent since 2001.

However, that still represents quite a lot of work left to be done. The Clean Air Act has been the key driver for this progress, and the resulting health benefits cleaner air provides. At the same time, California's economy has continued to grow and prosper. And job growth in the State has outpaced the national rate. Yet, there's still more work to be done. And between ARB and the District, we have major work as well as federal action needed to reduce emissions that will also be critical.

ARB will continue to work with the new administration to ensure that California continues to move towards clean air. Mr. Corey, would you please introduce these two items?

EXECUTIVE OFFICER COREY: Yes. Thanks, Chair Nichols. Earlier this month, the South Coast Air District adopted the 2016 AQMP, a multi-pollutant strategy to reduce ozone and PM2.5 pollution in the South Coast and Coachella Valley.

The 2016 AQMP demonstrates attainment of the latest 8-hour ozone standard of 75 parts per billion in the South Coast and Coachella Valley, as well as attainment of the annual and 24-hour PM2.5 standards in

the South Coast.

2.4

Development of the attainment strategy in the AQMP was a collaborative effort between ARB and the district. Over the last two years, staff of the two agencies worked together to map out the State mobile source measures, district measures to support development of cleaner mobile technologies, and local district measures for stationary sources.

Staff will first cover the AQMP to provide the overall context for the needed reductions and to describe local district measures for stationary sources, and the district mechanisms to support development of cleaner technologies.

Staff will then turn to the State mobile source strategies to describe the State SIP Strategy, the proposed measures, and the legal commitment to achieve the emission reductions from mobile sources, fuels, and consumer products.

Scott King will provide the staff presentation on AQMP followed by Kirsten King Cayabyab who will cover the State SIP Strategy for mobile sources. Both Scott and Kirsten are in the Air, Quality, Planning and Science Division.

Scott.

(Thereupon an overhead presentation was

presented as follows.)

AIR POLLUTION SPECIALIST KING: Thank you, Mr. Corey. Good morning, chair Nichols and members of the Board.

If I can have the second slide.

--000--

AIR POLLUTION SPECIALIST KING: Today's presentation will cover both the South Coast Air Quality Management Plan, and the State SIP Strategy. The State SIP Strategy is key component of plans for meeting air quality standards in both the South Coast and the San Joaquin Valley.

I'll begin the presentation with an overview of the process developing a State Implementation Plan, or SIP, and explain how the elements discussed today fit together. I'll also present staff's assessment of the South Coast 2016 Air Quality Management Plan, or AQMP.

Kirsten Cayabyab will continue the presentation with an overview of the State SIP Strategy, along with staff recommendation.

--000--

AIR POLLUTION SPECIALIST KING: A SIP is required by the Clean Air Act, and serves as the framework for actions to meet federal health based air quality standards. It includes a comprehensive scientific and

technical foundation that provides the basis for the emission control strategy for the region. The SIP consists of multiple elements starting with air quality data to establish the scope and nature of the air quality challenge.

Next, the emissions inventory provides a comprehensive accounting of the sources that contribute to the air quality problem, air quality modeling, which integrates air quality and emissions data along with weather patterns, predict future air quality, and identify the magnitude of the emission reductions needed for attainment.

These technical elements inform development of the necessary control strategy. Clear deadlines, as well as evaluation of technical feasibility and costs also guide the development of the control measures.

Finally, the SIP provides California's commitment, enforceable in court, to undertake the actions needed to implement the strategy.

--000--

AIR POLLUTION SPECIALIST KING: Today, the Board will consider both the South Coast AQMP and the State SIP Strategy. The air district SIP elements are developed at the regional level. Under State law, ARB is charged with the overall responsibility for meeting the requirements of

the Clean Air Act. That includes review of the local SIP elements to determine if they meet requirements of State and federal law. If ARB determines that they meet those requirements, then ARB submits them to EPA for its review.

The AQMP approved earlier this month by the South Coast board provides the technical foundation for the overall control strategy. The AQMP also includes local measures for stationary sources and complementary efforts to help achieve reductions from mobile sources. In parallel, the State SIP Strategy provides a statewide framework for measures to reduce emissions from mobile sources, fuels, and consumer products. Together, these two planning efforts comprise a comprehensive SIP, which, if adopted, will be submitted to EPA.

--000--

AIR POLLUTION SPECIALIST KING: With that in mind, I'll how provide an overview of the South Coast's 2016 AOMP.

--000--

AIR POLLUTION SPECIALIST KING: The South Coast District is responsible for air quality planning in both the South Coast air basin and the Coachella Valley. The AQMP serves as a roadmap for meeting air quality standards in these two regions. Today's AQMP builds upon the success of previous planning efforts in protecting the

health of nearly 17 million residents who live in the region. With its health-based air quality standards, meaningful deadlines, and requirements for comprehensive plans, the Clean Air Act has been the basis for the success.

As we move forward, meeting the standards addressed in the AQMP will provide significant health -- future health benefits, including approximately 1,600 premature deaths avoided each year and over 200,000 lost work and school days from polluted-related -- pollution-related illnesses. The district has estimated this represents about \$173 billion in cumulative health benefits by 2031.

--000--

AIR POLLUTION SPECIALIST KING: As shown in this slide, the AQMP is a comprehensive plan for meeting multiple -- sorry -- for meeting multiple -- yeah.

As shown in this slide, the AQMP is a comprehensive plan for meeting multiple air quality standards over the next 15 years. It includes current planning requirements for the 8-hour ozone standard of 75 parts per billion with an attainment date of 2026 in the Coachella Valley, and 2031 in the South Coast, as well as the annual PM2.5 standard of 12 micrograms per cubic meter in the South Coast with an attainment date of 2025.

The plan also addresses progress towards attainment of earlier ozone and PM2.5 standards that have not yet been achieved with attainment dates between 2019 and 2023. The AQMP's integrated framework provides an effective process to coordinate planning efforts for these multiple standards.

--000--

AIR POLLUTION SPECIALIST KING: As a result of ongoing control programs, ozone and PM2.5 levels have shown significant improvement. This slide highlights the progress in reducing ozone over the past 25 years. The highest values are shown in dark red with the two green colors representing attainment of the 75 part per billion standard.

As shown in the map at the top of the slide, in 1990, the entire region recorded ozone levels above the 75 part per billion standard, and peak levels were nearly twice the standard. Today, as shown in the map at the bottom left, peak concentrations of decreased approximately 45 percent. And 40 percent of the residents now live in communities that meet the standard.

By 2031, the AQMP will provide for attainment of the 75 part per billion standard throughout the region illustrated in the map at the bottom right.

These actions will also result in significant

progress towards the next health-based ozone standard established by EPA of 70 parts per billion shown in the darkest green on the map.

--000--

alr Pollution Specialist King: As I discussed earlier, solid science is the basis for determining the region's attainment needs, and also developing the most effective control of approaches. Decades of field studies, air quality monitoring, and peer-reviewed research have improved our understanding of air quality in the South Coast region.

Over the past two years ARB and District staff have collaborated on updating the air quality modeling platform to reflect the latest science and EPA modeling guidance. The results of this work have demonstrated the effectiveness of control strategies and the need for significant NOx reductions to meet ozone and PM2.5 standards.

--000--

AIR POLLUTION SPECIALIST KING: Meeting the ozone standards will require a 70 percent reduction in NOx emissions from today's level by 2023, and then 80 percent reduction by 2031, as indicated by the blue arrow in this chart. This will require comprehensive efforts, including current control programs, and new actions to deploy even

cleaner technologies.

Current control programs provide the majority of reductions shown as the solid green for ARB measures and solid orange for the district measures. New ARB and district actions then provide the remaining reductions shown in the corresponding striped portions of the bars. These actions also provide for attainment of the PM2.5 standards.

--000--

AIR POLLUTION SPECIALIST KING:

Over the next few slides, I'll highlight the scope of district actions contained in the AQMP.

The district has committed to a suite of new measures to transform stationary sources. These efforts focus on transitioning to cleaner energy sources, such as electrification, fuel cells, and solar for commercial and residential sources, as well as increasing energy efficiency.

In addition, the District Board committed to sunset the RECLAIM program, a move to -- a move to direct regula -- regulatory approach to achieve further reductions.

--000--

AIR POLLUTION SPECIALIST KING: RECLAIM is a market-based trading program for large industrial

facilities, such as refineries and power plants. These facilities represent the largest source of NOx emissions from stationary sources in region. In December of 2015, the District Board adopted amendments to the RECLAIM program designed to achieve additional NOx reductions.

2.4

Following your Board's direction, ARB staff reviewed the changes and identified concerns regarding the adequacy of the amendments to meet minimum control requirements specified in State law. Staff shared its findings with the district last year.

The District Board now has taken formal actions to sunset the RECLAIM program. This will include initiating a rulemaking process to transition the program to an individual rule-based regulatory -- regulatory system and accelerating further five tons per day of NOx reductions from 2031 to 2025.

ARB staff believes the adopted actions resolved the issues raised in our review, and we will continue to work with the district as they develop a replacement program. The transition to individual rules will maximize the potential for direct reductions to address both regional attainment needs and localized impacts in disadvantaged communities.

--000--

AIR POLLUTION SPECIALIST KING: The AQMP also

reflects a partnership between the district and ARB to transform the mobile sector. While ARB measures establish the core standards for cleaner technologies, the district has identified complementary measures to help implement the State SIP Strategy. These measures play an important role at the local level, and include both facility-based measures, and incentive programs.

The facility measures address ports, warehouses, and railyards. Over the next year, the district will be working with local stakeholders to develop voluntary commitments to achieve reductions from these facilities. The district board further directed staff to prepare a rulemaking package for a facility-based measure for airports by February 2019. ARB staff must be an active participant in those efforts to ensure timely development of effective approaches.

ARB also has a critical role as part of our work to deploy the technologies called for in the State SIP Strategy, and implementation of the Sustainable Freight Initiative.

The district has identified specific milestones for development of these measures, and has included a commitment to report back to the their board within one year. If sufficient progress has not occurred, district staff will identify specific actions and initiate

rulemaking. ARB staff will also provide a report back to this Board within one year with a specific assessment of progress and potential further actions.

Finally, the AQMP also includes a suite of incentive-based measures that are intended to support the accelerated introduction of cleaner technologies in parallel with ARB efforts.

--000--

AIR POLLUTION SPECIALIST KING: Development of the AQMP was a multi-year effort with extensive stakeholder input involving District Board member committee meetings, workshops, advisory committee meetings, and individual stakeholder discussions. This progress has resulted in a comprehensive strategy that identifies a clear pathway to attainment of all of the ozone and PM2.5 standards.

It reflects a combination strong regulatory actions, which provide approximately 70 percent of the needed reductions, coupled with programs to incentivize the early deployment of the cleanest technologies.

Funding for incentive based programs and development of other initiatives -- innovative mechanisms will be essential to accelerate this technology development. To support this effort, the district has developed a Financial Incentives Funding Action Plan.

--000--

Worked with the South Coast to define technology and funding needs and have estimated that sustained funding levels of approximately \$1 billion per year through 2031 will be needed. The funding plan identifies a broad spectrum of new funding opportunities and actions, as well as a number of guiding principles. These include building partnerships and coalitions, a priority of recovering costs from polluted -- pollution sources, maximizing reductions in disadvantaged communities, and ensuring criteria pollutant co-benefits from climate and energy efficiency investments

The district is creating a stakeholder working group to help implement the funding plan. ARB will continue to collaborate with the South Coast, as well as play a key role in implementing State level efforts, such as the Sustainable Freight Initiative and the ZEV Action Plan. South Coast's funding efforts will also be coordinated with those of the San Joaquin Valley, as there synergies in bringing clean technologies to both regions.

--000--

AIR POLLUTION SPECIALIST KING: In addition to attainment -- to the attainment demonstration, the AQMP addresses all other Clean Air Act requirements. These

elements are fundamental to an effective planning process, and ensuring ongoing progress. They include requirements for comprehensive emission inventories, control measure demonstrations, and contingency provisions should progress milestones or the attainment demonstration not be met.

Transportation conformity budgets ensure that transportation plans and project are consistent with the AQMP, and offsets must be in place for any growth in emissions due to vehicle miles traveled.

I'll now turn it over to Kirsten Cayabyab to discuss the State SIP Strategy.

Kirsten.

AIR POLLUTION SPECIALIST CAYABYAB: Thank you, Scott. As Scott noted earlier, the responsibility for the SIP development is shared between ARB and the districts.

Sorry, could we get the next slide, please.

Thank you.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: The State SIP Strategy reflects the State's commitment to address emissions from mobile sources.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: And the next slide as well.

Thank you.

I'd like to start by framing the importance of the strategy. Given the significant contribution of mobile sources to the formation of ozone, PM2.5, diesel particulate matter, and greenhouse gases, the Mobile Source Strategy, shown in the center of the slide, represents an integrated plan to help meet California's air quality, climate, and risk reduction goals.

The Mobile Source Strategy is providing a framework to link multiple ARB planning efforts. Each plan shown on the chart draws elements from the Mobile Source Strategy to meet individual goals.

For example, the short-lived climate pollutant plan, that you will be considering later today, incorporates actions that reduce black carbon. Today, we are focused on the proposed SIP Strategy highlighted within circle which introduces the elements of the Mobile Source Strategy needed to meet air quality standards.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: The SIP
Strategy provides California's legal commitment to take
action on a comprehensive set of measures to achieve
emission reductions from mobile sources, as well as
consumer products. These measures establish cleaner
engine standards, introduce ZEV technologies, ensure

engines remain clean, support demonstration and pilot projects, and accelerate deployment of the cleanest technologies through incentive programs. These actions provide ARB's commitment to achieve emission reductions in the South Coast and the San Joaquin Valley.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Today's item is the culmination of an extensive public process. Staff first released the proposed strategy last May and has since hosted a number of public workshops on various elements of the strategy, in addition to participation in district workshops.

Last September, we provided you with an informational overview of the strategy. In response to Board and public feedback, we released the revised version of the strategy being considering today.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Comprehensive technology assessments have provided the basis for measures included in the strategy. These assessments have demonstrated the next generation of cleaner technologies is here today, and identified which technologies are at a suitable stage of development to support regulatory approaches.

ARB also continues to fund pilot and

demonstration projects to advance cleaner technologies in other sectors. These projects will support identification of future regulatory measures as additional technologies mature.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: In the next section of the presentation, I'll highlight several key elements of the SIP Strategy. Because heavy-duty trucks are the largest source of NOx emissions in both the South Coast and the San Joaquin Valley, the strategy contains an integrated set of measures that define a cohesive multi-level approach to reducing emissions from trucks.

These measures capture all aspects of the overall SIP Strategy approach from cleaner engine standards, in-use emissions, to enhanced ZEV deployment through initial regulatory measures and demonstration studies.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Combustion technologies, especially for larger trucks will continue to play a role in the near future. Therefore the proposed new low NOx truck standards are a critical component of the strategy, which calls for Californian and federal action to establish standards that are effectively 90 percent cleaner than today's standards.

As this chart shows, because interstate trucks

account for a large portion of truck activity in the South Coast, federal action, in parallel with California action, is essential to achieve our overall emission targets for this sector.

In October 2016, the Board also approved the Innovative Technology Certification Flexibility Regulation, which is designed to streamline the introduction of the cleanest technologies.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: To ensure that engines operate cleanly over their useful life, the strategy also includes actions to enhance in-use performance and decrease engine deterioration. This will include amendments to revise the current opacity limit, amend the warranty, useful life, and durability provisions, and revise in-use testing protocols, ensuring a comprehensive heavy-duty vehicle inspection and maintenance program.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: To complement measures for cleaner engine standards, the strategy calls for introduction of ZEVs into initial vocations, including last mile delivery fleets and airport shuttles. These applications are well suited to ZEVs due to their smaller size and shorter distance traveled.

ARB staff is initiating a stakeholder working group to begin development of the last mile delivery measure. This will consider purchase and manufacturer requirements, as well as the role of advanced technology provisions and incentives.

The zero emission shuttle bus measure has also been enhanced to reflect consideration of other heavy-duty airport vehicles, such as fixed route vehicles entering or exiting the airports, and airport owned operational and maintenance vehicles.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: The last elements of the integrated truck strategy, includes actions to achieve sufficient penetration of cleaner trucks to meet attainment standards. These will include incentive programs, new regulations, increasing system efficiencies, and emerging technologies, such as intelligent transportation systems and autonomous and connected vehicles.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: In response to ongoing discussions with transit agencies, we have also expanded the scope of actions related to transit. The new innovative clean transit measure will consider the entire transit system, including light rail and first and last

mile shared economy services, to provide a long-term vision for transitioning to zero emission technologies.

This will include near-term deployment of zero emission buses where the economics are currently viable, collaborating with transit agencies, and piloting innovative approaches. These efforts will also ensure that approaches support Sustainable Community Strategies and maintain service to people with limited transportation options.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: For passenger vehicles, the strategy includes a mesh to ensure the continued expansion of the passenger ZEV market beyond 2025, while also increasing the stringency of fleet-wide emission standards.

The mid-term review, which you will be hearing about tomorrow, reaffirms that feasibility of current standards and sets the stage for continuing to expand ARB's passenger vehicle programs.

The program will consider a number of elements, including addressing differences in upstream emissions from fuels, structuring emission standards in order to accelerate the penetration of ZEVs, expanding ZEVs into heavier passenger vehicle applications, and leveraging partnerships, including those with Section 177 states in

order to maximize the cost effectiveness of our regulations.

--000--

2.4

AIR POLLUTION SPECIALIST CAYABYAB: As our technology assessments have shown, including the mid-term review near zero and zero emission technologies are available now, and offer significant emission reduction benefits. California will therefore move forward on development of new vehicle standards for passenger vehicles and heavy-duty trucks, as well as expanded ZEV requirements.

ARB staff has been working with EPA over the past two years, and the South Coast and San Joaquin Valley Air Districts have submitted petitions on the need for federal low NOx standards for trucks.

Last December, EPA acknowledged the need for federal action and announced it would initiate the work necessary to begin rulemaking efforts. ARB will continue to call on U.S. EPA to move expeditiously in supporting clean vehicle standards, and expects to work with the new administration to defend our clean air policies. Our partnerships with other states will be critical to reinforce the need for national action.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: I'll now

describe the benefits of the SIP Strategy in the South Coast and the San Joaquin Valley.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: As Scott discussed in the beginning of the presentation, the strategy is designed to provide ARB's commitment to achieve all of the emission reductions from mobile sources, fuels, and consumer products needed to meet air quality standards in the South Coast.

The graphic on the left illustrates that reductions anticipated in each mobile sector. Given the maturity of on-road programs, and ARB's greater regulatory authority, the strategy will decrease NOx emissions from passenger vehicles and trucks approximately 85 percent.

These combined efforts are a testament to the success of ARB programs for on-road vehicles. Measures to achieve significant reductions for off-road sources, such as locomotives, forklifts, and other off-road equipment are also key elements.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Moving next to the San Joaquin Valley, last summer, the Board approved the valley's ozone plan for meeting the 75 parts per billion standard. While the current control program is sufficient to meet the valley's ozone attainment needs,

the SIP Strategy provides additional reductions to accelerate ozone progress. The valley's key challenge is meeting PM2.5 standards over the next decade, and we are continuing to work with the district to define needed strategies.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Last October, the Board tabled considerations of the valley's PM2.5 SIP for the 12 Microgram annual standard, and directed staff to conduct outreach to identify opportunities for additional near-term reductions from both stationery and mobile sources.

Since the October meeting, ARB and the districts have conducted workshops and additional discussion with stakeholders to support development of a comprehensive PM2.5 strategy for meeting multiple standards.

Based on the diversity of sources that contribute to PM2.5, meeting the standards will require further reductions from both stationary and mobile sources.

Staff has included -- staff has identified a series of principles to guide the effort, including the need to consider opportunities to achieve multiple benefits, reducing localized exposure to air toxics, enhancing ozone progress, prioritizing for near-term reductions, and maximizing co-pollutant reductions for

climate pollutants, such as black carbon.

Measures that reduce directly emitted PM2.5 for example are one of the most effective approaches to achieving near-term progress, and can also reduce black carbon and localized exposure.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Continued reductions from mobile sources will play an important role. As shown at the graph on the right, current control programs, coupled with new measures in the SIP Strategy, will provide nearly 170 tons per day of NOx reductions by 2025. These reductions will accelerate ozone progress and serve as a downpayment on the reductions needed to meet PM2.5 standards.

Existing incentive programs will also provide further benefits. The dotted line reflects ARB staff's initial assessment of further reductions needed based on a science-based evaluation examining a balanced portfolio of actions to reduce both direct PM2.5 and NOx.

The district is conducting its own attainment modeling, based on what it believes are the limited feasible reductions achievable from sources it regulates.

As a result, their estimates place a much more substantial burden on the mobile sources than ARB staff is current estimating. We will continue to work with the

district and other stakeholders to determine the finally mission reduction needs, and additional strategies, including funding mechanisms to accelerate deployment of cleaner mobile source technologies.

Staff will bring a commitment for the additional mobile source reductions needed for attainment as part of the comprehensive PM2.5 SIP this fall.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: So to bring all the pieces together, what is the Board considering today?

--000--

AIR POLLUTION SPECIALIST CAYABYAB: First, adoption of the State SIP Strategy will create a commitment for new emission reductions by the attainment deadline specified for each area. The proposed implementation schedule identifies the timing to bring each measure to the Board, or otherwise take action, as well as initial implementation dates.

The second component of the commitment is to achieve the total aggregate emission reductions necessary to attain the federal air quality standards from existing control programs and new measures.

Finally, the SIP Strategy also includes a commitment to achieve the reductions needed in the South

Coast by accelerating the penetration of advanced transformational technologies beyond the pace of natural turnover.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: Ongoing tracking and reporting of progress will be critical to the success of the AQMP. Both ARB and the South Coast will assess progress in securing funding and quantify the emission benefits of other complementary programs. ARB staff will also directly engage in the development of South Coast's facility-based measures. As part of these efforts, staff will report back to you annually on progress, which will include recommendations for neither -- needed further actions.

Staff will also pursue demonstration and pilot programs and identify opportunities for additional regulatory measures as these technologies become commercially and economically viable.

Finally, staff will work with EPA to ensure that reductions from incentive programs are appropriately incorporated into the SIP.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: To meet the requirements of CEQA, staff completed a draft environmental analysis, or EA, for the proposed SIP

Strategy. The strategy will provide significant air quality, energy, and climate benefits. Although the draft EA identified potential indirect environmental impacts, staff expects that these indirect impacts will be short-term in nature and address through individual project level mitigation requirements.

Staff has prepared written responses to all of the comments received on the EA, and has provided the final EA and written responses to the Board for consideration. These documents were also released to the public in advance of today's hearing.

--000--

AIR POLLUTION SPECIALIST CAYABYAB: In conclusion, staff recommends that the Board take action today as follows:

First, certify the environmental analysis of State SIP Strategy.

Second, approve our State commitment to take action on the proposed measures according to the defined schedule and to achieve the aggregate emission reduction commitments by specifics dates.

Third, provide contingent approval of the San Joaquin Valley 2025 commitments, pending an additional public review period.

And finally, adopt the South Coast 2016 AQMP, and

direct the Executive Officer to submit it to EPA for inclusion in the SIP.

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

CHAIR NICHOLS: Thank you.

Are there any questions before we begin. We have about 40 witnesses who've signed up to speak this morning. I want to make sure that people know that we have with us sitting as a Board member, as a Governor's appointee to this Board, a member of the South Coast governing board, Judy Mitchell. And we have present with us a number of staff from the air district as well, who will be available if we have questions or need to hear from them further.

But otherwise, I think we should probably just begin and move directly into the testimony.

So let's begin with Dr. Phillip Fine.

This is a system that's new to us too. Yes, you can come right up to the front here.

Thank you.

DR. FINE: Thank you, and good morning, Chairman, members of the Board. My name is Phillip Fine. I'm the Deputy Executive Officer at South Coast Air Quality Management District for the Planning and Rules Division. I've been working on this plan for well over three or four years.

And this AQMP for the South Coast and Coachella Valley is the result of over three years of a comprehensive, transparent, and inclusive public process. And your staff, ARB staff has been with us every step of the way. It's been a truly collaborative partnership, both for the South Coast AQMP, but also for the State SIP Strategy that you just heard about.

And we really appreciate the effort and the close relationship between the two agencies, and as well as our relationship with SCAG in development of the AQMP. And we do pledge to continue this relationship as we move forward in implementing these plans with frequent updates on progress between the staff and participation in each other's public processes as we go forward.

So as you heard, the primary goal of this AQMP is to meet clean air standards and protect public health, including ensuring health benefits to our disadvantaged communities and our environmental justice communities here in the South Coast.

And enhanced analysis this year, demonstrated that these communities will benefit most from the actions laid out in this plan. And so I want to highlight three major elements of the plan. You've heard a little bit about this from your staff, that I'd like to highlight though that will help us achieve these goals.

First, this plan includes strong and aggressive stationary source measures across all sectors and all types of equipment, including our largest facilities, our RECLAIM facilities, by which we have additional emission reduction commitments as you heard, and a commitment to sunset the program and return to a more command and control regulatory structure.

Second, in addition to mobile source measures that you've heard about in the State SIP Strategy, our plan locally includes a specific process to help implement those emission reduction commitments that are being made by the State locally, through identifying enforceable mechanisms and actions to reduce mobile source emissions at facilities in the basin, such as ports, warehouses, railyards, et cetera.

And third, while past AQMPs have delayed addressing some of the tough issues and big questions by reliance on the so-called black box, this plan provides an honest assessment with specific technological pathways to attainment and the associated costs. And part of that are significant incentive programs will be needed. But we can design those incentive programs to help small businesses and residents that are least able to afford equipment upgrades.

Finally, all of these significant actions and

other actions in the plan that I didn't talk about will lead us to our most important goal, which is to protect public health, especially in our most impacted communities here in the South Coast.

Thank you.

CHAIR NICHOLS: Thank you. Any questions for Dr. Fine?

Okay. You'll be available, if we need you.

DR. FINE: Yes.

CHAIR NICHOLS: Great. Jennifer Shipman.

You can just come on. You don't need me to call on you. I just do it, because it gives me something to do.

(Laughter.)

MS. SHIPMAN: You have enough to do. I'm sure.

Good morning, Chair Nichols and Board members.

My name is Jennifer Shipman. And I am the executive director for the Manufacturers Council of the Central Valley. Thank you very much for allowing me to comment today on the SIP, most specifically the Mobile Source Strategy and how it impacts the San Joaquin Valley.

Fortunately though for the San Joaquin Valley, we have a history of success when battling some air -- significant air quality challenges. And 2016 was a great year. We had the cleanest year on record for PM2.5, and a

near record clean ozone year. And that just continues to demonstrate the tremendous progress with respect to air quality throughout the valley.

But this success is largely due to the investments and process improvements that have been made by stationary sources. Since 1990, the industry's financial investment and engineering of new technologies to run extremely clean and efficient processes have produced real and tangible results.

Valley food processors and manufacturers, for example, have invested billions of dollars to -- to achieve reductions.

They've reached 90 percent fuel efficiency in natural gas boilers. Those emit zero PM. They've electrified equipment, utilized solar technology. They've lowered NOx, SOx, CO2, VOC, sulfur emissions, and they're compliant with some of the most stringent regulations in the country.

I mention these points just to preface this statement. The San Joaquin Valley Air Pollution Control District has very few ways left to pick the stationary low-hanging fruit.

Our district could virtually eliminate all stationary sources, industry, commerce, agriculture, and all of its residents, and they would still not meet the

newest suite of PM2 -- PM regulations or the standards. Eighty-five percent of our district's issues come from mobile sources.

So I ask your Board to take the time to further consider the State's Mobile Source Strategy in light that the District's modeling of the emissions that need to be achieved are significantly higher than what ARB's modeling is showing by over 100 tons per day, and it doesn't achieve the reductions in time to meet the federal standards.

So I implore your Board to take a deeper look into the District's modeling and to delay the adoption of the State's source strategy in the SIP, until the fall when the District's PM2.5 attainment strategy is fully defined, and the proper ARB commitments can be included.

Action today will tie the hands of the San

Joaquin Valley Air Pollution Control District, and it will

devastate the San Joaquin Valley.

Thank you very much for this opportunity to comment.

MS. NEVITT: Hi. Good morning, Madam chair, members of the Board. I'm Lauren Nevitt, Environmental Affairs Manager, for SoCalGas. I'm here today to speak on the State SIP Strategy.

SoCalGas agrees with the State SIP Strategy's

focus on accelerating mobile source NOx reductions. The single most impactful strategy for reducing mobile source emissions is to incentivize the deployment of near zero heavy-duty trucks that are commercially available today. We expect additional near zero natural gas engines to be available by 2018, all of which will meet ARB's low NOx standard.

These next generation heavy-duty natural gas engines are the most cost effective solution to help meet our air quality and climate change goals. They reduce NOx emissions by 90 percent, and when used with renewable gas, these near zero engines can reduce greenhouse gas emissions by 50 to 80 percent further.

To that end, we support a federal low NOx standard for heavy-duty trucks. And SoCalGas supports the development of performance-based standards, not technology mandates.

The Innovative Clean Transit Measure must be flexible enough to allow transit fleets to deploy advanced technologies in a way that is synergistic with operations.

Similarly, the zero emission shuttle bus measure should take feasibility and operational concerns voiced by the airports into account. We recognize that the SIP does a lot for the South Coast. We also urge ARB to work closely with the San Joaquin Valley APCD to develop

enforceable commitments from mobile source reductions, as it has done with the South Coast AQMD.

While South Coast AQMD has a mere five years to demonstrate attainment with -- for the next federal ozone standard, San Joaquin Valley APCD has even less time to attain the fine particulate matter standard by 2019.

We support adoption of the State SIP Strategy as proposed by staff. And SoCalGas looks forward to continuing to collaborate with ARB and the air districts in pursuit of SIP implementation.

Thank you for your time.

MR. COLEMAN: Good morning, Madam Chair and members of the Board. My name is Curt Coleman. I'm the Executive Director of the Southern California Air Quality Alliance, which is a trade association whose members include aerospace, manufacturing, utilities and others.

I'm here today to request that your Board adopt the -- or approve the air quality management plan that is before you from the South Coast Air Quality Management District.

We went through extensive, as Dr. Fine mentioned, years and years of development of this plan. We went through a long public hearing process a couple of months ago. We would have preferred that the plan had been adopted by the AQMD Board as proposed by staff. There

were some significant amendments that I think a number of people would characterize as improvements in the plan. We would characterize it as removing some flexibility.

But this is a very good plan, even with the -let me just say to back up for a minute. We continue to
have concern with indirect source rules. And one of the
measures -- one of the amendments in the plan did include
an indirect source provision for the staff to begin
development of an indirect source measure for
consideration by the Board affecting airports.

We continue to believe indirect source measures are not very effective and have severe economic impacts to the region, and that there are much more effective ways of achieving emission reductions, such as the Mobile Source Strategy, and the stationary source strategies that are in the plan that directly affect emission sources.

So having said we would have preferred the plan that was proposed by the staff that was an amendment -- was not attended. We are here to support the plan that is before you even with those amendments. And we believe it is a good plan. It has gotten rid of all of the emissions in so-called black box. We don't have to rely on future control measures to be identified. They're all there. And we need to get this adopted and start implementation. And we will continue to work with you and the district

staff to implement this plan and bring clean air to the region.

Thank you.

CHAIR NICHOLS: Thank you, Mr. Coleman. Excuse me. Before you leave, I am going to ask you a question, and I'd be interested in your views.

Obviously, a number of the people who are here oppose adoption of the plan for different reasons. But as a former -- you are a former chief counsel for the district, and I know you've lived through several iterations of AQMPs --

MR. COLEMAN: Since 1979, yes.

CHAIR NICHOLS: -- as have I.

MR. COLEMAN: Yes.

CHAIR NICHOLS: So I'm asking for your thoughts about what are the consequences of not having an approved plan?

MR. COLEMAN: Oh. Well, they can be very severe. I mean, the worst case scenario is we'll have transportation funds withheld, we'll have grant monies withheld, we'll have the federal government decide they know how to fix the problem better than we do, and propose a federal implementation plan.

And I think the progress that we've made in this region since you and I first started in the middle

seventies has been tremendous, and it's a testament to the local district -- districts and the Air Resources Board working together to deal with mobile sources and stationary sources in an effective way. And I would really hope that that can continue.

CHAIR NICHOLS: Thank you.

MR. ROTHBART: Good morning, Madam Chair and Board members. I'm David Rothbart. I'm representing the Southern California Alliance of Publicly Owned Treatment Works. And my members are primarily public entities that operate wastewater treatment plants, public water systems. So we're essential public services.

And to echo a lot of what Curt just said, we're here to support the AQMP as presented to you. That doesn't mean we are happy with what's in the plan. It's very restrictive. As operators of stationary sources, it is very, very challenging to meet the standards in the South Coast. And the dynamic in the South Coast is that 88 percent of the NOx-forming emissions comes from mobile sources and federal sources. The stationery sources only represent 12 percent of the emissions, and we're very well controlled.

As an essential public service, that is trying to generate biogas that will help out this Board as far as reducing greenhouse gases, the technology needed to

operate in South Coast is very challenging to have that work reliably. And our mission is to make sure we keep sewage out of the streets, and make sure water continues to flow. That's what our members do.

So I just wanted to say that please keep in mind this is a very, very restrictive plan. If there's any push to have it more restrictive, that will have a lot of impacts to essential public service -- excuse me, essential public services.

One example of that is the public fleet requirements put into this plan, which we're very concerned about and makes it much more challenging for us to maintain our public services in an emergency.

Nevertheless, we're supportive of the plan that is presented to you and urge you to approve it as presented to you.

Thank you very much.

CHAIR NICHOLS: Is Josephine Young here?

And after -- excuse me, just one second.

After Ms. Young testifies, I'm going to call on the San Joaquin Valley APCD. They came after we had to put the list together. But as the agency that's affected -- as one of the two -- one of the agencies that's affected by our decision, we'll call on them next.

Thank you.

MS. YOUNG: So my name is Josephine Young. I'm with CCAEJ, and I'm here to cede my time to Penny Newman.

CHAIR NICHOLS: Okay.

MS. NEWMAN: I know there had been arrangement to try and limit the amount of time, so we wanted to do kind of an overview be me and then allow the residents to have their time, so we've got a couple who are ceding time.

Thank you.

I'm a little -- good morning to all of you.

CHAIR NICHOLS: Hi.

MS. NEWMAN: Welcome to Riverside County, and the home of your new ARB lab coming up. So we're really pleased to have you all here. I'm a little disappointed that our other EJ seat appointee is not here, Dean Florez. It's really important to us to have the voice of these communities present and involved.

This past year has taught us much. The residents of our region searching for solutions for dirty air that is suffocating our communities know they can no longer rely on the federal government. That's the elephant in the room here, and I think we need to acknowledge it.

We learned a couple weeks ago that we can no longer trust the South Coast AQMD to seriously address this issue either. They have presented a plan to you to adopt that has no teeth and relies on the good intentions,

warm fuzzy feelings, and generous heart of an industry that has demonstrated time and again its lack of caring for our well-being.

Rubbing salt in the wound, the plan calls upon us to be taxed to pay the polluters to stop killing us.

They've outlined potential funding measures that include a \$20 additional vehicle registration fee, gasoline tax increase, property tax increase, and sales tax add-ons.

So if I'm to understand correctly, ARB is going to vote to accept this plan, which means you are voting to place these taxes upon the people you are supposed to be protecting. This plan will tax the residents to create a pot of funds to give to the logistics industry for things they could and should be doing right now as responsible companies.

For our communities, this is unconscionable. Some people living near these facilities make an annual household income of less than \$10,000. We hear from families that their personal choices aren't whether to buy a hybrid car or a funny looking light bulb, but whether they should buy their child's asthma medicine or put food on the table for the rest of the family, and this plan wants them to pay.

I think that this plan doesn't pass the giggle test. I don't think there's a person in this room that

believes you can go to the legislature and get a two-thirds vote to increase the taxes on the people of California. Even worse, I don't think there's a person in this room that would believe you're going to go to the federal government and get billions of dollars to pay for this. These incentives is what this plan is based on, and it's based on nothing.

So that leaves you. CARB, you are our last hope for reason and compassion. Your decisions will dictate whether we have clean air to breathe or whether we continue for the next 15 years to suffer under this horrendous pollution burden, indeed whether we will live or die.

Delaying action will only make more people suffer, and you know the facts: 5,000 people die each year of the air they breathe, 12 to 15 people each day. And you know this.

You know that despite the alternative facts spewed out by John Hughes and our local industry economist, and regurgitated by some of our local elected officials, warehouses don't bring middle class jobs. They are temporary jobs paying barely minimum wage in an industry rampant with wage theft.

A lot of the AQMD board members commented that they didn't want to do regulations because they were

afraid the industry would leave the area and we'd lose these jobs, these good paying jobs.

You know that while logistics industry is touted as the fastest growing jobs sector, they are crappy jobs, and unsafe conditions. From the Claremont McKenna College to the Brookings institute and others, they point out that while it may be bringing numbers of jobs, they do not pay well. The result is our poverty rates continue to rise, and the prosperity of our region continues to slump.

We are a population of working poor, and the inevitable transmission to automation means that even these crappy jobs will be eliminated in the next five years.

From our perspective, there is only one choice, to modify the plan, so that you enact a serious comprehensive plan that will lead to compliance and save lives. We ask that you strengthen the AQMP by using indirect source authority to control pollution from large freight sources like ports, railyards, and warehouses, to push for zero emission technology deployment and forget these near zero alternative technologies.

Investing in technologies that are half effective, when you can invest in those that are fully effective delays our ability to truly get where we want to be.

The decision, the responsibility, and ultimately the blame will fall on you today. We ask that CARB be courageous, that you do your job. There's a lot of people counting on you.

Thank you.

(Applause.)

MR. GILL: Good morning, Madam Chair, members of the governing Board. My name is Sheraz Gill. I'm the Director of Strategies and Incentives at the San Joaquin Valley Air Pollution Control District. Thank you for allowing me to come here, and put me ahead of the schedule here.

As you know, we've had a great public process thus far with multiple public workshops in the San Joaquin Valley, and public advisory work group meetings with a whole host of people that are involved, a lot of stakeholders. And I want to thank ARB and their staff for working very closely with us through this entire process. The process is going really well. At your October meeting, your Board committed to identifying additional mobile source measures to ensure that enough NOx emission reductions are available to help us attain these very stringent PM2.5 standards.

The district is committing to developing our own strategy, as you know, and coming up with enough emission

reductions from stationary sources, and we have already developed a list of those measures and shared it with the public ARB, and will continue to do so with the public process, as we have multiple more public workshops that we plan to schedule

Through our planning process, we have found that even after considering a lot of directly emitted PM2.5 measures, significant NOx emission reductions are still needed to come into attainment. We are a little disappointed that today's proposal does not include any added measures for the Valley, essentially that the Mobile Source Strategy is the same document that was released in May 2016.

However, we are pleased by the commitment that has been made that the Mobile Source Strategy that is in front of you today is a down payment and that ARB will return to your Board with further reductions prior to us coming up with our PM2.5 plan, which will be heard in August of 2016.

We are a bit worried if -- that if we just piecemeal this for later action, we may lose the energy and attention that the valley deserves. So our preference, if at all possible, is to table action and approve it together in the next couple of months when our plan is due in August.

However, if that is not possible, we still appreciate the commitment that is made today to return back to your Board with a strategy of real reductions for the valley in the 2019 to 2025 time frame, prior to or when the District's PM2.5 plan is presented. We ask that your Board adopt that commitment as part of approving that plan. Thank you so much for your time.

CHAIR NICHOLS: Thank you. Dr. Sperling has a question --

MR. GILL: Sure.

CHAIR NICHOLS: -- or a comment.

BOARD MEMBER SPERLING: Am I on?

You said that you would like to see additional mobile source measures. What exactly are you talking about?

MR. GILL: So there's a -- so we need massive NOx reductions. We're talking about, you know, over about 100 tons of reductions that are needed. We're talking from light-duty vehicles, light heavy-duty, medium heavy-duty heavy heavy-duty trucks, ag equipment, off-road, locomotives. We need it from the whole suite of the mobile source.

Now, we believe regulations alone are not sufficient to achieve these reductions. The emission reductions that we need are significant, and they're in a

short time frame. Unlike South Coast who has till 2031 to come into attainment with their ozone standard, our attainment deadline is 2019 for the first -- for the 2006 PM2.5 standard.

So it's abundantly clear without significant increase in funding or incentive-based measures, attainment will not be possible. So we will leave it up to ARB how to determine what -- you know, whether it's an incentive based strategy or a regulatory approach, but those are the areas where we would need to get significant reductions from.

BOARD MEMBER SPERLING: Thank you.

CHAIR NICHOLS: Thank you. Okay.

MR. GILL: Okay. Thank you.

CHAIR NICHOLS: Paul Cort.

MR. CORT: Good morning. My name is Paul Cort I'm an attorney with Earth Justice. I'm here this morning to ask the Board to disapprove the State strategy, because it is not a credible plan for meeting the ozone standards in the South Coast, and will also set up the San Joaquin for failure when it comes to the PM2.5 standards.

The South Coast AQMP relies on the State Strategy. And the State Strategy relies on finding billions of dollars that do not exist, and federal regulations that are not coming.

Contrary to what you heard in the staff's presentation this morning, staff have not identified control measures necessary to reduce emissions to attain the ozone standards in South Coast. Over 90 percent of this strategy relies on a black box of measures to be determined. Even the specific commitments in this plan are unenforceable, because there is no commitment that any of these rules will reduce any amount of emissions.

What is particularly disturbing about this strategy is how inconsistent it is with our fights at the national level right now. California leadership has said that we will fight efforts to weaken national ozone standards, and yet our own agencies are refusing to adopt the control measures that are necessary to meet those standards.

California leadership has said we will fight efforts to weaken our bedrock environmental laws like the Clean Air Act. And yet, this plan relies on legal arguments that stretch the flexibilities of the Clean Air Act to the point that it's planning obligations become meaningless.

We get that the challenges are great, but we need to recognize how we got here. The 80 part per billion standard that we know have only six years to attain in the South Coast was adopted by EPA 20 years ago. South Coast

still violates the 1-hour ozone standard adopted by EPA in 1979. Why?

Because of plans like this that kick the can down the road that everyone knows will fail. It is time to stop. Stop delaying regulatory measures, stop adopting plans that are deliberately unenforceable, stop hiding behind legal arguments that weaken statutory requirements.

We need to stop and start over with a new plan that finally takes seriously the obligation to clean our air and protect public health.

(Applause.)

CHAIR NICHOLS: Ericka Flores.

MS. FLORES: Good afternoon. I just want to address before I speak that Italia Garcia was one of the speakers and her name was crossed out, but is -- is there a reason for that? I think Penny -- okay. Sounds good, yeah.

CHAIR NICHOLS: We didn't cross them out.

MS. FLORES: Sorry. Good afternoon. My name is Ericka Florez I'm a community resident in the west side of San Bernardino. Welcome all of you to our Riverside region.

The reason for today is because -- that I'm going to be speaking on is I live very close to the railyard, and I want to paint you a very clear picture of what it's

like to live near an industry. I actually want to invite all of you to come over, if you'd like, and spend the night at my house for as long as you'd like to have a clear experience of what the industry is not telling you.

So I'm not going to use fancy words today. Okay. I'm just going to tell you clear and loud what it's like. The industry does not respect communities that live near their sites, especially -- now, who are those communities? Communities of color, predominantly Latino communities, communities who are economically vulnerable.

I want to let you know that for us to even be here today having to pressure this Board to do the right thing, and introduce and implement stronger regulations is a travesty. This should not -- this song and dance between AQMD and CARB, and please do the right thing, and please we need to breath clean air. We are tired of doing this.

This should -- we are in a state of emergency. When our community members move into the inland region, they don't move out here because we want to be near the mountains, to be quite frank with you, because if you want to do that, you move up to the -- to Big Bear. And a lot of times those communities are expensive.

So these communities move out here because this is all we can afford. And upon moving here, we're found

that we then get asthma, cancer. We don't have the money to go to a doctor, and then we have to sit here and tell you to help us out. I want to urge you today. I want to urge you to consider what it's like for those who live near the industry.

The industry does not care for the public. The industry does not care for our children. The industry does not provide the jobs to working women and men. And those jobs are not good paying jobs. Technology is moving fast, and these jobs are not going to benefit my mom, my dad, my brothers, and my sisters.

So for all of you who are here in support of clean air and want clean air, I want to ask you to please stand up.

(Thereupon Ms. Florez spoke in Spanish.)
(Thereupon audience members stood up.)

MS. FLORES: Look at all these people right here, representing hundreds and even thousands of people who are asking, not -- demanding for you to do the right thing. Communities of color, people who care, do you think that we don't work today?

People had to ask for time off. You see the children here, bringing their kids here because they care that much.

Do the right thing. Thank you.

(Applause.)

MR. O'DEA: Chair Nichols, members of the Board.

My name is Jim O'Dea. I'm at the Union of Concerned

Scientists. And we share the concerns that the State

Implementation Plan is missing major elements, and many of those elements don't go far enough to protect public health.

And my comment today is that it doesn't have to be this way. We have solutions. We have zero emission technologies that are here and ready. And so, you know, despite all the leadership that ARB and California have shown over the years to develop these technologies, sometimes we have to be reminded from the outside of how far we've come and how far we can go.

And the example I want to share with you today came from a few weeks ago. King County Metro, the transit agency -- the major transit agency in the Seattle area released a report concluding that by 2034, they can transition their entire 1,400 bus fleet to zero emission vehicles. That means by 2020, just a few years from now, every bus they will purchase will be a zero emission electric bus. So if there's not a better statement of where the technology is than that, I don't have one.

And, you know, of course, California transit agencies have also been doing an excellent job in adopting

clean technologies, Long Beach Transit, where Senator

Lara's district is; Foothill transit, just down the road

of course.

And so I call attention to this King County Metro Transit Agency report, not because it's transit agency, not because it buses, and we definitely support public transit, but because this is a large bus fleet. It's the second largest bus fleet on the west coast. Only L.A. Metro has a larger bus fleet.

And when a fleet of this size and fleet operators that are in charge of managing this size of a fleet can make -- can come to the conclusion that they can make this transition, it speaks to other sectors of medium-, and heavy-duty vehicles that we're trying to get to zero emission.

So I really just want to conclude that there's a lot of gaps to be filled in the plans that were presented today, and the technology is here, and we can get there, we can fill these gaps with your leadership.

(Applause.)

CHAIR NICHOLS: Thank you. We agree.

Okay. Ada Trujillo.

THE TRANSLATOR: I'm going to provide translation. Can her time be doubled for that to happen?

CHAIR NICHOLS: We always give extra time when

there has to be translation, so yes.

THE TRANSLATOR: Thank you.

MS. TRUJILLO(through translator): Good morning.

My name is Ada Trujillo. I'm a mother of three kids. I'm here worried about my children. And they are really good students, and I do as much as possible to help them for their future. My daughter is in third grade. She goes to school in Ramona Alessandro Elementary School in San Bernardino right close to where they live. And when she goes out to recess, sadly she sees this area where they store so much natural gas. She also sees the rail yard that also has trucks going in and out, and she sees the fumes that go into the air that we breathe.

A couple of -- well, some years ago, the University of Loma Linda did a health study. And at that time, my son was at that elementary school. And this -- the result -- that study said that 47 percent the students at Ramona Alessandro had asthma. So a lot of the children have to learn how to use that inhaler, right, to control their asthma.

As it is, our community has little resources, and we feel forgotten, and you want to impose taxes on us? I drive a car because I need to take my kids. When my little girl was little, I used to take the bus whether it was raining, whether it was sunny, didn't matter. I was

in that bus. So she drives the car, her husband drives the car, and now you're imposing a 20 increase on the vehicle license fee. And she knows that many have to be able -- have to be able to drive cars, so that's imposing on them.

CHAIR NICHOLS: I'm going to have to interrupt you for a moment. Also, you're almost out of time, even at double time.

We're not imposing any fees on anybody. No one has said that we are about to ask for or impose a fee. We don't have the power to do it. We can't do it, as Board, and we haven't indicated any willingness to do that.

I just want to make it clear to people here, I think someone has taken something out of a list of possible ideas that has been put together as part of a financing plan and suggested that that was what was actually going to happen. And I can assure you, this is not something that we have ever thought about, talked about, or have any intention of doing.

So please, I need to assure you that this is not something -- I can't prevent you from speaking, and I don't want to prevent you from speaking your concerns, but I also don't want you to go away from here or sit here thinking that this is something that is actually being proposed, because it's not.

65

```
1
             MR. TRUJILLO(through translator): She's saying
    that, yeah, them as being the most impacted, they
 2
3
    shouldn't be.
             CHAIR NICHOLS: Yes, I quite understand.
 4
5
             Our Board Member De La Torre has asked to speak.
6
    I'm sorry. I should have --
7
             BOARD MEMBER DE LA TORRE: (Spoke in Spanish.)
8
             MS. TRUJILLO(through translator): Again, the
9
   reason she's here is it's affecting --
10
             BOARD MEMBER TAKVORIAN: My microphone is on.
11
    That's why. So I just want to clarify is my understanding
12
    is your.
13
             CHAIR NICHOLS: Your mic is not on either.
14
    Something is wrong here.
15
             THE TRANSLATOR: Can I translate what she -- or
16
    can she say what she just said?
17
             CHAIR NICHOLS: Let her finish, please. Okay.
18
             MS. TRUJILLO(through translator): And so again
19
    she said if you're saying that you're not going to raise
20
    the taxes on us, good. That's great, because I'm here for
21
    the future of my kids. I'm here for their health, and
22
    this is why I'm here, protecting them.
23
             Thank you.
2.4
             CHAIR NICHOLS: Thank you very much.
25
             (Applause.)
```

BOARD MEMBER TAKVORIAN: Can I just get clarification --

CHAIR NICHOLS: So may I just say, we would have had -- we would have had a translator here if we had had a request to have one. I don't know what fell through the cracks, but we always ask for a translator if there's a request for that to happen. We're very lucky that we have on our Board people who can do that for us.

All right. I'm going to now recognize Ms. Takvorian.

BOARD MEMBER TAKVORIAN: Thank you. Sorry for the interruption. I just wanted to clarify that my understanding is that the funding plan is part of the AQMP, and that the public is testifying in regards to that plan and the State SIP. And so shouldn't everything in those plans be part of the consideration that they have the right to testify about, and we should be considering?

Because if that plan is viable, it's viable based on what the funding action plan is that they're putting forward. I recognize we don't have the taxation authority. We wouldn't -- you know, the Chair is absolutely right we can't do that, but we can say, yes, we think you have a good plan, or no, we don't think so. We don't think this is a good idea or that it will be viable, successful.

So I guess I'm -- I just want to get some clarification about that, that we don't have the authority, but we do have the authority to say, yes, this is a good idea or no, it isn't.

CHAIR NICHOLS: May I ask the ARB staff first to address this issue. And then if necessary, the South Coast, because it's not my impression that we are approving their funding plan. I share your concerns about whether it's viable plan or not.

BOARD MEMBER TAKVORIAN: Okay. Thank you.

DEPUTY EXECUTIVE OFFICER KARPEROS: Chair

12 | Nichols?

13 CHAIR NICHOLS: Yes.

DEPUTY EXECUTIVE OFFICER KARPEROS: Chair

15 Nichols, over here. Kurt --

16 (Laughter.)

17 CHAIR NICHOLS: There. Hi.

DEPUTY EXECUTIVE OFFICER KARPEROS: Kurt

Karperos. I'll attempt to answer you question. The funding plan that the South Coast AQMD developed as part of their effort to begin the process for identifying potential sources of incentive funds and to establish a stakeholder group to advocate for those funds is distinctly not part of the AQMD. It has not been

submitted to ARB as part of the SIP and is not before you

today.

BOARD MEMBER TAKVORIAN: But isn't it in their plan?

DEPUTY EXECUTIVE OFFICER KARPEROS: It is -
BOARD MEMBER TAKVORIAN: Their plan is based on

it.

DEPUTY EXECUTIVE OFFICER KARPEROS: No, it is not, in fact, as part -- it is not in their plan. It is not part of what the local air district adopted.

CHAIR NICHOLS: So you could still think that the plan is meaningless without a funding plan. You know, that's your -- that is a view that one could have it's been -- that has been suggested that to adopt it without that funding plan present means that it's not real or somehow can't happen, but this is a situation that we have. This is not the first time we have found ourselves in this situation, not just with the South Coast, but in general as we strive to meet future standards in an area where we don't always know what the technology is going to be that will actually enable to us meet the goal.

Please go ahead.

MS. PATLAN(through translator): Good morning.

My name is Carmen Patlan, and I live in San Bernardino

next to big tanks of natural gas. So this establishment

has gas leaks that go up into day and night in our

community, and the smell is horrible. And it's -- and we smell it constantly. We can't breathe well, because it smell bad. There's always some type of gas leak and it's just not right.

It's not -- it's not just that we live this way and we need -- and please, we need a better way to live in our community. We put our trust in you to help us in our community. Thank you so much.

(Applause.)

EJAC MEMBER HAMILTON: Good morning, Chair
Nichols and members of the board. My name is Kevin
Hamilton. I'm with Central California Asthma
Collaborative up in The San Joaquin Valley. And I'm a
member of your Environmental Justice Advisory Committee.
I thank you for allowing me this time to speak today
regarding the State SIP and some pieces within it that we
find concerning.

Thank you for teeing up the funding thing. That was actually my first comment is how are we going to pay for this? So I would suggest that any plan that doesn't include a way to pay for what it wants to do is a defective plan.

So on its face -- though I don't live in South

Coast anymore, I moved to Fresno from there. And I have a

son and some grandchildren there living Gardena. So I am

very concerned about what happens in the South Coast.

In Coachella Valley where people are experiencing tremendous, tremendous barriers every day to just achieving good health in the face of what we know because of community monitoring projects like Ivan from Comite De Civico and others, that indeed the monitor there does not pick up all the emissions that people are facing locally every day. And they do face higher levels of PM2.5 in ozone than the monitors regularly report. And it is not surprising to us at all. Indeed, the monitors certainly can be anywhere, but we do have to recognize that they're only a small sample.

The public health consequences and the physical health consequences specifically of this are well understood. Dr. Balmes, Dr. Sherriffs and others on this Board I'm sure could enumerate those ad nauseam, and I'm glad. We have studies now that have completed after 20 and 30 years. That's -- we're patient in medicine. I'm a registered respiratory therapist. I've been working in the research area of that for quite a number of years. And one thing you learn is patience in this business. You're going to have to wait 5, 10, 15, 20 years.

Well, we've waited. The information is in. This ozone is a damaging thing to us and our children. It is limiting their expectations to have a great long life. It

is decreasing the development of their lungs. This PM2.5 is affecting the development of their immune systems in utero. Fetal development of immune systems is being affected by this pollution.

We are tasking generations moving forward with our trash. And so I would suggest that expeditious movement forward in cleaning this trash up is the responsibility of this Board.

I want to speak specifically to a couple of things nested within there that I think are really important, and specifically for the San Joaquin Valley, though I like to think I'm speaking for all of California, because I do care about the State I live in and the people who live here.

When you look at the Mobile Source Rule, which is something the San Joaquin Valley needs desperately. We'll argue with the District back and forth about whether it's two-thirds of the -- I don't I just did four minutes and 30 seconds -- two-thirds of the emissions are coming from mobile sources or 80 percent. I'm not going to split that hair.

But what I will say is two-thirds are mobile sources. We know that. And the timeline you've got right now within the Mobile Source Plan is not adequate. So advanced clean cars, we need that timeline to move from

2026 to 2021.

On-road heavy-duty, we need that timeline to move from 2023 to 2019. Medium- and other heavy-duty issues, we need them on track for 2018. That last mile system that you're talking about, which is so integral to our work here in the valley, we need that date moved up to 2017. We've got the technology. It's just a matter of having the political will to do it.

And I'm looking to you, Senator Lara and the legislature, to give us the bills and the power that we need to do this. We need you to step up. We need you to provide the funding for this, a vehicle to pay for it, because this will be expensive. And we don't need that burden to be laid on specific industry or specific people in our communities, but we need it to be spread around. We understand that it's going to be distributed, and it needs to be fairly. And the people who are producing the most pollution need to pay this price.

And so we need you to be brave and step up and do that. We need to see a tax or a fee on vehicles use and road use, so the people pay for the benefit of what they do. I'll pay for it. I know others who will too. It's something that we need, and we need to do it now.

VICE CHAIR BERG: Thank you, Kevin. I think you know that we let you go a little longer. And so we

73

```
1
    really --
 2
             EJAC MEMBER HAMILTON: I know. Well, I'll be
3
   back.
 4
             (Laughter.)
5
             VICE CHAIR BERG: Well, we want you back.
                                                         And we
6
    thank you very much for your testimony.
7
             EJAC MEMBER HAMILTON: So help us out there.
8
             (Applause.)
9
             CHAIR NICHOLS: We get to hear from Mr. Hamilton
10
    at the Advisory Committee meetings as well, and he's
11
    always eloquent.
             Mrs. Gordon, hi. So good to see you.
12
13
             MS. GORDON: Hello. Well, good morning, ladies.
14
   Hello, Diane. Hello, Mary.
15
             CHAIR NICHOLS: We're not used to seeing you in
    Southern California.
16
                         Well, I'm here.
17
             MS. GORDON:
18
             (Laughter.)
19
             MS. GORDON: I'm here. If people don't know, my
20
   name is Ms. Margaret Gordon. I am a resident of West
21
    Oakland. I'm right next door to the Port of Oakland,
22
    where we have been doing the same type of fighting for
23
    over 18 years to bring air pollution to a certain control
24
    within our city.
```

But as for a little history, I have participated

25

in the Goods Movement Action Plan, Health and Oil Policy, the TCRF Funding Development, and we're still here with these problems. And I'm putting on record also, public record, that we need to have an audit of the TCRF funds. What did it do for or benefit the community if we're still here looking at what's happening -- at what's happening here in Riverside?

This is -- this is very shameful, after all these years of doing this work to get here. We're in 2017 and we still got people with asthma and cancers. And I'm really not -- I'm really not seeing -- understanding it.

But how I came here to this area was I took the bus and the train, so I could see a bigger picture of what's happening. There is -- there is no way that this community should be impacted the way it is with all these different businesses that are impacting the community. This is very shameful.

And also, I understand that you want to put 75 -- 75 to 85 thousand electric cars. You need 75, 80 thousand electric cars just in this one community, if you want to combat the pollution changes. So let's be for real, and let's get it right one time.

I hope in my -- my next life, I will get to see it. I'm 70 years old. I know I will not get to see all of it here, but you need to do a much better job.

75

```
Thank you.
1
 2
             (Applause.)
 3
             REVEREND EARL: Ms. Margaret is a very tough act
    to follow.
 4
5
             (Laughter.)
 6
             REVEREND EARL: I'm Reverend Earl --
7
             MS. GORDON: Yes, I am.
8
             (Laughter.)
9
             (Applause.)
10
             REVEREND KOTEEN: I'm Reverend Earl Koteen.
                                                           And
11
    I am with the Sunflower Alliance. And we're usually
    wrestling with BAAQMD not down here at South Coast, but
12
13
    we're also part of a California Cleaner Freight Coalition.
14
             As you can imagine, when you go to seminary, you
15
    read a lot of scripture. And no matter how many times
16
    I've read the Ten Commandments, there isn't one that says,
17
    thou shalt not kill quickly, that permits people to be
18
    killed slowly, and that's what we're doing.
19
             We're poisoning people with bad air, bad land,
20
    bad water. We're poisoning people left and right and we
   know better now. We are in situation like we were in
21
22
    situation like we were a few years ago with tobacco. We
23
    have found, we have the evidence that what we are doing is
24
    wrong. For a long time, we didn't have the evidence, and
```

we still sometimes don't have causal evidence.

25

dealing with epidemiological evidence, but that is certainly adequate.

Now, every time I testify before BAAQMD, they keep kicking the ball to you. They say, oh, well, we don't have the authority to shut the proper measurements or we can't do anything that allows us to set meaningful time limits. And that's just unacceptable. You really become part of the process of ecocide. It's beyond genocide. We are making this planet uninhabitable, and I know you know that.

The evidence piles up every day. When I started doing this work ten years ago, I would walk in the room and the other ministers would walk out. They didn't want to hear about it. They didn't want to think about it.

But every day more and more evidence piles up, and we find out that scientists were not alarmists. In fact, they were overly conservative. So I ask of you today to disapprove of this proposal, because it is -- I have been told by the attorneys, it is unenforceable.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

CHAIR NICHOLS: Could I ask folks who are planning to testify if you can look ahead on the list - I think it's put up on the board - and be ready, because

we're only at number 17, and we have 65 people who want to speak. So thank you.

MS. RODARTE(through translator): Thank you.

Good morning. My name is Lorena Rodarte and I live in San Bernardino surrounded by industry. In the -- in our community, we have high levels of asthma and cancer. It's not right that we pay for this industry with our health. There's an invitation here for you to come and live with us in San Bernardino so you can know what it feels like to be so close to trucks, so close to sources of contamination. You're invited.

Touch your hearts, open your minds, and do the right thing, think about our kids, their future.

Thank you so much. I hope you do the right thing. Touch your hearts.

MS. HASSON: Hello, Chair. Thank you.

My name is Michele Hasson. I represent the Center for Community Action and Environmental Justice.

First of all, I'd like to extend the invitation to all the Board members to come and take a tour with CCAEJ, so you can really see what the logistics industry is doing to our communities. These are the refineries of the Inland Empire.

But I really want to clarity one point. I don't think the Board can have it both ways. You can't say this

is a great plan, we're going to clean up the air, but we're not going to worry about how it's funded. Even though we know that the funding plan is not on the table, you cannot extract the funding from the purported measures of this plan, because it's basic. You can't go to a -- you can't make a shopping list, go to the super market, and not have cent in your pocket and say I'm going to figure it out later.

And just another point. You know, it seems like you're trading the black box for the green box. It's not acceptable. You can't provide a plan that doesn't work, and I've said this before, because it is still true today.

Another thing I really, really want to highlight is indirect source rule. Let's face it, I am sick of alternative facts. I want California to stand up for science and for truth, because the logistics industry they can't go anywhere. They have nowhere to go. They need our freight infrastructure. They're going to stay here, and they're going to keep bringing these low-wage jobs, and their going to keep automating those jobs.

So let's face it, it is automation and not regulation. And anything else is an alternative fact, and we should not accept it, nor should this Board.

(Applause.)

MS. HASSON: We need to ensure that the AQMP

has -- and you have the authority to ensure that the AQMP has time-bound metrics. If they claim that our industry is so benevolent and will do everything to clean up and provide us with, you know, middle class jobs, then they have to do it in a very finite timeline with concrete metrics.

And if they don't do it, then hey, guys, time is up, regulate, because that's what we do in California more than anywhere else in this country, and that's what we should be proud of. We can enforce and we can clean. And that is our courage. That is what we are asking you here to do, enforce a plan that can be regulated. We are done with incentives, and we are done with alternative facts. It is time to regulate and enforce.

Thank you.

(Applause.)

MR. MAGAVERN: Good morning. I'm Bill Magavern with the Coalition for Clean Air. I think there's no decision that you'll make this year that's more important than this State Implementation Plan, because this is the way that you show that you're finally going to deliver on the long delayed promise of healthy air for all Californians. And we've made a lot of progress thanks to this Board over the years.

And this plan has many measures that will help us

to move in the right direction. But what the plan doesn't do right now is actually to add up to clean air. And we can and should do better. We certainly report incentive fundings, and we will help to try to secure money for incentives, but we should not bank on billions of dollars that are highly unlikely to actually materialize. We must not replace the black box with an empty wallet.

And what we've heard this morning is clearly you have no idea where the money will come from. And there are some ideas on the table. None of them are really -- have a clear path to success right now. So it would be great if we had the billions to turn over the fleets more quickly, but we can't gamble the health of our children on that.

In addition, we know that we cannot expect a lot of help from the federal government in the next few years, either in the form of money or the federal regulations that we know they should be executing.

So ARB needs to do more on mobile sources, and we strongly agree with a the San Joaquin Valley Air Pollution Control District, and that's not something that I say every day. But ARB needs to help the districts by regulating those mobile sources. We know that over 80 percent of the air pollution comes from mobile sources. This is the Board that regulates everything that moves,

and we need you to do that.

We have specific ideas, facility-based standards for freight hubs, moving more quickly and more aggressively on last mile delivery trucks, achieving full compliance with the at-berth standards for vessels, and we know we have now zero emission forklifts. So let's have 100 percent for the smaller forklifts by 2030.

All of those are measures that your staff are looking at. They've assessed the technologies. We just think you need to be more ambitious and more aggressive in the execution. So you're hearing this morning from almost every public interest group in the State that works on air quality. You've already heard from some of the legends of our movement Penny Newman and Ms. Margaret Gordon.

And we're all here to say we can do better, we must do better.

Thank you.

(Applause.)

MS. PORTILLO: Hi. Good afternoon, or -- I don't know, is it morning still?

My name is Esther Portillo with the Center for Community Action and Environmental Justice. I am a community organizer. I was raised and born in Los Angeles, and like many families here in California, many of us had to come to the Inland Valley, Inland Empire

because housing was much too expensive in Los Angeles as you -- as many of you all know.

However, what we found when we came to regions like these where like our city councils and our supervisors -- I've actually been at this county of supervisors many times, because unfortunately we have -- in many of our cities, we have people who really don't care about our health. They don't care about the health of people of color, especially in these areas where we still have a lot of people in power that have very conservative views about people of color.

And what they have done is they've brought in many industries, one the warehouse industry, to pollute our communities, to give us jobs that exploit us, and they done think that we deserve anything better than that.

I actually left the Inland Empire to go -- to find a job, because there was no good jobs here at all.

My husband and I we left to New York City. He actually just recently got hired at UCR -- a professor, he's Assistant Professor at UCR, and I work here proudly with the Center for Community Action.

But because of this, when we came back, we found ourselves with our family members who have -- are becoming sick. My grandmother just passed away three months ago from cancer, lung cancer. She never smoked a day in her

life. She lived in Colton for over 20 years.

My nieces, when we came back after these last few years, have asthma. We have seen and increase in -- of respiratory diseases in our community that we have never seen before.

I don't know how many cancer clusters or how many deaths in our families, how many asthma attacks we need to have -- we need to show you, so you can make the right decisions. Unfortunately, a lot of our elected officials don't care about our lungs. And I hope that everyone of you do care about our lungs, about the air that we breathe.

I'm asking you to do the right thing. You know, I'm ask -- but I really think I shouldn't have to be here. I really think that it should be something that should come natural to you all, and it's very disappointing that we can't even bring signs into this building to put on our -- on our laps, because they're threatened by signs that say, "Clean Air Now". You know, it's really outrageous. No handouts for polluters.

And I just want to really call out somebody who was -- actually, the Sheriff was actually really nice that came -- he told us we could bring our signs inside, and we could put them on our laps, and we were fine with that.

We were going to have our signs.

You know, we have the right to assembly. And he was fine. But when we came, the other Sheriffs started telling us that we couldn't put our signs down. And I just want to call out this person David Clegern, she -- he's the Public Information Officer for Climate Change Programs. He was actually very disrespectful. This is a representative of CARB, Office of Communications, and I just really want to really make sure that something is done.

This is part of us being able to express ourselves. And I hope that we don't have to come back here. I hope that you make the right decisions.

Thank you very much.

(Applause.)

MS. JONES: My name is Asher Jones. I live in Riverside down the street. I go to Riverside City College. I'm actually a communications major. I'm involved with my student government. I'm actually a senator who advocates for 500 students on their campus.

So I know a lot about policy and regulation and metrics and things of that nature, because I've been going to our strategic planning meetings, and I've been learning about that, and what it goes into actually running a facility or a campus.

And I know it takes a lot of hard work and

dedication, and -- but that's not what I've been seeing from the AQMD, because they haven't been doing the most for our people. They voted for a 12 -- 12 ton NOx RECLAIM instead of 14 ton. This plan allows that 12 ton to come to fruition, so that our people don't get the best air quality that they can.

Now, I brought up an orange to be representative. With are California. We have orange groves and things of that nature. This is our legacy. What is your legacy? Are you really going to leave people to die, because they can't breathe? Are you really going to let these cancer clusters that was just spoken about to continue? Are you going to let little babies in utero be born with asthma attacks?

We don't need that. Really, you all are up there in the numbers, and so you -- I understand that you want to leave a legacy. Oranges are California's legacy. Your legacy, if you do nothing, if you don't let the regula -- if you don't heavily regulate the industries, if you don't do enough, death is going to be your legacy.

And it's not just your death, but the death of other folks, people of color, people who are low income families that are by these ports that suffer the most. I live by at least three freeways, so myself, I am in a highly toxic area. When I go outside, I want to take

pictures of clear skies. I can't do that because of the smog.

2.4

I want to take clear pictures of the sky, because I want to post them, and I want everybody to see how amazing and beautiful Riverside is. But Riverside is not beautiful, neither is San Bernardino, and neither is East Coachella Valley, because we don't have these regulations that have teeth.

We are giving our polluters the incentive. Now, they can decide to or not to actually do their job when they have incentives. Now, if we regulate, and we put some burden on them, as far as, hey if you're going to pollute this much, we're going to tax you, and we're going to fine you X amount of dollars.

And then that actually will make them pay attention, because now their paychecks are being affected. So you see industry behind me with suits and ties. I'm in my regular clothes that I was in from yesterday, because I only got five hours of sleep, because I was working with the Sierra Club's lead organizer to work on this presentation today.

 $\,$ And I love that, because I am an advocate for my students and for my community.

CHAIR NICHOLS: Thank you.

MS. JONES: So you should be the same as well.

(Applause.)

CHAIR NICHOLS: Thank you.

I want to make sure people recognize that when the red light goes on, and you hear the buzzer, it's because your time is up.

Thank you.

MS. KHAN: Good afternoon. My name is Sadia
Khan. I'm a student from San Bernardino Valley College,
and I live in downtown San Bernardino. I'm actually here
right now missing class to be here to talk to you guys
about my health concerns, because right now the plan that
you guys have, it might sound great, but the indirect
source rule is not great.

It's not going to stop the pollution, and it's not going to control the -- it's not going to strengthen our air quality plan. I moved here in 2008, and the only gift that I've gotten from this county is asthma. I now live with asthma, and I lived -- at the age of 12, I had to watch my dad basically sit like a vegetable because of his health.

I had to bathe my own father at the age of 12, because he couldn't do that himself, because of the air quality here. And I watched him die at the age 17. He was only 45. That's not very old. That's -- people live to be 80, 90. You guys are much older than my father. My

father did not live to see this age. And here I was at 17 burying my father because of this air quality.

And I'm tired of that, because that's going to happen to me, because now I have asthma after living in this area for eight years. Eight years gave me asthma. Imagine all the people that are born here that have lived their entire lives here. Imagine how much worse their lives are because of what you guys are doing to us.

You guys are public servants. It's your job to make sure that we have good air quality, so we can live and breathe in our cities and be able to be proud of being wherever we're from, but instead we're dying.

My son cannot go outside without coughing every five minutes. He's probably going to get asthma before I did. He's probably going to be a vegetable before I am. What if I have to bury my son next? Is that what I want to live up to? No. Nobody should have to live for that. Nobody should have to bury their own father and possibly bury their own child because of how bad the air quality is.

This meeting was supposed to be held in Colton, but it wasn't. You guys canceled without an explanation. And so here I am in the County of Riverside trying to talk to you guys about these health concerns, because you guys clearly don't care enough. You guys are public servants.

Yet, this many members of the community have to come here and tell you you guys aren't doing a good enough job. You guys are being paid to do this. Yet, you guys are letting us die.

We -- members of the public have to come, members of the community have to come and tell you guys that you guys aren't doing the right thing. This is your job. You get paid to do it. I'm a member of the community. I have other concerns to deal with, like my health, like my school, like my job, and other things. Yet, here I have to come and tell you how to do your own job.

It's really, really sad, and it's pathetic, because so many of us are dying on a daily -- there's so many us in the background that have asthma, that are dealing with other issues. Every member of my family after coming to San Bernardino has gained some sort of health issue, whether it's asthma, whether it's allergies, and we've already had our dad die. How many members of my family need to die before you guys can wake up?

Thank you.

(Applause.)

MR. GARZA: My name is Ruben. I'm from the Eastern Coachella Valley. I'm here to speak for myself.

I don't real -- I don't have asthma. I'm actually in the family of people -- only my little brother

had asthma. I really don't know what it feels like to live with that type of pain, and I only see it.

It's like watching a show that never ends.

Something that's never a good show, and it's like -- I'm always looking at it and there's nothing I can really do besides come over here and talk. I don't know if what you're taking is to heart. I don't know what your listening is you're actually listening. And you may give me, eyes, views, attention.

But I look at people's eyes all the time. And, to me, personally that doesn't say much. You can open eye, but I need you to open your hearts, because that's something totally different. I really do not -- I hate -- I hate it looking at people who are suffering, and I can't do nothing about it. I hate it even more when I know people know that people -- that they're hurting people, not by your own, hands but that you let it happen.

You have family of your own and you know that you would do anything to protect them. The community is no different, because we all help each other, whether you're -- whether you know me, and whether I ever see you again does not matter. I will always believe whenever I see or meet a new person that they are good, that there's something good inside them.

And if you still have a piece of heart, something

that you took this job because you wanted to help somebody, because one person, maybe a whole family, or just one specific person, in general. Just remember that, because these people come here and do the exact same thing, and we do not get paid for it.

I will put my whole week, I will put whole month to come here and do this. My birth day was like three days ago, and like I can care less, because I'm putting the people I love first, because they make me happy. And if I see them happy, I'm happy. And I want you to feel the same way, because it's a great feeling.

Thank you. Have a great day.

(Applause.)

CHAIR NICHOLS: Okay. I'm going to try this one more time. I said it before, but maybe -- either people didn't believe me, or I didn't say it clearly. So let me try it again. Would you please look at the list that's been posted, and see where you are on the list, and would at least five people lineup and be ready to speak, so you can come right up to the podium, so we don't need to take a minute or more between each of the speakers.

And so some one seems so be marshalling the crowd here. Maybe whoever it is can help with your members of your groups, and just have people waiting, standing up right here, so you can come forward and speak pique when

your time comes.

You're not Adrian Martinez.

MS. SILVA: No, he has given his chance to speak to me.

CHAIR NICHOLS: Okay.

MS. SILVA: Hi. My name is Joana Silva. I have been a life-long resident of the City of San Bernardino. I grew up in a very impoverished area. My parents were 14 years before my little brother came along. We lived in government housing. When my dad got a raise, we decided to move into a house with our dream, a backyard for my little brother to play to get his little goal -- his little soccer field we had there for him.

And the only place we could find that was actually within our budget was a mobile home that was right next to the railroad. At first, it was just the fact that we couldn't sleep at night for the first month. No big deal. You get used to it.

It wasn't until a few months in that I started to develop more severe allergies, my little brother did too, and so did my mother. We just thought it was maybe the change of the seasons were impacting us, but we didn't really make much deal about it.

I wasn't until I started getting sick where my colds were never really hard on me, but my colds became

chronic bronchitis. I began to develop severe and chronic migraines, and my little brother is now developing asthma, and my mother is also developing asthma.

My father basically has one foot in the grave at this point. And I think about it, and I think of my parents' journey from Mexico to come here to provide me, and my little bother, and all of our family a better life.

Now, my both -- both my parents are thinking about going back to Mexico to provide us for better quality, because we cannot afford the care that my -- the medicine my brother requires for his allergies, for his asthma. And we need a better plan for quality -- our air quality, something stronger, something more direct, because it is not fair that at the price of innocent souls, we have to pay for the greed and the pollution of big corporations that are right behind us.

I would love to invite you all to my house some day. You can hear the trucks. You can look from our backyard and stand there and you can see the railroad. The trains are always passing by. There's always cars in that area, and you always see the smog.

We don't have clouds. We have smog. It's so sad to go outside, and when you breathe in, you don't breathe fresh air, it's bitter. It stings, and it is something that has truly caused, not just great panic to our

families there, but it's caused great panic to the doctors that have seen me grow up, and they're telling me how did you let yourself go? What has happened to you?

I come to you in hopes that we can all come to common grounds and find a solution to this issue with a stronger air quality plan that will benefit the main people, the people that we are supposed to represent.

Thank you.

(Snapping.)

(Applause.)

MS. ADEYEYE: Good morning, Chair Nichols, and members of the Board. Thank you so much for the opportunity to comment todayMy name is Adenike Adeyeye. And I'm a research and policy analyst at Earth Justice.

I am here commenting because the state implementation plan, as it currently stands, is intentionally unenforceable. And I say that because it relies on voluntary incentive programs to achieve the emission reductions that California needs to pass an ozone standard that was -- that California needs to meet an ozone standard that was passed in 1997, 20 years ago, and that says nothing of the ozone standards that have been passed since then.

The plan assumes that these voluntary programs will be funded by the Trump administration through

billions of dollars of federal incentive funding.

Honestly, I think we can all agree that this doesn't add

up. I don't think we see that as a real option.

California leads the nation in innovative solutions to challenging problems, and this is a place where we can be leaders. This is a place where we should be leaders. We need a plan that includes requirements that live up to our reputation, that protect communities that are hardest hit by pollution, as you've heard from everyone who's so eloquently spoken before we, and that help us transition to zero emission technologies.

We can definitely do better than this. We can definitely do better than relying on this highly uncertain incentive funding to meet these really important, really critical goals.

I ask the Board to direct staff to amend the plan for all the reasons that everyone has said before me, and to include regulations that will set us on a path to meet federal ozone and PM standards and to continue the transition to a zero emission economy. So thank you so much for the opportunity to speak.

MR. MARQUEZ: Good morning Chairman, members of the Board. My name is Jesse Marquez. I'm a lifetime Wilmington resident and founder and Executive Director of the Coalition for a Safe Environment, a member of the

California Clean Freight Coalition, thE Sierra Club, and the L.A Environmental Justice Network.

The proposed South Coast AQMP is already a failure, and will not bring us into containment. This year AQMD will be approving the new Carson Wilmington Tesoro Oil Refinery merger, which generate and release 75 tons of new VOCs annually into our community's air. That's unacceptable.

AQMD has failed to mandate any significant reductions in criteria pollutants, toxic pollutants, and greenhouse gases from the six major oil refineries in the L.A. area. In fact, some emission categories have actually already increased. ConocoPhillips oil refinery, under the criteria PM and SOx has increased in the last five years.

Under toxic pollutants, at ConocoPhillips:
Benzene, acetylene, naphthalene, perchloroethylene have
all increased in the last five years.

In the South Coast AQMD, we have Rule 1118, which is the flare reduction rule. There's been no significant reduction in flaring in the last five years.

AQMD does not have mandatory use of the best available control technologies. More than 15 years vapor recovery systems have existed and proven to be cost effective and feasible, but they're not mandatory at all

major refineries for their storage tank facilities, or any fuel distribution center. Why?

That's not acceptable.

We have continuously brought up that power failures happen every year at every refinery, yet AQMD and the SIP does not require any back-up power plants to prevent that from happening.

There is nothing to mandate the replacement of parts, pipelines, valves and systems according to the manufacturer's specifications or warranties. They wait for the things to break.

The ExxonMobil refinery that exploded, you know, two years ago was because of a leak. There was nothing there to detect it. Employees told management. Nothing was done. Yet, it showered toxic heavy metal ash on residents for a mile away.

The AQMD does not regulate ships at dock as a stationary source. Each ship puts out two, three tons of pollution every day. Yet, they AQMP and the SIP does not require compliance to the at-berth rule. In January 1st, 2014, 50 percent of the ships were supposed to plug in. In January 1st 2017, 70 percent of the ships were to plug in. We're not in compliance to either one of those, and now even have an extension on to top of it.

There is also an approved technology advanced

maritime emission control technology is a ship emissions capture technologies. It's been tested on over 200 ships. It's CARB certified, and nowhere is it being mandatory to be used, and nowhere has a port purchased one yet in order to do it.

CEQA requires the assessment, identification, mitigation of all environmental emission sources. Yet, it's not being done. We have identified port travel desti -- port truck travel destinations, such as emissions from traveling to and from container storage yards, chassis storage yards, truck storage yards, reefer genset storage and repair yards, container fumigation facilities, inspection facilities, gut truck gas stations, truck repair and maintenance. None of these emissions are being tabulated.

And we also support the indirect rule to close this gap.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

MS. LARIOS: Okay. Now, I'm here as Garciela Larios. I work -- also work with the Center for Community Action and Environmental Justice. And I come fresh, come in yesterday from a planning commissioner meeting in the city of Jurupa Valley, which is not too far from here.

We're a baby. We're only sic years old in the State of California. We're one of the brand new baby cities, but we're strong. And we're fighting every day, because as a new city, it wasn't a big celebration because we had to deal with what the county had decided for us.

I come to you to tell you that I never thought
I'd live to see a day where a developer would come in
front of a planning commission and use ARB's land-use
guidelines to defend their property to not build
residential homes so close to heavy industry, so close to
even immediate industrial zoning areas.

And I'm hearing this developer and saying, man, he's fighting for his land, and he's also fighting for the lives of the people hopefully, so they don't be so close to that sources of pollution. And I'm thinking we need that. We need that. And it sucks that a develop has to do it to protect his land, but it's an everyday fight.

And as community members of Jurupa Valley, and here I am to represent the community of Mira Loma, which is in the City of Jurupa Valley that has been fighting against more construction of warehouses less than those 1,000 feet that is the guideline of ARB land use.

And we're fighting constantly. And I'm sure to urge you that we need help in that fight. We need a stronger AQMP. We need a stronger ARB. We need a

stronger California, because federally we don't have that back-up, right? We need California to stand up.

And again, thank you. Welcome to the County of Riverside, and I invite you to come visit and stay with us. Slumber party. It's an invitation, open. Thank you.

(Applause.)

CHAIR NICHOLS: Thank you.

You know, you folks who are younger especially may not be aware of the fact that Riverside was actually the very first area in the country to sue U.S. EPA under the Clean Air Act back in the early 1970s. So this area has actually a very long and distinguished history of having fought for cleaner air and having been responsible for many of the advances that did occur.

So it's actually great to see that there's another generation of people from around the Inland Empire area who are once again coming forward to really insist that they have a right to cleaner air. Thank you.

MR. LUGO MARTINEZ: Hi. Good morning, Board Chair and members of the Board. My name is Humberto Lugo, I'm with the Comite Civico Del Valle, and a member of the California Cleaner Freight Coalition. And I also lead and coordinate the largest air monitoring community citizen science based project in California on air quality.

And we want to, you know, do this kind of work at

a community level throughout California. So that's -- you know, my role is I'm on the ground as well with the community members, you know, working with them closely. I'm not just here on the policy, but I'm also on the ground installing these monitors. So I know first hand, what is the impact to our community.

And so I'm here on behalf of the Eastern

Coachella Valley today. Eastern Coachella Valley still

struggles to breath some of the most hazardous air in the

basin that is in non-attainment. The issue in eastern

Coachella falls off the cliff environmentally, because of

the goods movement burning in our communities with diesel

pollution and our fossil fuel dependency, not to mention

toxic dust storms from exposed playa at the Salton Sea.

The Coachella Valley is also home to aerial pesticide spraying, agricultural burning, power plants, hazardous facilities. And in a recent report, South Coast AQMD admits these facilities throughout the basin are discharging far greater amounts of GHG, greenhouse gases, than they are reporting.

The Coachella Valley plan recognizes that the primary transporter of ozone and ozone precursors including PM2.5 are from the South Coast Basin, down wind of the San Gorgonio Pass. And additional analysis presented in this plan support these research findings.

As shown by pollution rises for Coachella Valley exceedance days, persistent surface winds transport emissions originating in the South Coast into the Coachella Valley.

There are currently only three regulatory monitors, and two of them are in the affluent community of Palm Springs, and one in eastern Coachella. But the biggest most harmful source of pollution comes from the ports and warehouses and the trucks that travel back and forth through our communities.

We need a stronger action plan to make sure that the facilities and freight system clean up. This is not the first time my colleagues and I have raised these concerns. For years, they have worked on, and requested more robust regulatory agenda to spur zero emission technology -- technological transformation needed to brings us into attainment.

For those of us who have been working for days and cleaning up California's air pollution, it is disappointing that we are again considering a plan that all reasonable people know would not work. Attainment of national standards in the South Coast Basin and Eastern Coachella Valley air basins is difficult. Everyone knows that attainment would require transformational change in our use of fossil -- in our use of fossil fuels, but that

is why this plan falls so short.

We ask the Board to demonstrate courage and to end this pattern of approving deficient plans that have resulted in California being home to one of the most polluted regions in the country. ARB's mission is to promote and protect public health. It knows how deadly our air pollution is, and it knows what is required to protect the public and our community members. We ask the Board to demand a plan that would actually do what is necessary to finally achieve air that is safe for everyone.

Thank you.

(Applause.)

MS. BARRAGAN: Good morning. My name is Marina Barragan. I am from the East Coachella Valley. I've lived there my whole life. I also am an organizer with the Sierra Club My Generation Campaign.

Most of my volunteers live in Mecca, which is across the railroad tracks. The East Coachella Valley is 90 percent below the poverty level. A lot of groups that help third world countries actually help build infrastructure in the East Coachella Valley because of how low -- how low income folks are.

I also live across the railroad tracks in Thermal, California. I, along with these volunteers, wake

up 4:30, 5:00 in the morning every month to attend the air quality management district meetings for this specific plan, building up for this specific moment to, like you said, make history.

My sister suffers from asthma. Today is her 25th birth day, and I'm standing in front of you instead of spending time with her, because I want to bring her home the best birthday gift ever, what should be a human right, clean air.

My four-year old nephew also has asthma. He's the son of my eldest sister. The -- my sister with asthma. And it also goes back and forth between bronchitis. She's my second sister -- second eldest sister.

And so I've seen asthma progress in my family.

Over a decade ago, I lost an uncle in JFK Hospital with breathing problems. He went in, never came back out.

This is my favorite uncle. And I didn't really understand it then, but I started working up to that for this moment, and started learning more about how the air quality is affecting my family directly. I'm seeing it progress. My uncle died.

My sister is now 25 with asthma and bronchitis.

My mother takes medication to prevent asthma attacks.

She -- and she has breathing problems herself. And now my

nephew had his first asthma attack and went o the ER January 22nd. I've seen this progress through my family. I don't need more death in my family.

The fact that I'm even here to speak on family that has died from air quality is a big deal. We need an indirect source rule. We need clean trucks. And I don't say -- and I'm not saying natural gas, because natural gas is not clean. I always see it on vehicles as I drive -- as I'm driving to work, you know, I see it on vehicles, clean natural gas. That's not clean. That's not clean energy.

We need to start talking about zero emissions. We -- that needs to be on the table. We have the technology, why aren't we talking about it?

One of my volunteers said this before in an AQMD meeting, and always stays with me. By the way, he also has asthma. He says we're here fighting for our lives. Who are going to listen to, the people fighting for their lives or the people who are fighting for their wallet?

Thank you.

(Applause.)

CHAIR NICHOLS: Excuse me, but I think before we proceed with the next witness, we still have -- we're only about halfway through, and the court reporter has not had a break since he started first thing this morning, and he

has to actually sit there and get everybody's words down correctly.

So I think it would be smart if we took a short break, but not a very long one. Can we make it 10 minutes? Let's try to make it 10 minutes, okay? And we will promise to take up right away where we left off.

If you could be back here in the room by 20 of 12:00. That's -- let's make it a quarter to. Sorry, I'm looking at the clock in the back of the room. Quarter to. My watch must be fast. Thank you.

(Off record: 11:33 a.m.)

(Thereupon a recess was taken.)

(On record: 11:50 a.m.)

CHAIR NICHOLS: Can we get going again.

Hello.

There's the sound system. Hi, everybody.

Well, it took us a little more time. We took an extra five minutes, but I think the extra five minutes was worth it, because I understand that some of you have been rearranging schedules for speaking. And the Board has also rearranged our own schedule. So we are not going to be taking the lunch break that we had planned, so we won't -- we won't take a break. We will for the Board members, so we don't faint on you. It's going to be possible for them to take a quick break in the back just

to grab a sandwich and come back out. But we will maintain a quorum and everybody will just be listening, but we will not be -- we won't be shutting down the hearing process. So we're going to stay here, and make sure that we hear from everybody. I understand that some of you have also decided that you don't need to speak, and that's fine too. But we're -- we're here, and so we're going to do with this process, and look forward to hearing from everybody. Okay.

MR. JACKSON: Hello. My name is Hakan Jackson.

I'm with the CCAEJ. And I was born raised in Los Angeles

County. I spent most of my adult life away from

California, because as soon as I graduated high school I

joined the military, in fact, the U.S. Air Force, which

I'm happy to see the flag back there.

And as any service member can tell you, a big part of your identity when you serve is your state. And it's always been an honor to be, you know, Sergeant Jackson from California.

And then while I served -- and I served six years in Japan, and it was also an honor there, because when you get to tell somebody overseas, you know, they know you're from America. But then when you tell them you're from California, the eyes widen and they're happy to meet somebody from this wonderful State.

And as soon as I -- I got out after 12 years -- I went to Boston to go to Boston University. And I expected to kind of just live as somebody from California, and just be elsewhere, because most people who graduated from the east coast stay in the east coast.

But unfortunately, I have a sick mother, and so I came back here to the Inland Valley to take care of my mother. And I didn't know what I was going to do with the job. I just ended up working that out as you can see with CCAEJ.

And she has asthma attacks constantly. I don't even live by a warehouse. I don't live too close to a freeway, but what I do live near is by a lot of open space. And truckers they like to park in those spaces, and we get a lot of that idling.

But that's all I wanted to say, because I know, as a lot of people who are here are wanting to speak, and have their story. But I just wanted to share my story with you guys, and how I'm impacted and how proud I am for being from this State, and I hope that I continue to be proud of this State.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

CHAIR NICHOLS: Jim Stewart, I know you, but your

name was crossed off. Was that a mistake?

(Laughter)

MR. STEWART: I don't know why they're crossing all kinds of names off. But in any event, I actually did pass around some slides, which might be showing back there.

But what I really wanted to point out to you is -- I'm Jim Stewart, and I'm representing not any organization, but I'm representing the 200,000 people that live in the forest area. And I'm proud to Call Senator Lara my senator. Thank you very much for standing up for all the great work you've been doing.

But the bottom line is we're suffering. The ports area is the worst air quality in California. And you can see it on your slide. The AQMD has it as the black zone. We call it the sacrifice zone. We are sacrificing our lives for the commerce of the entire United States.

All those trucks and ships and trains that come through the ports they're killing us. And we are depending on you to stop this carnage.

And the next slide just shows the ridiculous situation. This is what the ports are showing that they're going to -- you know, without any action, they're going to increase their -- you know, and this is 50 tons

per day coming out of these ports, right?

And so there's no actual targets in the plan that you have before you to reduce the ports. And we call upon you to require that you actually get this plan fixed to reduce the port emissions.

And then the next slide shows what all of the preposterousness of this whole charade that is before you. And that is that the ARB strategy as presented by staff has 108 tons per day of NOx in the South Coast area, which will be reduced -- I mean, which is going to be handled by new technologies, but you haven't specified them. The little pie chart here that I passed out was just based on SIP table 4 on page 32. And I hope you all look at that, because the issue is that there is no strategy.

And I guess I have to call upon each of you to have a heart, that it's your heartfelt concern for those of us who are suffering. You cannot allow this staff proposed plan to be passed. And the reason you can't allow it to be passed is because it doesn't show how you're going to save lives.

In six years, you're going to reduce 108 tons per day of NOx with unspecified new technologies?

No, fix it.

(Applause.)

MR. LA MARR: Good morning, Chairman Nichols and

Board members. I'm Bill La Marr, and I'm the Executive Director of the California Small Business Alliance.

I guess for the record, I should say that I'm also asthmatic and a cancer survivor so -- for the record. And we believe that CARB should approve AQMD's Air Quality Management Plan, because it directly addresses one of the region's greatest challenges, and that's the timely attainment of federally mandated air quality standards.

What we don't support are the amendments, which were introduced at AQMD's February and March governing board meetings. These amendments were introduced after public testimony had been closed. And it should concern you, as it does us, who represent the regulated community that these amendments were introduced at the end of four long years and thousands of hours of collaboration and exhaustive vetting of the plan. Moreover, they were introduced without any staff, socioeconomic, or CEQA analyses.

We deeply appreciate that the ASMP recognizes the need for incentives, and reliable sources of funding in order to obtain the ambitious emission reductions in mobile and stationary source sectors. And I must emphasize that if meaningful reductions are going to be required of small businesses, that the availability of and access to incentive funding will be absolutely essential.

For decades, small stationary sources have invested millions of dollars in cleaner technologies which have made it possible for us to enjoy the air quality -- the much improved air quality that we have today. But a mandate for further reductions raises serious questions by small business owners about the feasibility and affordability of these technologies in exchange for any meaningful benefits to cleaner air.

We appreciate CARB's participation and input in the development of the AQMP, and we look forward to working with your agency and AQMD in moving forward in implementing the plan. Thank you for allowing me comment.

MS. TOMLEY: Good afternoon. My name is Heather Tomley and I'm with the Port of Long Beach.

I first want to thank the ARB Board and staff for their long working relationship with the Port. We share the same objectives to good stewards of the environment and to continue to reduce air quality impacts associated with Port-related operations. And we've worked successfully over the past decade with your agency to implement effective source-specific regulations and other strategies that have dramatically reduced emissions.

Between 2005 and 2015, our emission's inventory shows port-wide diesel particulate matter emissions are down 84 percent, and nitrogen oxides are down 48 percent.

We look forward to continued collaboration between our agencies, as we move forward with our third iteration of the Clean Air Action Plan, which is currently underway. We view this plan as a local implementation plan to assist the State in meeting its goals of the Sustainable Freight Action Plan.

However, we do not support an indirect source rulemaking approach. The rule would incorrectly identify the Port as an indirect source, will reduce our ability to remain economically competitive, will limit voluntary cooperation with the Port-related industry that's been critical for or success to date, and will not provide any additional tools to help us meet the challenge.

The potential impacts of this approach have yet to be fully analyzed. We're developing strategies today to move towards zero emissions at the ports, which will be a huge challenge, and will require all of us to work together. We therefore request that you move forward with the collaborative approach as described in the AQMP that will bring all stakeholders including the air agencies and the industry together to work on effective solutions, but do not proceed with an indirect source rule.

The cooperative approach with the Port's voluntary action moving forward early, followed up by source-specific regulation to sustain those emission

reductions has proven to be successful over the past decade, and we strongly believe that this is the best way to protect health of our local communities.

Thank you.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIR NICHOLS: Excuse me. Could you wait just awe sec, please. We have a question.

SENATOR LARA: Ms. Tomley, I have a question.

Can you describe for us, in your opinion, what -- what have been the most effective programs under the Clean Air Action Plan for the Port?

MS. TOMLEY: So we've been working on the Clean Air Action Plan. We originally adopted it in 2006, so we have about 11 years of experience on working on that plan together with the air quality agencies, the industry, the environmental justice groups and community advocates, working on a variety of different programs. The Clean Trucks Program was one of the first early programs that we worked on under the Clean Air Action Plan. That two ports worked together on establishing environmental standards for trucks coming into the ports. That was worked on cooperatively with the California Air Resources Board. So the State regulation for drayage trucks came on the back end of that.

But through that program, we were able to reduce emissions from trucks by 95 percent today from where they

were in 2005, and that's just one example. We also have our vessel speed reduction program moving forward with shore power, which is also a State regulation. Low sulfur fuel, we moved forward as an incentive program.

Initially, that was backed up by regulation.

All of these strategies have been ones that we've worked on cooperatively with the agencies and the industry, and that's the reason why we've been able to achieve the 84 percent reduction in diesel particulate matter that we've been able to do in the last 10 years.

SENATOR LARA: And have any of the other ports followed suit with similar programs of this nature that you might know of?

MS. TOMLEY: Absolutely. The Port of Los Angeles. Obviously, we're in lockstep on this. We've been partners the whole way through. But through these programs throughout the State, and the work with the Air Resources Board other State -- other ports in the State have done the same. But we've seen clean trucks programs adopted in Seattle/Tacoma area, and New York/New Jersey. These types of things that we're doing here are moving out to other ports throughout the nation.

And some of the work that we're doing as well in our technology advancement program. We've been investing millions of dollars into demonstrating prototype equipment

that hasn't ever been used in these settings before demonstrating zero emission technologies, demonstrating cleaner at-berth technologies that are barge based. These types of things are being tested in the port complex here, but these are technologies that can be deployed throughout the nation, throughout the world, and we are seeing that with the work that we're doing.

SENATOR LARA: And in terms of the middle harbor project that is ongoing at Long Beach, do we anticipate -- is there any estimates in terms of how that will further lower our carbon footprint in the Port?

MS. TOMLEY: We definitely have estimates. The middle harbor terminal -- for everyone's clarification, if you haven't had the chance to see it, I invite you all down to take a look at what's happening out there. But it is a almost entirely zero emission terminal. They -- as the ships pull up to the berth, they plug in, they're offloaded with electric cranes on to automated guided vehicles that go to the stacks, which are -- have automated electric gantry cranes. The cranes in the railyard are also electrified. The terminal itself dramatically reduces emissions from port operations. But that's one example of how things could move forward.

We're also putting investments into demonstrating and developing zero emission yard tractors and zero

emission top picks that we can move forward also with traditional operations, but do that in a much cleaner mode as well. So we're -- we're looking for a variety of different options, lots of tools to help us get to where we need to go, because we know we still have a lot of work to do, but we're putting that emphasis -- putting that effort into it. And we want to continue the same approach that we've taken that's been effective to this point, working on things that we can do early at the ports, and then having that go forward.

SENATOR LARA: So you can -- you can essentially create a greener port and still be economically feasible and potentially much more expedient in the traffic and the cargo that comes in and out?

MS. TOMLEY: We've proven over the last ten years that we've been able to reduce emissions dramatically, 84 percent for diesel particulate matter, and at same time our cargo volume, our container volume has increased by seven percent over that same time, so that we can continue to make dramatic reductions in emissions, but still allow cargo to continue to move through the ports.

SENATOR LARA: Thank you.

MS. TOMLEY: Thank you.

CHAIR NICHOLS: Excuse me. We have another question here or comment.

BOARD MEMBER MITCHELL: I have another question for Ms. Tomley.

MR. TOMLEY: Sorry. I was ready to scoot. (Laughter.)

BOARD MEMBER MITCHELL: I know you're presently working on a Clean Air Action Plan that is the latest iteration. And could you give us a little bit of background on the progress of that, and where you're planning to go with that?

MS. TOMLEY: Absolutely. So last November, we -the two ports released our discussion draft. We called it
a discussion document, because we wanted to put out
strategy concepts, and really start a dialogue with all of
the different stakeholders that are involved with -- that
are interested in the air quality efforts at the ports.

And so we -- we proposed the next version of the Clean Trucks Program. We proposed strategies to continue to reduce emissions from vessels, and the turnover for terminal equipment. We proposed really aggressive strategies that we know will be extremely challenging to achieve.

For example, on the Clean Trucks Program, we propose to move to zero emissions by 2035 and on terminal equipment by 2030. We're working together with all of the different stakeholders that are involved with this. We

currently have -- we've received a lot of comments, and a lot of input on what we proposed. We're currently working the next draft of the Clean Air Action Plan, which we hope to release here in the coming months. And continue to have public comment and input on what we're proposing.

But it really is our goal to move forward with where do we go from here, and how can we continue to bring down the emissions impacts associated with port operations.

BOARD MEMBER MITCHELL: And let me just ask you to tell us under the Clean Air Action Plan and the Clean Trucks Program that you adopted from the 2006 plan, what is the make-up of the trucks now in the port?

MS. TOMLEY: All trucks are required to meet 2007 standards or better. We see it just through natural turnover at least a third of those actually meet 2010 standards or better. We have -- we have about, I think, around 800 natural gas trucks that are somewhere between 800 and 1,000 natural gas trucks that are in the system as well. There's about 16,000 trucks that are registered in our drayage truck registry.

BOARD MEMBER MITCHELL: And I understand that now there is an experimental program with a low NOx drayage truck that you're working on, is that true?

MS. TOMLEY: That's right. So there are -- there

have been demonstrations of the low NOx, the near zero standard trucks that are currently being tested right now. One of the trucking companies is using that truck that meets the engine size requirements for port operations. They're testing that truck right now. The estimate is that that truck will be commercialized and available early next year, so we're looking forward to that as a natural gas truck.

But we're also working with the South Coast Air Quality Management District on a variety of different demonstrations to test other near zero and zero emission trucks, so looking at a variety of different technologies, so that we can have multiple options so the operators can choose what works best for their -- for their operations.

BOARD MEMBER MITCHELL: Okay. Thank you.

MS. TOMLEY: Thank you.

CHAIR NICHOLS: And, excuse me, we also had a question from Dr. Sherriffs.

(Laughter.)

BOARD MEMBER SHERRIFFS: You're so good at answering these questions.

MS. TOMLEY: Chris is very glad he didn't go first.

BOARD MEMBER SHERRIFFS: Your speech is so clear and -- and I'm sure Chris is thrilled that you're the one

who's managing this.

(Laughter.)

BOARD MEMBER SHERRIFFS: Bring on the questions.

4 (Laughter.)

BOARD MEMBER SHERRIFFS: Looking at this graph, so these demonstrations and so that you've talked, is -- tremendous progress from 2005 to 2014, but flattening in progress since then. So these are all potential projects to change that curve. If there is no change, that curve indeed flattens. But if there's progress with these, then that is a very different curve?

MS. TOMLEY: So I'm not familiar with that graph. I haven't seen it, but that has been a comment that we've heard. And we recognize that there were very dramatic emission reductions in the early years after the Clean Air Action Plan was approved, and some of that has been slowing down, leveling off. But that's really the recognition that we have that we need to move forward with the next round of the Clean Air Action Plan.

The majority of the strategies that we initially proposed have either been fully implemented or well underway. And so we need to be planning for the future and where we go. And that's what we're working on right now. There are still, through the California Air Resources Board Shore Power Rule, there are still, and

we're expecting, continued emission reductions through the use of expanded shore power in the ports. There are other strategies that are continuing to proceed, but we need to be looking at what we need to do for the future, and that's what we're attempting to do through our Clean Air Action Plan process.

BOARD MEMBER SHERRIFFS: Thank you.

CHAIR NICHOLS: Okay. Chris. You get a break.

MR. CANNON: I just wanted to add one more thing that. Your comment is important. A lot of people have mentioned just what you said, if you look at the curves of emission reductions, they do flatten out right around 2011, 2012. And the reason is because there was a lot of low-hanging fruit. There was a lot of opportunity in those early years to get at some serious pollution problems. Fortunately, we were able to do that.

And so what's left is the tough stuff, and that's what makes our Clean Air Action Plan update that we're doing now a challenge, because we have to find ways to get at those tougher challenges. So I just wanted to add to what Heather added.

Good afternoon, Madam Chair and Board members.

My name is Chris Cannon with the Port of Los Angeles. I'm here to ask that your Board support the collaborative process that is embodied in the AQMD's proposed AQMP.

Please be assured that we are committed to doing everything we can to continue our work to clean the air, and we have already -- we already have plans to begin meeting with the AQMD to discuss how programs for our upcoming Clean Air Action Plan update will fit with their plans for the AQMP.

I would also like to ask that you resist proposals to impose things such as indirect source rules or facility caps. These approaches have questionable utility due to our limited control of the sources whose emissions they seek to address. They also raise troubling legal issues.

These types of programs have been brought up in your Sustainable Freight Action Plan process, and we actually think that there is an important and good dialogue that's going on there regarding these types of programs, and we think that should continue.

For these reasons imposition of facility caps, at this time, could compromise the good working relationships that our organizations have, the two ports have, with AQMD and ARB by creating unnecessary conflict, which at this time could potentially even delay our efforts to clean the air.

Instead, I urge that you allow the collaborative process that's been so successful for the last 10 years to

continue. We look forward to continue working with the AQMD and also your staff on opportunities to clean the air through the proposed AQMP.

Thank you very much.

BOARD MEMBER MITCHELL: Chairman, Nichols, if I could have a question --

CHAIR NICHOLS: Yes, I'm sorry.

BOARD MEMBER MITCHELL: -- with Mr. Chris Cannon.

CHAIR NICHOLS: You know, this system is good,

but not perfect.

(Laughter.)

CHAIR NICHOLS: I'm going to turn up the sound so I can hear you when you add yourselves to the list.

Okay. Go ahead.

MR. CANNON: Yes.

BOARD MEMBER MITCHELL: Mr. Cannon, we heard a claim that the ports are not using some of this newest technology, the AMECS technology to capture emissions from ships hat berth. And also, they're not fully using the shore power. Would you comment on that, so that we understand what's going on there?

MR. CANNON: Well, first of all, in our proposed Clean Air Action Plan update, we -- both ports have identified the alternative methods for controlling at-berth emissions as important goals to improve and

increase the usage of. We both have worked to test those procedures over the years, and contributed money to those. I got some data that I can't give you the exact numbers, but it's from your staff here.

Both -- there's two systems that are at work, and they both were used quite a bit last year, between 40 and 60 usages over the last year. I can't give the details, because your staff told me I wasn't allowed to.

(Laughter.)

MR. CANNON: But they were actually used quite a bit. And we were surprised, to be honest with you, at the numbers. We -- if you think about that, that's, in some cases, almost once a week, and so that's pretty significant.

Now, should they be used more? Yes. Yes. And we believe that they should be used more and are going to encourage, either through incentive programs, and possibly even grant programs, the additional creation of these technologies.

We're also with a program that your -- you -- your organization funded at the Pasha Terminal also working to develop an undocked version of that that could be used for non-container ships. And so that's something that we'll go through the verification process that you have here for the Air Resources Board.

The last part of your question was plugging in.

We got some good numbers. Our numbers are actually pretty good. There are certain berths that are having problems and certain lines -- shipping lines are having problems.

But actually the plug-in rates have been pretty good at Port of Los Angeles. I don't think they've been bad at Port of Long Beach either.

So there are certain berths that are having problems, and those usually have to do with the location of vaults, and the way the size of the ships now has increased. And so it makes it harder to plug in. There are also some lines -- shipping lines that do need to step up their efforts to plug in. But for the most part, we've actually received good news about the plug in rates at the Port of Los Angeles and also Port of Long Beach. And so we're happy to report that things seem to be moving in the right direction.

BOARD MEMBER MITCHELL: And since we gave Long Beach the opportunity to describe their clean --

MR. CANNON: Heather did a great job.

BOARD MEMBER MITCHELL: -- clean piers. Los Angeles Port is TraPac and Pasha Terminal. Would you describe a little bit for us what's happening at those terminals?

MR. CANNON: Well, both of them are really

interesting projects. The TraPac Terminal is also an automated operations -- partially automated. They're -- the portion of the terminal that is automated is fully automated, but they have another half that is still being modified.

It's pretty exciting. They don't use the automate guide vehicles that Long Beach uses. And so they do have tier 4 or hybrid -- tier 4 hybrid engines that operate. They're called straddle carriers, but they're extraordinarily efficient, and they even have engine shut-off/cutoff technology, so that when they're not used they immediately stop.

The emissions profile that we looked at from that terminal is actually pretty similar to one that has full electricity because of the difference in the grid and the amount of emissions that are associated with the generation of electricity. So it's pretty good. It's exciting.

And if you come down to have a look at middle harbor, please also come take a look at TraPac. I think you'll enjoy it. The other thing you brought up was the Green Omni Terminal at Pasha. That's something that we are thrilled about, and we thank your organization for helping to fund that.

This is the first terminal in the world that will

be able to operate fully off the grid through using solar power to harvest electricity, and then a large -- two large battery storage units that will actually be able to store that electricity. And then with zero emissions technology, all of the cargo handling equipment will be zero emissions. So everything on the site will be zero emissions. It will be zero emissions operated by people, I'm happy to say, and our unions are proud to say that.

But it will all be zero emissions, so it becomes great. Those of you who have shore -- or excuse me, solar power or know people that have solar power, you know that during the day, you can, of course, run the electricity. But when the sun goes down, you can't run the electricity anymore.

But with this battery storage capability at this terminal, it actually can run at night. And so it's a 24-hour off-the-grid operation absolutely fascinating and we are thrilled to be the first in the world to do something like that.

BOARD MEMBER MITCHELL: Great. Thank you very much. That helps.

CHAIR NICHOLS: So, okay --

BOARD MEMBER TAKVORIAN: I had a -- I had a question. I'm sorry. Hello.

CHAIR NICHOLS: Hi.

129

BOARD MEMBER TAKVORIAN: I pushed the button. 1 2 CHAIR NICHOLS: I see you -- no, but you're not 3 up on -- oh, it says Alex Sheriffs. 4 (Laughter.) 5 BOARD MEMBER SHERRIFFS: I defer. It must have 6 been mine. 7 CHAIR NICHOLS: Go ahead. 8 BOARD MEMBER TAKVORIAN: Thank you. Sorry, Mr. 9 Cannon. And thank you to Ms. Tomley also. It sounds like 10 there's a lot of great progress happening at both ports. 11 And I'm from San Diego, so, you know, you all lead the way 12 oftentimes, so we like to point to your successes. 13 MR. CANNON: We like working with Port of San 14 Diego as well. So they're part of CAPA and part of -- we 15 have good dialogue with them, so they're very helpful. 16 BOARD MEMBER TAKVORIAN: Great. Good. 17 And we are excited about the successes that you've made. 18 I find that there's a little bit of a disconnect though 19 with some of the timelines that are built into the State 20 It seems based on your testimony, an that of Ms. Plan. 21 Tomley that we could do better --22 MR. CANNON: Okay. BOARD MEMBER TAKVORIAN: -- particularly with the 23

at-berth requirements and the cargo handling, which are

often really big sources of emissions, so --

24

25

MR. CANNON: Are you referring to the proposed Clean Air Action Plan update? Is that what you're talking about?

BOARD MEMBER TAKVORIAN: I'm referring to the SIP.

MR. CANNON: Oh, the SIP, got it. Yes.

BOARD MEMBER TAKVORIAN: And so we're looking at requirements that are -- for the at-berth requirements to be at 50 percent by 2032. It seems like you're challenging that timeline already, and that we could do better with that, and that cargo handling isn't really included and should be, and that we should really get to like 100 percent compliance in the next decade at least.

So I just wanted to hear your thoughts about that, since you didn't comment on that directly.

MR. CANNON: Well, we agree. We think that both of those are important goals. The cargo handling equipment, we set a goal of being fully zero emissions by 2030. We're in discussions with industry about whether that's feasible, given the availability of technology. But if that is possible, if the technology is available, we believe that cargo handling equipment is the first place where fully battery electric or other types of zero emissions technologies are quite possible.

So we agree with you that it should happen as

fast as possible. We think that as soon as the technology is available and can be demonstrated to be feasible, it will be implemented. And we even think that we can push that a little bit by, you know, urging early introduction of this technology, so that industry begins to refine it and make it work better. So that's the first thing.

And as far as shore power, yes, we agree that we think that we should be able to increase the amount of shore power usage by non-container terminals. We think that the container terminals appear to be working and the container ships appear to be moving along the pathway toward meeting the State's shore power rule.

But we believe that for non-container terminals that's important too. The challenge, of course, is that the profit margins in those non-container terminals aren't the same. So it's hard to retrofit the ships, and that's why the comment that was raised a moment ago about the alternative technologies, the bonnet technologies is important.

We think that for non-container ships, those bonnet technologies are actually very, very viable, and very good. The issue with containers is that you're on a barge, and sometimes that barge gets in the way. But for non-container ships -- or terminals and ships, they can actually be on dock. And we think that that actually is a

very, very viable opportunity.

So we're pushing that, Long Beach is too, and so we do agree with you, but we are mindful of your comments, and we'll keep pushing as hard as we possibly can on those issues.

BOARD MEMBER TAKVORIAN: Thank you.

CHAIR NICHOLS: Okay. Thank you.

MR. QUINN: So I don't see Mike Lewis.

CHAIR NICHOLS: No, I don't see him either.

MR. QUINN: Bill Quinn with CCEEB, the California Council for Environmental and Economic Balance. And I want to say that in February CCEEB encouraged the South Coast Board to adopt the AQMP as originally proposed by the District staff, and should reject any last minute changes.

Stakeholders had worked hard for nearly four years to bring the Board -- District Board a good plan that we felt met all State and federal requirements, and fully fulfilled the commitment for an approvable AQMP.

As we know, the AQMD Board adopted the plan in March with several amendments, including amendments to control measures addressing the RECLAIM Program and indirect source rules. CCEEB does not support those amendments.

Further, we were highly concerned with the process that allowed the last minute introduction of these amendments without the clarity needed to fully understand the impact to the regulated community.

So saying that, in other areas, we are very pleased to see that the plan recognizes that many of emissions needed to meet attainment requirements come from State and federal sources that are beyond the District's direct authority, or they're very difficult sources to achieve emission reductions.

So for these sources, we fully support the AQMP's use of targeted incentive funding to help achieve these reductions. We have already committed to work with the district and we commit to you now to work with you and other stakeholders to help these needed incentive funds.

So thank you very much.

CHAIR NICHOLS: Thanks.

DR. AGUILAR: Good afternoon, Honorable members of CARB and, of course, the legendary Chair, Mary Nichols.

(Laughter.)

DR. AGUILAR: It is my privilege to speak to you today. My name is Dr. Felix Aguilar. I'm a practicing physician here in Southern California. And I treat, you know, patients who suffer the poor effects of the -- of poor quality -- air quality on a daily basis. I'm deeply

concerned about the public health impact.

And so those -- I have joined the American Lung Association doctor for Climate Health Campaign. And I also am a member of the Sierra Club. And as someone who lives in Southern California, as we all know one of the poorest air quality challenges in the country, and that has put us in a health crisis.

We know that statewide the freight sector it's estimated to cost about \$20 billion dollars in health damages. And here in Southern California, we have two large ports we heard about them. You know, of course, rail operations, warehousing, diesel emissions, all of those treat -- all of those threaten the health of the families and of my patients that I work with.

And in my clinic on a daily basis, the noise of an albuterol nebulizer like a nest of bees is a daily occurrence. And on personal basis, my daughter suffers of asthma. And on bad days she's unable to go to school.

And she comes to me asking me what's going on, dad?

For that, I believe that when we need to achieve zero emissions, and I'm wearing my little sticker about zero emission vehicles. So I want to emphasize the point that that is a way to reduce premature death, asthma attacks, heart attacks, and other impacts of poor air quality, diesel emissions, and other hot spots that we

have.

It is important that we drive down the emissions, and that there would bring policies to protect our -- you know, patients, our kids, and our families. This plan is a good start that needs a lot of follow-up. On a daily basis, I take care of patients. I help them, and I give them health care plans. Some of them aren't able to follow them, and they come back sicker and asking for relief, and we need to avoid that.

So, you know, as we said, I request that the Board move forward on a progress report and an ongoing care plan to ensure that we're making the progress in terms of cleaning up our air. And if not, start developing the rules to make up for any shortfalls of this plan that affect both Southern California and our State.

We need to know that my patients have a fighting chance when they leave my office, when they go home, they go to school, they go to work. It's the way for us to look for a healthier future.

Thank you so much.

(Applause.)

MS. GOLDMAN: Good afternoon. My name is Corie Goldman. I'm an advocacy director with the American Lung Association based out of our San Bernardino office.

I work and live in this region. On a personal

note, I have to say that the air quality issues that we are discussing here today have personally impacted my life, my family's life.

This morning, I just received a call regarding my aunt who suffers from a serious lung disease and who lives in San Bernardino, that she is on the donor list for a double lung transplant. And she received a call from UCLA this morning saying that she -- they found a pair of lungs.

So she is at UCLA right now waiting to go into surgery. And it's people like her who suffer from serious lung diseases that are significantly impacted by our poor air quality in this region. The American Lung Association is working every day to save lives, and doing this by improving lung health and reducing lung disease.

We view the South Coast AQMP as a vital plan to improve the health of millions of residents today and into the future. We appreciate the work that's been done to improve the plan over the past few months, including the retirement of RECLAIM. This is a big improvement, and a clear signal that we need to do more with direct regulation.

We support moving forward today with AQMP now, but we also ask for additional measures to strengthen and accelerate emission reductions throughout the region.

The American Lung Association's Annual State of the Air Report continues to show that Southern California is home to the most difficult air pollution challenges in the nation.

We need a massive transition to zero emissions throughout the region to get cleaner air. We are concerned with the tremendous emission impacts of warehouses and ports on our communities. And therefore, we encourage more attention to regulations on these sources that guarantee we get and stay on track in cleaning up our most dangerous pollution hot spots.

We urge the ARB to develop regulations to clean up the warehouses and ports that attract increasing numbers of truck trips and mobile sources of pollution. The State should commit to developing rules for these major pollution sources. We also urge an annual review of progress under the AQMP that's tied to clear benchmarks.

If funding and reductions are not sufficient, then the State needs to jump in right away, and -- right away with new regulatory measures to reduce emissions.

The communities and people who suffer from lung disease like my aunt in Southern California deserve cleaner air and a future free of lung disease.

We urge you to adopt a strong AQMP that will help make this future happen.

1 Thank you

(Applause.)

MS. DALE: Good afternoon. My name is Kathleen Dale. I'm a life-long resident of Moreno Valley, which is the next city east of here. When I first lived there, it was a farming community that was centered around March Air Force Base, and our city is now turning into a warehouse mecca. We're surrounded on the west and the south by warehouses that are not only in our own city but also in the adjoining cities and the unincorporated county area.

And our city council, in their questionable wisdom, recently rezoned the whole east end of our city for more warehouses. I think -- I've heard some things that I hope you're going to consider in your deliberations as we've -- I've been listening today.

And I guess the biggest questions that I'm hearing is whether or not the AQMP actually includes effective measures and whether or not those measures are feasible.

I think -- it seems that the AQMP and the SIP are focused on regional and statewide issues, but the plans and policies that you're considering have to effective in addressing the localized consequences of those pollution sources. And in our town, we're increasingly affected by the trucks that are drawn by the logistics industry,

I don't know if our regulations and our thought processes on this are keeping up, because when I think about is a truck a mobile source or a stationary source, I have to question what it is when I think about a warehouse, because it -- I think it's both. And so I hope maybe there will be some evolution in how we think about and regulate these sources.

I was looking at the staff report as I was sitting in the audience. And the AQMD's EIR concludes that air quality impacts are significant and unavoidable. And I guess I'm trying to understand how a plan that's effective or a plan that meets the requirements of the Clean Air Act could still have significant and unavoidable air quality impacts.

I worked for 35 years as a city planner and an environmental consultant. And as I was listening to things today, I was thinking about an old APA journal article that I read when I was a brand new planner. And there was a quote, and it said we're a major league at preparing plans, and we're minor league at adopting plans, and we're bush league at implementing plans.

It sounds like, you know, there's lots of reasons here for you to think about the plans that you're adopting today, and whether or not they're actually going to be effective in helping the people that you've heard from

today who are dealing with the real consequences of poor air quality in their own neighborhoods.

Thank you very much.

(Applause.)

MR. HAGUE: Welcome to the area. My name is George Hague. I'm also a resident of Moreno Valley, 10, 15 minutes east of where you are right now.

I also strongly support indirect source rules that are actually implemented and enforceable. We hope you will somehow make sure that South Coast Air Quality Management District does regulate the logistics industry, because at the last speak -- said, we're being surrounded. We're being inundated by the big boxes, millions of square feet, and the tens of thousands of trucks.

She mentioned the east end of Moreno Valley recently being rezoned. Forty plus million square feet of warehousing was approved called the World Logistics Center, which will bring more than 14,000 daily truck trips to our area, to this city, and to the Inland Empire.

The World Logistics Center EIR -- and even if they promise 2010 trucks, they are cleaner. They're not clean. They will continue to pollute, and we need the zero emissions.

But the World Logistics Center also explained in their EIR that sound walls will be needed on the backyards

of miles and miles in Moreno Valley. And that's to protect the people from the sound of the traffic that will be generated by these 14,000 trucks trips each day, but that doesn't stop the pollution from wafting over these walls into the homes where the young and the elderly are there.

Moreno Valley truck routes themselves are a problem. They have one truck route that goes past three schools, and yet the trucks still use this truck route. It should be a rule that none of them go by any schools.

The World Logistics Center will also impact a world class San Jacinto Wildlife Area. It will share a two-mile border with this 10,000 acre partial mitigation for the State water project. The State has spent \$80 million to put together the San Jacinto Wildlife Area. And yet, the World Logistics Center two-mile border with this project will impact the threatened and endangered species that the State of California has put land aside to protect.

And yet, the pollution that affects us, and you've heard it all day long, will also affect these plants and animals that are endangered and threatened.

Hopefully, you have heard the people who have to live and breathe this pollution throughout the day, and they are suffering.

I was a classroom teacher for 40 years. I watched my children suffer with asthma.

Thank you.

(Applause.)

MS. KAVEZADE: Hi, everyone. I'm up to speak, but I'd like to give it up to Ms. Whitehorse over here to take my place.

MS. WHITEHORSE: Hi. Good afternoon. (Spoke in native language.)

Madam Chair, ladies and gentlemen of the Board, my name is Nancy Whitehorse. I'm a full blood member of Cheyenne River Sioux Tribe located in South Dakota. I'm the liaison for the Los Angeles City County Native American Indian Commission as well as a mom.

I'm here today to encourage the Board to pass an AQMD that protects people. A couple years ago, I moved back to South Dakota, which is where I'm from to be with my family. My dad was passing away from cancer. I was basically back there to bury him.

Fortunately, the cancer was not progressing, so I decided to move back to California. That's when I noticed our -- mine and my daughter's cough. I'm pretty sure it's due to living near the freeway. I'm just here to encourage you all to clean up the cars and all the trucks that this Board needs to regulate.

I am actually currently and advocate for solar power on my reservation. We just started last week install solar pans on residential units. So I hope that you guys are able to do the same and clean the air.

Thank you.

(Applause.)

MR. EDER: Good afternoon. I'm disappointed there's so few of you here. You should have planned for a large group and gave us time to speak.

I'm Harvey Eder. I'm with the Public Solar Power Coalition. I'm speaking for myself, and for PSPC. We're against this plan. This plan needs to be an immediate total solar conversion. On page 10-2 on energy and climate written by Dr. Aaron Katzenstein says that there's been a 30 percent increase in methane in less than 12 years.

At a board committee meeting on the 13th of January, he said there will be from -- there are now from 750 to 800 parts per million CO2 equivalent -- those are numbers we weren't supposed to get till 2100. These are the facts. This is now.

The plan, the scoping plan, the local plans are off. You're supposed to get 90 -- 40 percent reduction by 2030, 1990 levels. That's increased by 100 or 200 parts per million CO2 equivalent. We need immediate solar

conversion now. This is no game. This plan -- the SIP and the environmental document were written in March, two -- several months before the District's plan was out in July, August, and September. The CEQA document is supposed to look alternatives, and the local plans said they were looking at it. It was garbage. They omitted DOE's sunshine program, and Delucchi/Jacobson's solar conversion for California.

The comments that we made were ignored. This is an illegal plan. You can't do an evaluation of a State plan before the plan is out. They didn't look at the solar alternative. They just ignored it.

And as we said -- we've litigated three times.

In '92, the '12 plan, and are looking seriously at litigating now. We'd like to have help from the so-called environmental groups that come to these meetings, but that's yet to be seen.

There's big, big problems here, and we've got to address them instead of just ignoring them. In the House of Brown, who's back east representing us, we've got his -- his sister and their family got their money from natural gas. In Asia, so-called politically questionably people and now Ms. Brown is on the Board of Sempra, and the gas company, and San Diego Gas and Electric. They're lobbying against CCAs.

We need community control. We need it as soon as -- okay. There's \$57 billion to spend a year on fuels in the district. Thirty years -- this only goes -- your numbers only go to 15 years. You've got to go -- the life of the solar system is from 30 to 50 years. At 30 years, it's about \$1.8 trillion.

Also, a social cost. You only go 15 years out. You say there's \$9 million cost for premature death. The State plan says there's 7,500 deaths, 4,000 of those which come from the District. The District only uses 1,600 deaths a year. The 4,000 is \$36 billion a year times 13 years, that's another trillion dollars in social costs. There's also the cost of waiting around in traffic, and there's other costs of the so-called renewable natural gas, which is spreading drug resistant antibiotics.

All this stuff is in the plan and in comments to the plan, and we're ignored by the district and ignored by you. The only thing you understand is fighting, and I guess that's litigating. These are captured agencies.

MS. INMAN: Good afternoon, Chair Nichols, and ARB Board Members. I'm Fran Inman, Majestic Realty.

Majestic is a long-term California based company with 90 million square feet of commercial real estate.

And I can tell you we've been at the table a long time.

We're active members of our communities. I'm chair of our

corporate foundation, and we are always pushing to make our communities stronger.

I think we've heard today, and what's before you, is evidence of collaboration. And I have worked as part of the regional transportation plan development, the Sustainable Communities Strategies, the AQMP, and with your staff on a regular basis. I think I have the honor of serving on all 3 -- on committees and task force on all three legs of the Governor's Executive Order for Sustainable Freight.

And I'm happy to be there, and I think that that collaboration is what we all need to do. These are difficult challenging goals and objectives for all of us. And the only way we're going to get there, I think, is through collaboration.

So our company had challenges with the last minute amendments that came before the AQMP. We've been at the table working on the committees for four years and we're saddened to see those come in, not as part of the efforts that we've been going through.

We also have concerns -- we've been actively working with the Ontario Airport to take control back in the Inland Empire. We think that that asset really needs to grow. And so we're concerned that anything we do don't help us achieve those goals, because if anybody has seen

the numbers, and I think you all, if you're trying to get back to Sacramento tomorrow will see that we don't have enough flights and enough activity at that airport. So we really do need to continue to improve that.

We think that the Indirect Source Rule is not going to help us achieve our goals. We're concerned with the 25 percent freight efficiency goal that we have in the Sustainable Freight Strategy will be difficult if we start diverting cargo. So we'd be hesitant there.

So I just want to remind you that freight is the economy in motion. And we've heard earlier today that we would have to close all businesses and we still couldn't get to our goals of removing all the emissions.

So happy to be here and look forward to continue working with your staff.

CHAIR NICHOLS: Thanks.

I want to just say one word, Fran. Go ahead and sit down. This is really -- because several other people have made this comment about process and -- it always -- as a lawyer, I guess I'm always immediately reacting to those kinds of comments, and especially because, you know, this AQMP and a lot of the work that we've been doing over the last few years has based on -- has been based on so many work groups and discussions, and so much time that people, including my staff, but also including

stakeholders, such as yourself, have put into developing plans.

And I can understand why it's frustrating when changes then get introduced sort of late in the process, which have not gone through that same kind of a discussion and vetting.

On the other hand, I have to say, you know, as an appointee and a member of the Board, we're not chopped liver either. We're here to apply a political filter, if you will, to the results of all of this work. And so while it -- I would agree that it would be better if, you know, everything had been all perfectly planned out in advance, I just want to put down a marker here in defense of the Board of the South Coast District, since my colleague and friend Judy may not feel like she needs to defend them or wants to.

But, you know, people who agree to serve on boards like the AQMD also put in their time getting prepared and understanding the issues, and work hard to get elected to the positions that enable them to be appointed in the first place.

And so I just don't want to de-legitimize the decisions that were made there. I think we can deal with this AQMP on its -- on its merits.

So that's all I really wanted to say.

Judy, did you wish to be heard also?

Go ahead.

BOARD MEMBER MITCHELL: I want to say that, you know, I've heard some of these complaints about the process, but I also want to say that the motions that were made, the amendments, the -- all of those issues were raised in the document. They weren't -- they were in the document. They came up again as amendments to so solidify what was already in the document, so -- and later -- I don't know if this is the time, but I will ask the attorney for the AQMP -- D to come forward and talk about that issue on the process, if that would be helpful.

CHAIR NICHOLS: Thank you. I just couldn't -- couldn't resist.

Mr. Shimoda.

MR. SHIMODA: Thank you, Chairman Nichols. Chris Shimoda, California Trucking Association. We here today to express our concerns regarding Indirect Source Rules. Today, goods are moved by trucks that virtually eliminate diesel soot, and reduce emissions of NOx by over 90 percent.

Existing regulations, such as your Truck and Bus Rule, will ensure that all trucks on the road meet these stringent standards by the year 2023. And we continue to work with your staff to fully implement that regulation.

The State Implementation Plan before you today, as well as the AQMP as drafted, calls for aggressive new engine standards: Inspection and maintenance of existing engines to reduce in-use emissions, incentives for small businesses that deploy near zero emission vehicles, and the early commercial deployment of next generation zero emission technologies.

Commercializing advanced near zero emission and electric drive capable vehicles will require close collaboration of vehicle manufacturers, fleets, utilities in the public sector.

Since last year, The CTA has been working very closely with your staff on these efforts. And I have to say that Indirect Source Rules will be a distraction, and which will stifle needed innovation. We're putting all our efforts forth towards trying to get these advanced technology vehicles on the road. Reducing the economic activity of freight facilities will jeopardize the middle class blue collar jobs our industry supports.

The Governor's Freight Executive Order said roughly a third of the economy in jobs of the State of California are freight dependent, and will not make advanced technology vehicles anymore commercially viable than they are today.

The goods movement and regional business

community has been united in this message for several years now. Indirect Source Rules are not the answer.

Thank you.

MR. HERZOG: Chair Nichols, member of the Boards[sic], my name is Peter Herzog. I'm with the NAIOP, the commercial real estate development association representing the chapters here in the four-county area.

It's a pleasure to be with you today. And I think first we should kind of go back just a little bit. Your staff and the AQMD staff have clearly pointed out in their presentations that this is a regulatory document.

And, in fact, over the last five to six months, Dr. Fine has testified in numerous locations and had numerous discussions about the fact how he looked under every rock humanly possible to find things that were feasible and reasonable that could legally be placed into the AQMP. He has made it very clear that he has placed all of those in this AQMP. This is a regulatory document.

And we are very pleased the fact that the AQMP -- AQMD has pushed the collaborative process.

Yes, we have concerns, and one is certainly surrounding the ISRs. And to keep this short, Merely adopt the comments of Mr. Cannon and Ms. Tomley, Mr. Quinn, and Mr. Shimoda with regards to ISRs. I wholeheartedly agree, and we certainly appreciate the fact

that Ms. Mitchell did vote against those three measures when the AQMP was approved.

The fact of the matter is is that what our concern was was the fact that the specific amendments could not be discussed. There was no study of them.

There was no analysis of those specific amendments. And that's part of the public process that needs to have happen.

I also wanted to just point out that this is all not going on in a silo. There's a huge effort dealing with the freight system in this State, and in this region. That's the California Freight Action Plan. That has been an ongoing process since this organization, the ARB is deeply involved in, has been for some time, and will continue to be.

That has three legs, both emissions, efficiency, as well as increase the competitiveness. That is one of the government -- Governor's Executive Order requests. So there, all aspects are being looked at. And that is the appropriate place to discuss any additional matters that might be useful in cleaning up the air surrounding the freight system, not to add something today, not to give any directives today.

Use what is already in existence. Let's not confuse the issue with a whole bunch of things going on in

multiple places and nobody can connect the dots because it's all over the State.

And finally, there's been some comments about the economics of the logistics industry. Governor Brown specifically indicated that the logistics industry is one-third of the California economy both in numbers and jobs.

That was 6, 700 billion dollars and five million jobs in 2013. That's not industry talking. That's not any economist that's. That's your Governor.

And finally, I believe that both the ARB and AQMD have said, and I'll close, that the real focus here should be on the technology. And as Mr. Shimoda pointed out, we need to focus on that. Let's look at the technology. Let's work on that technology. That's really the way to get to the future.

Thank you very much.

(Applause.)

MS. THOMAS: Good afternoon, Board members and staff. My name is Taylor Thomas. I'm a resident of Long Beach and a member of East Yard Communities for Environmental Justice based in the L.A. area. And we submitted comments along with other community groups expressing our concerns over this plan.

There's an overreliance on imaginary incentives

and lacks mandates. And this plan is nothing more than a compendium of wishes and empty promises that will further devastate our communities.

The people who will be affected most by this are more than numbers on a page or data on a chart. As I live and breathe, we are mothers, fathers, sisters, brothers and workers just like you, and just like all of you, but we have to live our lives in the shadow of industry's hopes.

With the quality of our lives, there's never a guarantee of good health. So I want to be able to go back to my community members and tell them that you did the right thing, and acted to protect public health. Our lives are literally at stake.

Please revise the SIP to include the necessary commitments that we need, and I'd also -- with all due respect to Heather from the Port, she's one of the most amenable people to work with at the Port, but I need to push back on the comments around the Clean Air Action Plan, because it's a guidance document. It's not enforceable.

So when those promises aren't delivered, we don't have any recourse to hold the ports accountable. And also too, the point about the truck drivers, at least in the harbor area there are a lot of truck drivers who are

misclassified as independent owner/operators, and many of them end up actually either owing money to their trucking company or going home with very little, you know, dollars on the cents after several hours of work.

Many of them can't afford to pick up other jobs, but because of the way that their employment is structured, they're earning poverty wages. So I -- we need to call a spade a spade, and be very clear about what types of jobs and -- we're supporting, and how we want to move forward collectively as a State.

Thank you.

(Applause.)

MR. SILVA: Good afternoon, Chair Nichols, who just left, and. My name is Andy Silva. I'm with the County of San Bernardino. I work in the County Administrative Office. Supervisor Janice Rutherford sits on the South Coast Board, and I also help out as staff in her role as South Coast AQMD member.

I'm going to strike a little hopeful note to start off. Some of the interesting projects we have going on in the Inland Empire, in Perris, in Riverside County, there's a facility that takes biosolids, creates renewable natural gas, and powers their entire waste pick-up fleet with renewable natural gas.

We've got a similar project that was just

permitted in Rialto in our county, my hometown. Just last week, Supervisor Rutherford toured a brand new warehouse in Fontana that has a 600-kilowatt solar array. And that solar array will recharge fully electric drayage trucks, and fully electric forklifts. And also just speaking about solar and renewable energy, Riverside and San Bernardino County are far and away the leader in those categories.

And thanks again for deciding to put your research facility in Riverside. CE-CERT is like my favorite place.

Quickly, a little bit about the demographics of the Inland Empire. More than 50 percent of our residents do not have a college degree. We're -- high rates of poverty. If you look at CalEnviroScreen and those little red things that mean you have high pollution burden, and low income, the Inland Empire has a lot of those red squares.

In the past few years, 25 percent of the jobs created have been in logistics. That is the growth sector. So my board of supervisors, one of their biggest priorities is economic development. So we just want to be mindful as we consider additional rules and regulations, that we consider the economic impact, and make sure that our residents do have access to jobs and the economy

that's developing. So we just ask that you be mindful of that.

Thank you.

(Applause.)

MR. ANDERSON: I'm urging that this fan -- plan does not get implemented until there is a funding plan put into place. Currently, the AQMD has been kicking around a bond issue, a \$0.02 cents a gallon increase on gas a \$0.20 additional fee for licenses. Some of that won't be acceptable to a lot of people.

And one of them is is that none of us really want to sub -- any more subsidies for business. I personally do not want to subsidize businesses that pollute. And that should be a part of their business plan before they set up. That is nothing that the AQMD or CARB should approve. And you can't approve this plan right now. This is a plan that doesn't exist because the funding that they're proposing is unacceptable.

The federal government isn't going to have money with all the cutbacks they have. The State isn't going to have a lot of money with all of the things that they're going to have to make up. So where is the funding going to come from for this?

The polluters need to assume responsibility for the pollution that they bring about and not the public, or

to put it personally, not myself.

Thank you.

(Applause.)

MR. NEWELL: Good afternoon, Madam Vice Chair, members of the Board. My name is Brent Newell. I'm with the Center on Race, Poverty and the Environment. I'm rising today in support of the environmental justice organizations who have been calling for zero emission vehicles for freight, as part of the State strategy.

It's an exceptionally important issue here in the South Coast. It's also extremely important in the San Joaquin Valley, where diesel trucks are a main contributor to both fine particulate matter and ozone pollution. But this desire to go to natural gas, and, you know, the linkage to the short-lived climate pollutant plan, Senate Bill 1383 using dairies as a source of natural gas, through anaerobic digestion and public funding of those anaerobic digestion -- digesters is exactly the wrong kind of policy.

Because throwing money at dairies to generate natural gas, subsidizes those facilities, and it doesn't address the air pollution that they create in that air basin. Dairies are there number one source of ammonia, precursor to the largest fraction of fine particle matter in the San Joaquin Valley Air Basin. They're the largest

source of VOC. These unlined manure lagoons that emit the methane and emit the ammonia discharge nitrates into groundwater.

You know, subsidizing that industry to do this half measure of natural gas powered vehicles is just wrong-headed. You know, this State strategy ought to be taking California to the 2050 decarbonized economy, zero emission vehicles, dairies that aren't fouling up one of the worst air basins in the country, it's absolutely the wrong way to go.

Finally, the plan needs to be enforceable. The Clean Air Act says that plans to attain the ambient air quality standards have to be enforceable. Having incentives, discretionary components violates the Clean Air Act. It's that -- that simple.

So please make this plan do what it needs to do for the people of California.

Thank you.

MS. GALE: Good afternoon, Board members. My name is Genevieve Gale. I represent the Central Valley Air Quality Coalition, and I also represent the Coalition for Clean Air on matters pertaining to the PM2.5 plan. I would like to speak today on the connection between the Mobile Source Strategy and the State SIP and San Joaquin Valley needs.

But foremost, I would like to thank the Board for their ruling last October that mandated a more robust planning process on PM2.5 in the valley. This has kicked off a very important public process, and I cannot stress enough the value added by ARB staff.

I'd especially like to call out a Karen Magliano who has provided her expertise and assistance all along the way. Since that ruling, we've had multiple public workshops and a series of public advisory work groups.

And ARB staff have laid out a pathway to attainment. This pathway includes a 30 ton per day reduction of NOx. And ARB is responsible for about 85 percent of NOx emissions in the Valley. So control measures will have to come from this agency. And unfortunately, the Mobile Source Strategy as it laid out today does not get us to that goal.

So advocates and ARB staff agree that we're going to de -- going to need to do more in the coming months.

And opportunities for reductions lie in what ARB staff would like to target, including heavy-duty diesel trucks, and construction equipment, and zero emission vehicles.

But also, I'd like to note that there are opportunities that lie in unregulated sources of emissions in the valley that ARB staff have not wanted to target.

And this includes agricultural equipment. Agricultural

equipment has been heavily incentivized in the valley, but has not seen any regulations. Advocates have been asking for regulations on tractors, which are the second largest source of NOx emissions in the valley.

So one of our asks today is that we see an inventory ag equipment in the valley. I'd also like to note on diesel powered drilling rigs are also large sources of NOx. So we look forward to seeing those commitments in the future. And thank the Board again for their ruling last year.

Thank you.

VICE CHAIR BERG: Yes, sir. It's right there for you.

MR. HERNANDEZ: Hello. Good afternoon. My name is Santiago Hernandez. I live for a quarter of a century on Moreno Valley, California, and I -- when I just moved there 25 years ago. I commute every day to my work, two hours one way. I don't want that to happen to my kids or my grandkids. Then in a couple of years ago come the World Logistics Center project that I support all the way.

And last year, we approved it, that project. The citizens of Moreno Valley approve it. And our developer Highland Fairview who got the best builder in the west coast -- I mean -- yeah, the west coast of the United States.

For example, the sketcher, they call it warehouse. I call it a piece of art, because they're green friendly, energy efficient, and lead free. So there's one example of what's going to build on World Logistics Center. So those associations or groups, the CCAEJ, they oppose it, or sue our city. They're suing our, the residents of Moreno Valley, the citizens. They're not suing the city, because everybody approve it, all the citizens. So if they go against us, remember that they respect of the rights of others is a piece. Thank you.

(Applause.)

MR. WRIGHT: Chairman, Board, glad to be here. Frank Wright, resident of Moreno Valley. I'm here to support the Logistic World Center. It's unfortunate the lady -- many of the residents of San Bernardino live in conditions where they're heavily congested with industry, such as the railroads, but they're forced to live in conditions because of their lack of having proper jobs and the education.

The World Logistics Center has taken this in will and compensation. Sixty percent of the people in Moreno Valley are Latin people. And the mayor and three members of the Board are all Latinos, and these people are crying for new jobs, and to be able to eliminate commuting 60

miles a day away from their families.

The whole program there is to get the families close together and united, and get them better jobs, employment. The warehouse is not just only just warehouses for drawing in private industries, which bring in more jobs, well paid jobs, not menial jobs, but if you -- you have from laborers, to technicians, and to supervisors. All types of jobs available.

Progress is inevitable. In every city it's going to happen. We're going to change. It's also -- Mr. Ito Bensedy[phonetic] has already taken care of with the agencies, like the one that we just talked to here, considering the conditions of the trucks coming in. There will be a lot of trucks, but they're designed to enforce to be low image -- emission, which another agency progress had just mentioned.

So the program there is to enhance the livelihood of people, even for the people here in San Bernardino, that can be progress to a better way of life, and also to educate the kids coming out of our high school, so they can have a well educated job right there in the city instead of having to go out of town to find another job.

So the education is there is involved too. Plus, all the good work that people can have. You know, fine lifestyle. That's the importance of it right then and

there.

So with all of that, even with the help of the trucking situation, all those problems will be worked out. When the Golden Gate Bridge and the Bay Bridge in San Francisco were developed, it was big problems, but they all were worked out. We can do the same in Moreno Valley. We might even have our own airport eventually, but that's the progress to motivate the people and that's we're asking that you recognize.

Thank you so much.

11 (Applause.)

12 VICE CHAIR BERG: Thank you, Mr. Wright.

MR. OKUROWSKI: Is Dr. Aguilar here?

VICE CHAIR BERG: No, I'm sorry. He already

15 went.

MR. OKUROWSKI: Thank you.

VICE CHAIR NICHOLS: Thank you.

MR. OKUROWSKI: Members of the Board, my name is Peter Okurowski. I'm here on behalf of the Association of American Railroads, Union Pacific Railroad, and BNSF Railway.

We've been working voluntarily with CARB for over 20 years, and we've met every requirement of our voluntary enforceable agreements, and we've cut our NOx by over 70 percent since 2000. We support the adoption of the AQMP

and the mobile sources measures today. And we continue to join with our goods movement partners to strongly oppose indirect source rules.

Indirect source rules will have a chilling effect on job growth, will lead to increased vehicle miles traveled and emissions, will likely increase the cost of rail transportation, and will stifle innovation and collaboration.

We also believe that ARB lacks the authority to establish emission reduction targets or Indirect Source Rules for railyards.

Finally, ARB, Caltrans, and GoBiz and working to implement the Sustainable Freight Action Plan. And we believe that any discussion of indirect source rules or facility cap concepts should be discussed in that forum.

Thank you very much.

MR. CHATTOM: Good afternoon. My name is Mike Chattom from the Watts Area Neighborhood Council, as well as from the Watts area. That is one of the most polluted areas in the nation. Unlike what the gentleman just said before, I see the train go right down the street on the Alameda corridor every day.

And I'm sorry to say that it's very polluting, and a lot of our children, who are in the Watts area, breathe these components of agents that come from these

trains. So unfortunately, we want to eliminate all type of contaminants that comes from those trains that inhibit our children who have more respiratory issues than probably any other area in the nation.

Me and Ms. Gordon, the lady that was here a couple hours ago, went to the Crescent City Foundation in Chicago, Illinois and studied this issue for four days. And unfortunately, these in-house warehousing people who receive these products from these trains have polluted the area. And they have a tendency to have a lot of greed. And greed, as Michael Douglas said, is not good. And I'm not here to tell you something that's unfactual. I see it each and every day.

So again, we're here to convince you to adhere to the regulations stringently, and give us the results that we're looking for to have a better tomorrow for our children.

And I'm asking you and pleading that urge you to do the right thing. Spike Lee started that. Thank you.

(Applause.)

VICE CHAIR BERG: Thank you, Mr. Chattom.

While the next speaker comes up, I'm going to go ahead and call for the last -- anybody who hasn't signed up, would you please sign up. We're going to go ahead and cut off the testimony here in the next couple of minutes.

So if you haven't signed up, please do so, and then we will right now finish up with, at the end, Pedro Garcia will be our last, if no one else signs up.

So is Nancy Whitehorse?

MS. SILVA: She spoke.

VICE CHAIR BERG: And we've got Joana Silva, she spoke.

Joana Silva.

Okay. Thomas.

MR. JELENIC: Good afternoon. Thomas Jelenic with the Pacific Merchant Shipping Association. As you've already heard from Chris Cannon and Heather Tomley today, the maritime industry has achieved incredible success in reducing emissions. Diesel particulate matter has already been reduced by 85 percent.

This was achieved even though the industry has not recovered from the great recession. Nearly a decade on, San Pedro Bay -- the San Pedro Bay Port complex has not recovered to their pre-recession levels.

So it's amazing that we've been able to achieve this great success with -- without the growth that we were hoping for. But today, we're here to ask that this Board not consider Indirect Source Rules. ISRs do not provide the necessary tools to reduce emissions. ISRs will not provide new engine standards. ISRs will not provide new

technology. ISRs will have unintended consequences. And ISRs will result in cargo diversion.

You've heard that cargo can't go elsewhere. This is just wrong. Southern California has already lost significant market share over the past decade. That is lost jobs, and lost economic activity.

Instead, we ask the California Air Resources
Board to continue the collaborative work on the
Sustainable Freight Action Plan. Initiated by the
Governor, the Sustainable Freight Action Plan takes a
comprehensive approach looking at air quality, efficiency,
and competitiveness.

We ask that the Board continue to make use of the current programs, and not consider ISRs that will only delay further emission reductions.

Thank you.

VICE CHAIR BERG: Thank you.

MR. BRUGUERAS: Good afternoon, Supervisors,
Chair. My name is Rafael Brugueras. And I live in Moreno
Valley. I want to start with my conclusion. I want to
start with the ending of my story, so I can bring you to
the beginning of why I'm here.

As an activist, I prepare communities for growth and change. Their views -- my views help citizens have input and help county governing boards make informed

decisions.

Okay. The impact of good planning may take some years to be recognized. And orderly growth pattern takes time as well as input from the people who care about their communities.

I am one of them. I fight for jobs. I love development, because without development, we don't have what we have today, or you don't live in what you have today. Okay.

There's another thing that I learned today in the last few years, I became an intern about asthma. I asked Google to help me to understand what that meant. My rubber band holds up my phone, because I'm not here to please anyone, but to inform you that asthma comes in many different shapes and forms, not only air, but part weeds, dust, being in a closed room, eating the wrong food, okay?

There's different kind of asthmas. I do have passion for those that passed away. Really, I really do. I'm sorry for their loss. But don't blame air for all the problems, because we just heard from professional men and women that we're doing better, and we're continue to do better as long as you have an open mind to what you hear tonight, today, this afternoon.

I'm nobody, but I know when I hear truth, and I fight for truth. In Moreno Valley, Mr. George Hague

mentioned the World Logistics Center. That's a project that I fought for, because I was in my own room minding my own business until somebody knocked on my door and I went across the street to see that project, and I thought wow, 20,000 jobs. See, I work for Ralphs Food 4 Less for 30 years in a warehouse and I retired in 2010. And I left in 2009 with \$88,000. I worked hard, real hard, something that my mother thought me. And that's why I'm here, because of her, because she taught me how to work hard.

So I believe your staff. They work very hard to put this proposal together to show you that there's another direction that we can go. So if we incentivize people to do better, because I work for incentive. Boy, you pay me an extra hour or two, I had a day off or I gained some money. That's how I made \$88,000.

I work very hard, but it cost me. It cost me to retire. And that's okay. I'm happy with my little pension and my medical. That's the point of working. There's a point of big warehouses. Of all the grief, I could have been a supervisor or manager, but I chose not too. I like going home at 5:30. I didn't have to be a manager to be off Tuesdays and Wednesdays, you know. I work for my incentive, my seniority.

So anyway, Moreno Valley is a greenhouse. We fight for development. We fight for environment. We do

not allow any company to come in and restore our cities.

VICE CHAIR BERG: Thank you very much.

(Applause.)

VICE CHAIR BERG: We have two last speakers. And so we're cutting off the -- being able to sign up for anybody else. Let's have Pedro Garcia I think is going to come up, and we have someone translating?

MR. GARCIA(through translator): Thank you for the opportunity. My name is Pedro Garcia. I'm a resident of the Moreno Valley, and I respect the comments against the World Logistics Center project, but I do not agree with them. My position is towards the creation of more jobs in our community. I understand that it's important to take care of our health with good air quality, but caring for the emotional health of families is also important. And economic support will create this with more jobs.

Remember that depression is one of the biggest sicknesses on a worldwide level, and the creation of more jobs is what will support the families. My position is to create more jobs in Moreno valley.

Thank you.

(Applause.)

CHAIR NICHOLS: We have one last speaker, I believe. Mr. Katz. You are the last person who signed up

to speak.

MR. KATZ: Hello, my name is Gerald Katz. I live in Perris, California. I started in environmental work in the early seventies and got my degree in health and human environment from San Bernardino State University. And it was an integrated approach that air, water, pollute -- and the on-the-job hazards, prenatal health care nutrition. These were all integrated things for -- to protect the health and that health was even just not the absence of disease. It was a positive social, psychological, spiritual well-being a positive thing.

And we were also taught that, you know, in the section on occupational health is -- you know, it's dangerous if someone is in a hazardous environment. It's not good for their health to be breathing toxins. It's also not good for their health to be unemployed. So rather than stop things, we were encouraged to be creative, to be make creative solutions that would not only keep jobs, that would expand the economy, that would be more productive by taking something that would be a waste or a pollutant and making it something of value.

And I did actually -- and I worked for 10 years in San Bernardino for a community development, where we were training young people for the coming solar industry, insulating homes, rebuilding derelict housing. And then

for 20 years, I worked for utilities. I also worked for Edison for a while, contracts with SoCalGas, Sandia Labs, the State of California.

And the programs we implemented in the City of Colton, we had a pot of money a small percentage, and that went for public goods funds, and we would invest that back to the customers to help them pay for improvements. And we got -- and sometimes it took us, I remember, you know, one company we went to about lighting in their building, changing it. And it took them 10 years to realize they would save a lot of money if they did that. So it takes time, but the innovations that happens.

And I'm wondering whether this plan is setting the goals in what is going to be done for the next 10, 20 years or will it be flexible through the legislature or other means as new problems, because I did notice somethings were emitted. I was reading through it and I've been working with people at the Salton Sea about creating solar sustainable communities using all of that solar energy, the geothermal to bring industry there using clean energy, desalinating the water.

And you might have heard about the dust problems there. And I didn't notice that, when I saw Coachella is on this, and there's nothing about PM2.5 -- when I started, it was 10, now we're down to 2.5 There is

nothing on that about dealing with that issue. So I want to know that as new problems become aware, this can be added to it.

Is new solutions? You know, 10 years ago an LED flashlight was \$25, and now, -- we were giving them away, after we found out the LED -- the compact fluorescents people mercury, mercury.

But I hope that you will consider that this should be open for changes for -- as we become aware of new problems, and make it so that new solutions, and some enforcement, especially if you can take some money for the pollution, put it into a fund and say you're ready to make a change here it is.

CHAIR NICHOLS: Thank you. Your time is up.

Okay. We have a board member's light flashing somewhere or is this -- this system is a little odd.

BOARD MEMBER MITCHELL: Judy.

CHAIR NICHOLS: Judy, your name did not come up. Okay. Hi.

BOARD MEMBER MITCHELL: I think with the close of the testimony Madam Chair, I'd like to ask Barbara Baird to come to the podium and address two issues. One was the process issue that people have raised regarding the amendments made at the end of the -- at our final hearing on this.

And the other issue is the funding plan and the incentive measures, and how that fits into the AQMP, whether it's part of the AQMP, whether it is not. And Barbara can address both of those for us.

CHAIR NICHOLS: Okay. So just to be clear then, we are closing testimony at this time. And we'll be turning then to discussion.

So welcome.

MS. BAIRD: Thank you, Chair Nichols and other members of the Board. Yes, I would like to address the issue raised concerning the amendments that were approved by the governing board. The federal and State case law is very clear that agencies are not required to adopt exactly what is proposed to them. The tests are phrased slightly differently under federal and State law, but it's our view that the tests were satisfied in both cases.

Under the federal requirements, which we look to, because this is a SIP revision, which is a federal measure. The federal courts of appeal say that agencies are free, indeed they are encouraged, to modify proposed rules as a result of comments they receive. Thus, a final rule is proper if it is a logical outgrowth of the proposal, meaning that interested parties should have anticipated that such a change was possible, and that they should comment on it.

And as Board Member Mitchell mentioned, the issues both with respect to RECLAIM and with respect to the Indirect Source Measures were raised. And, in fact, people did comment against both of those proposals during the rulemaking process. And that's the case of Northeast Maryland Waste Disposal Authority versus EPA.

Under State law, the governing standard for the South Coast plan is not specified by statute, so we look for applicable case law, which was actually established with respect to an action taken by this Board years ago, Western Oil and Gas versus Air Resources Board. And the State Supreme Court said that one of the purposes of the hearing process is the eventual adoption of a regulation different from that described in the prehearing notice.

To require a new notice and hearing would tie the agency into timing-consuming circular proceedings.

Accordingly, the regulation may not be the same as proposed, as long as it deals with the same issue or subject.

And so although the statute has been amended under the administrative procedures act with regard to your Board's rulemaking, this remains the applicable standard. And as was mentioned, these issues were both adequately discussed during the rulemaking -- during the plan development process.

Finally, although the actual motions were not made until the February meeting, both Supervisor Kuehl and Board Member Mitchell did discuss that they intended to make these motions at the February meeting. The District staff announced that we would accept written comment letters in between the February and March meetings, so people did have an additional opportunity to comment, which was not required by statute.

The second issue that I wanted to address, when the Board was discussing the fact that the funding plan is not before the Board, and it's not technically a part of the plan, I think Board Member Takvorian raised a concern. And also a commenter raised a concern is -- which I paraphrased as is the plan really complete, and approvable without the incentive plan being part of it?

And the answer is yes. First of all, some of the incentive measures, such as the Carl Moyer Program and the District's SOON Program, which feeds off of one of your rules, have funding programs already in place and have already been approved by EPA.

But more fundamentally, EPA expects to approve, as much as possible of this plan, under the traditional criteria, which would include fully funded measures. And as well as enforceable commitments to adopt measures, both of which are in the plan. And this is not a one-time

decision today. We're not -- we're -- EPA is not going to judge by what has been funded today, the day your Board adopts the plan, but rather what has been funded by the time EPA takes final action.

So as funding is identified over the course of the period of time that EPA takes action, they will approve measures that are fully funded. But most importantly, for the remainder of the measures, which are the your Board's further deployment measures, as well as federal and international measures, EPA expects to approve them under Section 182(e)(5), if they haven't been fully funded by the time of action on the plan.

And that, of course, is the provision that some people call the black box. But for this approval mechanism, it's not necessary to show that funding is available before EPA approves the measures in the plan.

They can approve those measures under 182(e)(5), and we will then have the opportunity to implement the measures over time as funding is identified. It's an iterative process that is -- and a ongoing process that is anticipated.

So with that, I'd be happy to answer any questions on those subjects or others that the Board members have for the South Coast.

VICE CHAIR BERG: Thank you so much for that

explanation. Could you also just make a comment on time after time we heard that the plan is not enforceable, and -- and give us your view on obviously why it is enforceable and does meet the criteria of an approvable plan?

MS. BAIRD: So with we respect to the traditional measures that EPA approves, as well as the enforceable commitments to adopt measures, for example, we have enforceable commitment to adopt a RECLAIM measure, those are directly enforceable in court. And if we don't undertake an action to implement that measure, we can be sued by citizens in federal court to enforce that measure.

With regard to the 182(e)(5) measures, the enforceability works a little bit differently. The real enforceable hammer is the commitment that was made by your staff in the plan to submit a contingency measure three years before the attainment deadline, which would attain whatever emission reductions are -- remain necessary in order to attain the standard. So it's the commitment to adopt a contingency measure three years before the standard that is enforceable with regard to the 182(e)(5) measures.

VICE CHAIR BERG: Thank you.

MS. BAIRD: Thank you very much.

CHAIR NICHOLS: I think the -- there's a great

deal of disconnect between the people who live in the area who are active and organized and who don't feel that action is happening fast enough, and the people who write plans and try to develop the regulations. Some of the disconnect is about just the process by which things get approved by EPA and the timing of these air quality plans.

Some of it is undoubtedly poor communication or at least inadequate communication on the part of the State and the local agencies about what they actually are doing and planning. Some of it I'm very sad to hear is that we still are plagued with this dichotomy between having a vibrant growing economy and good jobs and dealing with our air quality problems.

And, you know, we've been at this since the 1970s, and we still haven't cured every bit of air pollution by any means. But if you look at the growth and you look at the jobs and the people and at the air quality improvements, you would have to say that we've really demonstrated over and over again that these two things don't have to be in conflict. And yet, whenever we come up against a set of plans, and it looks as though industry feels like they're pushing too hard, and the community feels like we're not pushing hard enough, that's where we end up.

I'm not saying that means that we're in the

perfect place. It's pretty clear that where we are today requires this Board to be more open and more assertive than we have been about our responsibilities to assure that the -- that the goals will be met. But at the same time, I think there's a lot of good here, and I think that the District in many ways deserves praise for having gone as far as they have, not just in terms of their past achievements, but of being creative about how to deal with the uncertainties of the future.

So with that, I would like to ask if there are Board members at this point who have additional comments, questions, or suggestions before we move to take action starting with you, Ms. Mitchell.

very much. First of all, I want to recognize the staff of AQMD and the staff of the Air Resources Board who worked collaboratively on this, that really worked hand in hand to come up with an AQMP that addressed both mobile sources and stationary sources. As we all recognize, much of the pollution in our region comes from mobile sources. And it's absolutely necessary that the districts, which are responsible for stationary sources, work together with the Air Resources Board to reach the federal targets that — and standards that are set down for us. So I think that was really one of the hallmarks of this AQMP, that

collaboration.

Secondly, I want to say that what all of us do on this Board is we always try to balance the environmental issues with the economic issues. And actually, as Chairman Nichols pointed out, the economy has actually been changing and thriving as a green economy. So some of the regulatory measures that we adopt actually had wonderful new innovative jobs, and lead to new technology that creates new jobs. And we think that that is certainly possible with the plan that is before us today.

It's difficult I think for all of us up here to hear the heart-wrenching testimony of the families who suffer from the impacts of air pollution. And we all recognize that our primary goal as members of this Board is to protect the health of the public. We're carrying out the mandates of the Clean Air Act, which was enacted to protect the health of the public.

And, as you know, we have doctors on our Board, we have many people on our Board who have specialized knowledge, and care deeply about the health of the public and the health of the residents of California.

This plan real really is a regulatory plan, as was pointed out. We looked to incentives in some cases, because I think we need to recognize that the transformation of mobile fleets will absolutely require

incentives. And we work together with both regulatory measures on mobile fleets, as well as the incentive measures for mobile fleets.

We have some new technologies for low NOx drayage trucks and heavy-duty trucks that provide for now an immediate pathway to cleaner air. And the South Coast Air District when they approve this plan brought forward a motion to amend the plan to add a focus on those low NOx trucks that can be immediately deployed to reduce NOx emissions in our legion.

So obviously I'm supportive of the plan. I participated in the many, many weeks and months of developing the plan, and I hope that this Board will approve it. Thank you.

CHAIR NICHOLS: Ms. Riordan.

BOARD MEMBER RIORDAN: Thank you, Madam Chairman.

We certainly heard a wide range of testimony today. And I appreciate all those who came both for and against. And I would just like to say that my support of the staff recommendation is for the following reason:

I think we have a partnership that's before us, but also I look to our staff as being the objective third party looking at the air quality plan proposed in the South Coast. And I do believe that staff has made a strong recommendation to approve the South Coast AQMP and

to forward it on to EPA as part of our State Program.

With that, I want to also say that I have lived in this area for a number of years, being born and raised here, and recognize the progress that we've made, and at the same time, know that we need to do more work. And that is, I think, embodied in the plan that is before us.

And so with that, I just want to say that I'm going to be supporting staff recommendation for approval.

CHAIR NICHOLS: Okay. Dr. Sperling.

BOARD MEMBER SPERLING: This is a tremendously ambitious and innovative plan. I want to -- and it will be influential also. But there's one specific item I did want to address. It's in the resolutions. And it deals with the Indirect Source Review. The resolution says that the Board directs staff to participate with the District in the development of the facility-based mobile measures, and it goes on.

I'm asking what Indirect Source Reviews, as many people have pointed out, have a checkered history and are difficult to do. And so I'm wondering is this committing us to actually developing specific Indirect Source Review rules, and is there a timetable implied by this? So I guess it's more of an interpretation because I think we want to be really careful about this one?

CHAIR NICHOLS: Yes. Mr. Karperos, do you want

to respond?

DEPUTY EXECUTIVE OFFICER KARPEROS: So the AQMP includes what they call facility-based measures for four sectors, marine ports, airports, distribution centers, and railroads.

The actions called for in the AQMP for three of those, for marine ports, distribution centers, and railroads is to continue the voluntary and collaborative process that's been underway now for some time, to continue that over the course of the next year to identify specific direct actions that could be taken to further recuse emissions and deploy the sorts of technologies that are called for in the Mobile Source Strategy at those facilities. The District staff will be reporting on a very regular basis back to their board about the progress of that.

With the decision point at the end of a year, where if the progress was not appropriate, and that would be the local air district's decision, if progress was not appropriate at that point, the District would pivot, to use the word that was used at the air district hearings on the AQMP, to a rulemaking process.

For airports, the AQMP envisions take -- starting a indirect source rulemaking process now. For all four of those, the first year is really very -- very much a focus

on data gathering, developing the sort of concepts that might go into rule identifying what the -- as I said earlier, the direct measures that would bring about the emission reductions at those facilities.

And what we're talking about is for ARB staff, because much of that effort is directly focused on mobile sources, that we would want to be very much engaged in those deliberations. But in the case of the AQMP, those would be district rule-makings.

BOARD MEMBER SPERLING: Okay. So it's really the AQMD is taking responsibility and we're just participating in it, if I can use shorthand for what you just said?

DEPUTY EXECUTIVE OFFICER KARPEROS: You got there much quicker than I did, yes.

(Laughter.)

CHAIR NICHOLS: Yeah. I do think though if the AQMD is moving forward in this area, that it behooves us not to just sit back and wait for them to present us with something, but to be actively engaged.

Okay. Dr. Sherriffs is next on my list.

BOARD MEMBER SHERRIFFS: Thank you.

Yes. Boy, thanks to AQMD, thanks to staff for all of their work, for their collaboration, for their optimism. Many thanks for the testimony from everybody today. It's a challenge. It's a lot of hours of

testimony. It's a lot to absorb and then remember, oh, there was something three hours ago I wanted to comment on. I hope I remember.

But it's so important that there was such a good engagement. So really, I think that's a compliment to the air district here that this brought so many, many people out.

You know, much of the testimony would suggest stop, let's get it better before we approve it. You know, this is a little bit like health care. Being a physician, providing health care, is a very humbling experience, because in a sense, we never get it right. We never do as much as we could do, but I think it's always important in every encounter with a patient to do something that moves things forward, and not to worry about doing everything now, because often trying to do everything now means we get nothing done. Or as I'm fond of saying, if I want a diabetic to do nothing, suggest 10 really good things to do. And if I want them to do something, we need to decide on one and think about that hard and work on that. So doing enough and moving things forward, that's the important thing.

Of course, I'd like to see shorter timelines wearing my San Joaquin Valley Air Pollution Control
District hat. I wish there was more that specifically

helped the valley in terms of our 2.5 goals and timeline, but I think this Board is committed. When we tabled the Valley's plan back in October, this Board is committed to that ongoing process, public process, collaboration with San Joaquin, and identifying and agreeing on more specific mobile source strategies, as well as specific direct PM contributions from the valley, so that is an ongoing process. And I don't think we need to hold this plan up in order to continue with that very positive process.

No plan is ever perfect. And I think, as was commented earlier, we need to be very clear that there are benchmarks along the way that, no, we're not coming up with this plan and in 10 years we'll look back and see if we got there, but, in fact, we are looking along the way are we, in fact, making progress? And if we're not, then yes, we need to be changing our approach.

So I, at the end of the day, am in favor of this. Thank you.

CHAIR NICHOLS: Ms. Eisenhut.

BOARD MEMBER EISENHUT: Thank you.

BOARD MEMBER SHERRIFFS: Yeah, and I'm sorry, but I did want to mention one other --

(Laughter.)

BOARD MEMBER SHERRIFFS: There was a comment, you know, something that -- in terms of agriculture, tractors.

We've talked about doing that, and that's not really part of this plan, but it's really important for the valley for, I think, PM2.5. And at some point, we -- we -- this year, we have to make a commitment to get started on that, whether it's just developing an inventory, so we know what we're dealing with, so which are the most important tractors to target in terms of incentives or however we're going to approach that, but we've talked a lot about it. And this year we need to do it. We need to get started on that path.

BOARD MEMBER EISENHUT: Thank you, Chair Nichols for -- am I on?

I'll try it again.

Thank you, Chair Nichols, for framing the question and acknowledging the tension in the room, and the diversity of opinion that we -- or testimony that we've heard. I'm going to do a -- and by the way, thank you also for acknowledging the left bank of the podium here. We're -- the two of us -- the two of us are out on our own. We --

(Laughter.)

BOARD MEMBER EISENHUT: We -- I'm going to do what I do worst and that is acknowledge a little personal journey. I heard today from folks, and I just want to -- we heard you. I grew up and still work next to the tracks

and the freeway in the San Joaquin Valley. This -- and -- and have the -- acknowledged the consequences of so doing.

And so this is a decision that is not made in a vacuum. And I think each of us on this Board, as we grapple with this decision, have our own journey that's caused us to be where we are. This action -- and I'm prepared to support the action -- it is, what I would call, a faith-based project.

There are -- there are black holes, nuances both in the process and in the budget. And as a consequence of that, and I heard staff say earlier that there would be an annual review, I would -- I would request that that annual review come with benchmarks, and that we have targeted -- and I don't have some specificity to that, but that we have some very targeted benchmarks that we intend to achieve at the time of that annual review, so that it's more than a report. It's an invitation for remedial action, should we not be achieving those benchmarks.

So that's -- and in addition, I would -- this is a separate issue, but the San Joaquin Valley, while that's a -- the 2.5 plan for the San Joaquin Valley is a separate but related issue, I want to affirm Dr. Sherriffs' request. I think that off-road mobile equipment, in order for us to move forward in a meaningful way in that

project, we need an inventory, and a use inventory in order to put some meaning and structure to the decisions that we're going to be making in that endeavor.

Thank you.

MR. MARQUEZ: You're not meeting currently these benchmarks.

CHAIR NICHOLS: Dr. Balmes.

BOARD MEMBER BALMES: Thank you.

So let me reiterate what several of my fellow
Board members have said. As a physician we knows about
air pollution's effects on public health, you know, it's
really hard to listen to all the stories of affected
families and individuals -- individual patients. Believe
me, I know the science, and I understand that science
supports your concerns to try to have clean healthy air.

I also appreciate the testimony of others, such as the representatives of the ports, which I think should be congratulated for trying to improve the emissions from their facilities, because the communities around the ports are particularly impacted. And I wish I could say the same about perhaps the other three sectors that are being considered for Indirect Source Rule. But I want to call out the ports, because I think they have done a pretty good job of trying to improve emissions from their facilities.

I'll start with the State overview SIP. And I want to second Mr. Eisenhut's request for targeted benchmarks with regard to the annual review. I really think we need to have staff report back on progress regarding securing funds for the incentives.

As I said, at a previous Board meeting, I think actually the amount of money that we need to properly fund incentives, you know, it's really a lot. I agree with Mr. Eisenhut's characterization of this as faith based.

Maybe a more positive way of saying it that it's aspirational. Another way to look at it, it's fantasy in the current scenario both at the State level where we now have a concern about a deficit, and certainly at the federal level with regard to EPA.

In terms of the -- you know, another benchmark is I think we need a report back on achieving targets for zero emission vehicles, and other technologies. You know, it's -- like I said, it's aspirational. It's great that we have all this potential technology, but we have to see it actually be on the roads and implemented. So that's a State level.

At the South Coast Air Quality Management

District level, like I said, I think the ports are doing a good job. The airports are required under this to make improvements, but for the logistics industries, and

railroad, and ports, it's voluntary. And as we heard testimony, there's a lot of logistics industry out here where the air is already bad.

I'm not sure that a voluntary process is going to work. This is another area where I think we need to be ready to make regulatory commitments if, you know, the voluntary progress isn't made. And I realize that that's sort of in the South Coast plan, but I really think at the State level, we have to be ready to step in if we're not meeting these targets.

And then with regard to the South -- or, excuse me, the San Joaquin Valley, I appreciate that both of the folks on the left bank over there -- last time, I've heard that -- or first time I've heard the valley being called the left anything.

(Laughter.)

BOARD MEMBER BALMES: But I appreciate that they both mentioned the need to do something about ag equipment. As somebody who doesn't live in the valley, but does research there, and have done -- have done some research for a long time in terms of air pollution, I think that, you know, it's -- the PM2.5 problem needs to have ag contributing to the solution, and I would say diesel drilling equipment as well needs to be considered so I appreciate my fellow valley Board members bringing

that up.

So with that, I think I'm done.

CHAIR NICHOLS: Okay. Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Thank you.

I want to acknowledge one thing that's in here that is very, very important. It's been mentioned, but we can't mention it enough, which is the phasing out of RECLAIM.

It has been something that's been going on for a while. A lot of concern about it. And here we have a proposal in front of us that phases it out. So that cannot be minimized or underestimated in terms of the importance and the change within the AOMD plan.

But there have been some concerns that have been expressed about black box, green box, whatever you want to call it, the funding issues, this kind of, you know, nebulous promise of where things are going to go. And the second is the Indirect Source Review.

Those two things give me pause, and should give us pause, because we're the ones who have to forward this to the federal government with our seal of approval. And so going forward, I think we need to have more oversight, more engagement, not just as a rubber stamp at the end of the time, but throughout the process.

And to that end, I'd like to introduce a

resolution that would provide that. That would be an ongoing partnership with AQMD on this plan, so that we can do those two things. So I believe there's a copy of it somewhere that can be handed out to the Board members, and then we can talk from that.

CHAIR NICHOLS: Great.

BOARD MEMBER DE LA TORRE: And while they're doing that, I'll read it.

This is a resolution -- proposed Resolution 17-7 to the Air Quality Management Plan for ozone and PM2.5 in the South Coast Air Basin, and the Coachella Valley.

That's the core, and then this would be 17-8.

"Whereas the proposed State SIP Strategy and the 2016 South Coast Air Quality Management Plan reduce NOx through measures to accelerate deployment of clean technologies and will require more aggressive incentive and other programs than our in place and funded today;

"Now, therefore be it resolved, that CARB staff will report back to the Board within one year on metrics for assessing progress in achieving the necessary reductions outlined in the proposed State Sip Strategy;

"Be it further resolved that ARB staff shall provide an annual report to the Board on

implementation of the proposed State SIP
Strategy. This annual report shall include:

"One, the development status of each regulation identified in the proposed SIP Strategy;

"Two, specific actions taken to pursue new funding mechanisms;

"Three, the amount of funding that has been secured to incentivize deployment of the cleaner technologies identified in the proposed State SIP Strategy;

"Four, the number of additional vehicles and pieces of equipment upgraded or turned over as a result of the incentive funding programs;

"Five, investments made in pilot and demonstration studies to advance additional technologies, the status of commercial application of these technologies, potential issues or impediments, and recommendations for further action;

"Six, additional progress metrics approved by the Board as provided for above;

"Seven, identification of further regulatory or emission control strategies to advance technology deployment and achieve emission

reductions to ensure requisite progress towards attainment.

"Be it further resolved that within 12 months staff shall return to the Board with concepts for an Indirect Source Rule to control pollution from large freight facilities including ports, railyards, warehouses and distribution centers, as well as any identified alternatives capable of achieving similar levels of emission reductions."

So in these two ways, we will be working with AQMD and also with our own State plan in parallel to make sure that we are setting those metrics, that we are identifying the information that we need, so that we can make a decision on a yearly basis of where we're at. The points that were taken -- that were made today were taken to heart. And many people who spoke to us before today made some of the same points, and I think they're extremely valid, we do need to be monitoring something this important to the State of California.

But today, the RECLAIM piece and the other pieces that are in here are so important that we need to move forward, and then we can take those further steps with this resolution.

Thank you.

2.4

BOARD MEMBER BALMES: Madam Chairman, could I

second that?

CHAIR NICHOLS: Okay. You can.

AQPSD CHIEF MAGLIANO: Chair Nichols, before we have any further discussion, I've been asked to respond to several additional CEQA comments that we received today, and then that can be considered as part of the Board's consideration of the addendum and the resolutions themselves.

CHAIR NICHOLS: I'd like to let the Board members who had already asked to speak speak first, if you don't mind --

AOPSD CHIEF MAGLIANO: Okay.

CHAIR NICHOLS: -- and then we can go back to staff on the CEQA item.

I have Ms. Takvorian, Supervisor Serna, and Ms. Mitchell again. And the CEQA comments will be part of the wrap-up of this conversation. Okay. Thank you.

BOARD MEMBER TAKVORIAN: Thank you.

And I just wanted to thank everyone, the District and CARB staff, and everyone who's been here today, but also throughout the process. And I want to especially lift up in appreciation for the inclusion and the stated emphasis on the most impacted communities, environmental justice communities that are bearing the burden of -- of this pollution. And I wanted to thank everyone who was

able to come today.

As many have testified, this plan may not be able to achieve its goals. And therefore, I really do support the intention of Mr. De La Torre's amendments or this resolution. And I think it's the right direction to go.

It's -- I think it's clear from the testimony that we've heard today that this plan is really about saving lives. You know, it's about reducing emission, but we have heard with sadness about the people for whom this plan will be too late. But we have -- it will motivate us to really go into the future to -- and inspire us to do more.

So I think that we can't build a plan on shaky ground. And I believe that accountability, which is what I believe is in this proposed resolution, is very important and I would support that.

I also think that a funding plan, whether or not it's legally required to be included, is, in fact, linked to this plan. And I believe that if we have a shaky funding plan that's associated with this, then we know that we can't succeed. So whether -- whatever your view on a progressive sales tax, or whatever, or incentives is, we need to have a funding plan that we can rely on.

So I would like, in a friendly manner, to suggest that we -- we do say that we want to build in the

accountability and that we want to say that we will not only look at what -- how much money has been raised, as it says in this resolution, but that we will commit to taking further action at that time should those dollars not be on track, and should those reductions not be on track, as per the plan.

So I would ask that we could add language that would say that should the regular -- should the incentive funding and should the other funding not be secured or if the intended amount of vehicles have been replaced and the heavy-duty trucks not have been replaced that there would be within 18 months of today's date - so this is within a year - that there would be a regulatory agenda for achieving the remaining emission reductions assigned to the Clean Air Act section.

I think it's important for us to commit to what we're going to do if this isn't achieved.

So I would ask for that --

CHAIR NICHOLS: So can I take that as a friendly amendment to Mr. De La Torre's --

BOARD MEMBER TAKVORIAN: Um-hmm.

CHAIR NICHOLS: -- proposed resolution, and ask if he would accept that amendment.

BOARD MEMBER DE LA TORRE: Yes. And it's fine.

I would just make it broad for all -- all the things that

are here and not just pick on number 3 on 4. I would just say for all of this, if we're not hitting our targets in general, that we would commit to doing that.

BOARD MEMBER TAKVORIAN: Okay. That would be good for me.

And I think that the other thing I would like to suggest is that the timelines be improved. And I was heartened to hear from the Port of Los Angeles that their -- that we have moved technology forward enough, that we can do better. So I think in regards to particularly with cargo handling equipment, that it be included. And that my recommendation is that we add to this resolution that there be a requirement of 100 percent compliance by 2030, and that it be -- in particular for the Port of L.A. and those ports that are in or adjacent to areas that are in the top 10 percent of those defined as most impacted by the CalEnviroScreen.

I think we have heard strongly that we need to address those communities that are most impacted. And I would want to set forth a resolution that includes, or amendment to the resolution that would include improvements for the at-berth measures as well. It seems really timid to me to be at 50 percent by 2032. And I think that we can get to 100 percent compliance by 2030. So I would add those two things to the resolution.

BOARD MEMBER MITCHELL: Just a question on that.

To what extent do we -- to what extent do we control -
those are federal sources -- the international vessels?

This is just a question --

BOARD MEMBER TAKVORIAN: Well, we're -BOARD MEMBER MITCHELL: -- maybe to staff.
BOARD MEMBER DE LA TORRE: We have the plug-in requirement.

BOARD MEMBER TAKVORIAN: Yeah, I thought -EXECUTIVE OFFICER COREY: Yeah, let me take a
stab at this. I think you're referring to the at-berth -the expansion of the at-berth regulation that we already
have that requires the plug-in of cargo -- shore power on
cargo container ships and cruise ships. And the objective
of that measure was to expand the control of emissions,
NOx and PM, particularly ships at berth, smaller ships,
and applying, in fact, some of the certified technologies
that were referred to here.

So it's one of about 30 measures that are called out in mobile source plans. So -- and I've referred to this as -- before as the most ambitious mobile source strategy package we've ever assembled. So it's one of those measures. And I get the point, it's can you pull these measures together?

It would be much more comfortable with report

back to the Board annually on have we been able to pull the measures? We call out dates in this document. We call them out realizing that we're -- we've got a major lift with 30 some odd measures. But I get the point, can we pull some forward and can they be executed sooner? And absolutely prepared to push staff and have a report back to the Board where we're able to achieve that.

BOARD MEMBER TAKVORIAN: I guess what I'm hearing is that there's confidence that we can. These are two measures that there seems to be a lot of activity on, that the technology is there for, that we're already moving forward with shore power in particular, and that we're asking for it for those communities that are the most impacted.

So to get to 50 percent by 2032 seems quite timid when we're looking at some -- at almost achieving that quite soon. So to get to 100 percent by 2030 doesn't seem to be that ambitious to me.

But I hear what you're saying, I'm worried that a report back that might say, yeah, we're getting there, we're not sure, doesn't really give relief to the communities and give them something to point to to say we're going to -- we can wait another child's lifetime.

We're looking at another generation by the time we get to 2030. So that's doesn't -- that seems like a long time to

wait, and it seems like we're being not that ambitious to say that we're going to get there by 2030.

EXECUTIVE OFFICER COREY: And Board member
Takvorian, I'm talking about a new regulation. I'm
talking about requirements that don't currently apply to
we're bringing additional marine craft into a regulation
to implement. And so when they're referred to as timid,
I'm talking about a new regulation to develop, implement,
and looked and have called out specific dates. And we're
looking to opportunities to pull it forward, but this is a
new rulemaking, new reductions, not a modest increase of
something that's already in play or under way. It's not.

CHAIR NICHOLS: So I -- if I could perhaps offer something similar. I don't know if it's in the middle, but just that moves this forward. The point is that the language we have in front of us now has deadlines in it and numbers in it, which don't seem to be sufficiently ambitious.

At the same time, what the staff is saying is that they've got to go through a rulemaking and tease some of those issues out. It seems to me though that in this resolution we ought to be directing staff to be moving those dates up and taking a comprehensive look at particularly how you can implement all the measures in ways that will have the greatest impact first in the

disadvantaged communities.

I mean that's an overlay on all of us, but there's a -- there's -- as you've pointed out, there's 30 different specific pieces of equipment or types of equipment that we're talking about here that are all going to be covered by regulation. That is going to take time, and there is going to have to be more fact finding done before those dates can actually be firmly established.

So I do think that the language can be more of a direction to staff to pursue those accelerated deadlines for just the reasons that Ms. Takvorian is indicating, if that's -- if that's acceptable to you?

BOARD MEMBER DE LA TORRE: If I may --

CHAIR NICHOLS: Yes.

BOARD MEMBER DE LA TORRE: -- friendly amendment to a friendly amendment.

(Laughter.)

BOARD MEMBER DE LA TORRE: Why don't we say up to 100 percent? That way that is the direction to staff that that's where we're heading, and so we would like to see in these new regs and all of this stuff that they're preparing, up to 100 percent. And then we get, you know, whatever analysis has to happen embedded in that, but they're authorized to go all the way up to 100 percent.

CHAIR NICHOLS: It certainly shouldn't be a -- 50

shouldn't be the ceiling.

BOARD MEMBER DE LA TORRE: Exactly.

CHAIR NICHOLS: I think that's clear.

I'm not really probably the best person to try to wordsmith that language. Maybe the best thing to do would be before we actually take a final vote to have a brief pause and have the two of you look at the language of the resolution and see if you can --

BOARD MEMBER TAKVORIAN: That sounds good. Thank you.

CHAIR NICHOLS: -- if you can agree on that.

Okay. We still needed to recognize Supervisor Serna, who hasn't yet been heard from.

BOARD MEMBER SERNA: Thank you, Chair Nichols. And certainly one of the advantages of going last, assuming there are others that are not going to speak, is that it's all been said. So I do want to say that I agree with a number of the statements that have been made by my colleagues. I certainly want to lead with the standard thanks to District staff and certainly our ARB staff who, I think, did everything that's certainly required of them in the course of developing the plan recommendation.

I'm prepared to support the addendum that has been proposed by Director De La Torre with the friendly amendment to the friendly amendment. I do want to -- I do

want to ask whether or not -- I just want to get some clarification on Item 5 of the proposed addendum. Where it says investments made in pilot and demonstration studies - this is a question for Director De La Torre - by studies, does that also mean invest -- capital investment?

So, for instance, if you were going to look at electrification of campus bust systems for something like an airport, would that -- would the -- would this capture the intent to provide investment in the actual vehicle, so you can study the efficacy of something like that, or is this language intended to mean just the investment in the actual production of a report? Does that make sense?

Because I'm stuck on the word "studies", I guess.

BOARD MEMBER DE LA TORRE: I take it as a project --

BOARD MEMBER SERNA: A project, okay.

BOARD MEMBER DE LA TORRE: -- that is being studied.

BOARD MEMBER SERNA: Okay. All right. Yeah, maybe -- maybe when the two of you get together here in a minute to hone the final language, you might give that some thought in terms of adding a word or two just to clarify that.

Other than, I just want to conclude with my

thanks to all the environmental justice advocacy we've had in front of us today. I always get very itchy, quite frankly, when we're asked to consider adopting a plan as important as this, and we have - I don't know how many speakers we had, Chair Nichols? Probably in excess of 80 90 today, maybe 100?

CHAIR NICHOLS: No, no. sixty-five.

BOARD MEMBER SERNA: Sixty-five. Oh, we actually deleted a few, didn't we? Okay.

But the point being is we had a great deal. And when we have as much testimony as we did today, and you look at our sheet, and many of those that are speaking are opposed to what's being considered, I'm glad to see that we have the leadership up here that is willing to literally while we're continuing to receive the testimony, look at language that could be proposed that might serve as belt and suspenders for -- to address some of the concerns that have been expressed. I think that shows real dedication on behalf of this Board and its membership to take very seriously what we're hearing, not just today, but certainly leading up today -- to today.

So again, we can't do that without your input and your commitment to do that. I know there's a great many of you that have taken time away from your jobs, or perhaps your studies to be here to address us. And it's

not lost on any of us that it's important to you, enough so that you're willing to make that sacrifice. And you deserve our attention and our willingness to again consider how best to work carefully on the fly, in some cases, to get to a place where it is the best plan that we can make it. So thank you.

CHAIR NICHOLS: Thank you. We are going to break briefly before we take the final vote. And then whatever changes have been made to the draft resolution here will be posted, so everybody can see them. But I want to give Mr. De La Torre and Ms. Takvorian a few minutes to confer.

I want to say just a couple of things, and I will also ask Ms. Magliano to add her additional statements that she wanted to make with regard to the CEQA review.

The first is that this is obviously, what we're about to do, is not a blank check, and it's also not the end of the story. We will be holding the District and ourselves accountable for -- for results under this -- under this plan. And the public will have legal rights with respect to enforcing anything that's in the adopted plan at the end against us.

So this is -- this is an ongoing work-in-progress, but I do think it is progress that we're looking at here. And I think it's important to recognize when that happens. Karen, did you want to add some

comments here? I know you did, but I -- but the moment was not right.

AQPSD CHIEF MAGLIANO: Yes. Thank you. I am told it's very critically important that I do bring these up. So during public testimony, we heard a comment that mentioned CEQA, that we interpret to address the need to analyze and mitigate emissions from ongoing heavy-duty emission sources. ARB's CEQA document must address impacts caused by the State SIP Strategy measures.

The State SIP Strategy measures produce air quality benefits from the source types identified by the commenter, rather than impacts. Therefore, this comment does not raise any issue requiring revisions to ARB's CEQA analysis.

A commenter also stated that the draft State SIP Strategy, and its associated draft EA, were published before the South Coast AQMP was published. ARB staff wants to clarify that the draft EA for the State SIP Strategy was just for ARB's planning efforts for mobile sources and consumer products, and not for the South Coast AQMP, which is governed by separate and distinct legal requirements.

And finally, we heard a further comment regarding potential pollutant increases regarding to dairy digesters. This issue relates to the Short-Lived Climate

Pollutant Strategy Board item, rather than the State SIP Strategy, and is addressed in that Board item.

Thank you.

2.4

CHAIR NICHOLS: Thank you. I understand why you had to do that.

I will also mention from a process perspective, that some of you may have noticed that Board Member Berg has been actively walking up and down the platform from time to time, and speaking to different Board members.

And I want to make it clear that in those conversations, what she has been doing is trying to help me organize the order of speakers until I master this machine or it masters me, unclear of which of those things will happen first.

We have to make sure that everybody who wants to speak gets a chance to speak, and that they're in some formal order. So I hope members of the public will understand what she has been doing. I appreciate it very much.

Okay. I think at this point then, without further do, we will take literally a five-minute break.

Don't go anywhere because we want to come back and finish this item.

(Off record: 2:29 p.m.)

25 (Thereupon a recess was taken.)

(On record: 2:45 p.m.)

CHAIR NICHOLS: While staff is finishing up, along with Mr. De La Torre the language, Senator Lara had a question on the port-related language that's in the resolution. And we'd like to get clarification on that.

SENATOR LARA: Thank you. Thank you, Chairwoman. I also just want to take a moment to thank the community that came out. Obviously, clean air is our number one priority. And as somebody who still lives near rail and near the city of Vernon, I can wholeheartedly understand the concerns.

My question is now as we type up the resolution that kind of changed some of the timelines, I just wanted to get clarification from the ports, specifically on the state of the technology, both the cargo handling and at berth. I just want to make sure that we have realistic timelines, and that meet the current technology that we're asking for, if we can -- oh, here we go.

MS. TOMLEY: Hi. This is Heather Tomley with the Port of Long Beach. And I know that there was some discussion earlier about some of the development of technologies that we've been involved with. For cargo handling equipment, we've been involved with a lot of demonstrations. We have a technology advancement program. We have representatives from California Air Resources

Board, Air Quality Management District, and EPA that help us to evaluate different demonstrations that we want to move forward with.

And we've put funding into developing zero emission yard tractors that are currently in the prototype stage that are being demonstrated. Currently, there are not any top handlers that meet that emission standard. And that's something that we're hoping to move forward here in the near term with the support of some grant funding that we've been able to secure. Electric rubber tired gantry cranes are available. But the -- across the board, these technologies are really, in many cases, just being developed or have not yet been developed.

But that's part of our aggressive timeline that we're hoping to be able to move forward with and why we're putting out the goals that we have in our Clean Air Action Plan, but there isn't certainty that these technologies will develop on those timelines, that the infrastructure will be available, that the financial business case to be able to move forward with them on that timeline is not 100 percent secure at this point. And that's why we're committing in the Clean Air Action Plan to look at doing feasibility assessments on a periodic basis, every five years, potentially more frequently than that, to look at all of those factors to see where we are on the timeline

to meet those goals that we've put out there.

For at-berth technologies, the ports have also been involved with demonstrations of those technologies. We are -- there are currently being used for container ships, but they have not been proven on the other vessel types. They -- one of the technologies has an approved demonstration test plan. We're hoping to move forward with a demonstration, but that has not been able to get off the ground yet.

So none of those technologies have been proven on the other vessel types. And that's the subject of the SIP requirement for 2032, the 50 percent use of those technologies in 2032. Those technologies have not yet been proven, but we're hoping to go through the demonstration phase for that.

SENATOR LARA: And are your -- your feasibility studies are saying every five years. Is that an appropriate timeline or can we do feasibility studies more often, given that technology continues to change much more rapidly?

MS. TOMLEY: Right. So that's what -- we had originally proposed that timeline in our discussion document for the Clean Air Action Plan, but I think we're recognizing, given the flux and the interest in getting -- having assessments on that more frequently than that, we

215

```
1
    recognize we probably need to accelerate that timeline.
    My guess it's going to be probably somewhere closer to the
 2
3
    two- to three-year timeline, but we're working through
 4
    that process right now.
5
             SENATOR LARA: Thank you.
6
             MS. TOMLEY: Thank you.
7
             CHAIR NICHOLS:
                             Okay. Let's then get back to the
8
    matter at hand. Do we have an amended resolution?
9
             Almost. Not quite.
10
             Okay. What can we do?
11
             (Laughter.)
12
             CHAIR NICHOLS: Anymore questions?
13
             Anymore comments?
14
             Where we are?
15
             MR. MARQUEZ: Expand your public comment time.
16
             (Laughter.)
17
             CHAIR NICHOLS: Yeah, more public comments.
   That's an idea.
18
19
             You know, we heard a lot of -- a lot of good
20
   public comments. And I think they were very pointed and
21
    influential. So I hope everybody understands that that
22
   was true.
23
             I have --
24
             BOARD MEMBER SHERRIFFS: Can I ask a question of
25
    staff since we have a little time?
```

216

CHAIR NICHOLS: Yes. 1 2 BOARD MEMBER SHERRIFFS: Down here on the left 3 bank. 4 CHAIR NICHOLS: Yes. 5 (Laughter.) BOARD MEMBER SHERRIFFS: Well, there was some 6 7 talk earlier in terms of synergies. And it just -- it occurred to me what -- maybe staff are maybe somebody has 8 9 an answer now, maybe to think about. But the trucks that 10 have to be cleaner because of their port activities, 11 presumably some of those are actually trucks that are now traveling through the valley, and are cleaner as a result 12 13 of what's going on with the South Coast in those port 14 activities. And so that's synergy in multiplying it. 15 Important as we moved forward to --16 AQPSD CHIEF MAGLIANO: Absolutely. And so our 17 estimate is that about 20 percent of the truck travel that 18 comes out of the South Coast also goes through the San 19 Joaquin Valley and vice versa. So that certainly speaks 20

to the benefits of funding in either region.

BOARD MEMBER TAKVORIAN: So just to clarify, it's

(Laughter.)

the WiFi, it's not Member De La Torre.

21

22

23

24

25

BOARD MEMBER TAKVORIAN: Can we open public comment right now?

(Laughter.)

2.4

CHAIR NICHOLS: I have also added some resolution language, which I can just read and not type. It only goes to the State SIP, which is the only one that's subject to CEQA. And it's very simple, but it -- just so everybody has it.

On page seven, the second be it further resolved where it says that, "The Board approves the responses to environmental comments released March 10th, 2017", I'm adding at the very end replacing the period after "resolution" with a comma, and then adding the words, "And the responses from staff at the hearing on this matter".

It's probably self explanatory, but just to be clear, the reason for putting that in there is so that in the event of a subsequent challenge to the plan as adopted, that it's clear that we heard the comments at the hearing, the oral comments that were brought forward at the hearing, and our staff's responses to those comments, and that we are including both of those things in our action.

And we now have the language that will be attached to both resolutions that was what we've just been discussing.

So, Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Okay. So this is

again an addendum to the State SIP and the AQMP for South Coast Air Basin. Everything is exactly the same in terms of what we're amending. We're amending both. And we have both resolutions here.

There was one change on number 5 -- bullet point number 5 to address Board Member Serna's comment. We have investments made in pilot projects and demonstration studies.

And after number 7, we are inserting two additional clauses, "Be it further resolved that within 18 months of this date, ARB staff shall develop at-berth regulation amendments that achieve up to 100 percent compliance by 2030 for L.A. Ports, and ports that are in or adjacent to areas in the top 10 percent of those defined as most impacted by CES;

"And, be it further resolved that within 24 months of this date, ARB staff shall develop cargo handling equipment regulations to achieve up to 100 percent compliance with ZEV by 2030 for the same criteria as above".

And then the final be it further resolved is the same as before.

CHAIR NICHOLS: Okay. And are those changes satisfactory to staff?

EXECUTIVE OFFICER COREY: Yes.

219

```
1
             CHAIR NICHOLS: Okay. Well, then I think
2
    we're -- sorry, go ahead.
             BOARD MEMBER DE LA TORRE: We have a motion to
 3
 4
    amend both.
5
             BOARD MEMBER BALMES: I'll second, the amended
6
    amendment.
7
             CHAIR NICHOLS: So we have vote separately on the
8
    two items. They are two separate resolutions.
9
             Ms. Berg, do you want to do that.
10
             VICE CHAIR BERG: I move Resolution 17-7, the
11
    2016 State Strategy for the State Implementation Plan with
    the amendment.
12
13
             CHAIR NICHOLS: Okay. All those in favor, please
14
    say aye?
15
             (Unanimous aye vote.)
16
             CHAIR NICHOLS: All opposed?
17
             All abstentions?
18
             Okay. That passes.
19
             VICE CHAIR BERG: I further move on Resolution
20
    17-8 the 2016 air quality management plan for ozone and
21
    PM2.5 in South Coast Air Quality Basin, and the Coachella
22
    Valley with the amendment.
23
             CHAIR NICHOLS: Okay. Everybody.
2.4
             All in favor please say aye?
25
             (Unanimous aye vote.)
```

CHAIR NICHOLS: Opposed?

Abstentions?

Good. I think we have done it. And thank you to everybody for your positive and very civil contributions to this discussion. It's been a good one, and it's been a long one, but I think the discussion was worth it. So thank you very much.

And we will move on to the next item, as soon as we give our staff a chance to reorganize. And while people are moving, I'm going to ask Board Member Berg to read the opening statement that I would normally have read because my voice is giving out.

VICE CHAIR BERG: So we'll go ahead while staff is getting seated. Our next agenda item, 17-3-5, is a presentation on the proposed Short-Lived Climate Pollutant Reduction Strategy. This is the second of two Board items on the strategy. Staff provided the Board an overview of the Short-Lived Climate Pollutant Strategy in May 2016. A few months after that, Senator Lara's bill, 1383 passed, and so staff went back to reevaluate our plan in light of that legislation. The Board will vote on approving the final proposed strategy today.

Short-lived climate pollutants are trapped heat many times the level of carbon dioxide, but also tend to have a shorter lifetime in the atmosphere, ranging from a

few days to a few weeks to a few decades. They include methane, black carbon, and fluorinated gases, including hydrofluorocarbons, or HFC.

The science unequivocally underscores the need to immediately reduce emissions of these super pollutants, such as methane, black carbon, and HFCs. Senate Bill 605 requires ARB to develop a strategy to reduce these emissions, while Senate Bill 1383 requires ARB to approve and begin implementing this strategy by January of 2018.

Actions to reduce emission of short-lived climate pollutants will not only help the State combat climate change, but will also improve our air quality and reduce related health risk hospitalization and medical expenses.

The emissions reductions achieved from implementing these strategies will help the State meet its 2030 GHG emission goals. In fact, the short-lived climate pollutant strategy will be incorporated into our 2030 target scoping plan that will be before us before year-end.

Mr. Corey, will you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks, Vice

Chair Berg. Short-lived climate pollutants, or SLCPs,

were recognized by scientists early on as a major

contributors to global warming, but these pollutants took

a back seat as the nation's first targeted carbon dioxide,

the more pervasive and longer lived greenhouse gas.

Now that reduction efforts to address carbon dioxide are underway across the globe, the international community is turning its attention to reducing these powerful pollutants, and California is leading the way on this.

Now, as you mentioned, Senator Lara's SB 605, and SB 1383 require ARB to develop and approve a strategy to reduce SLCP emissions in California. ARB staff developed a proposed strategy pursuant to these bills in coordination with other State agencies, local air districts, and many stakeholders.

Last May, staff presented to the Board an overview of a draft Short-Lived Climate Pollutant Strategy. Since that time, SB 1382 was chaptered requiring adjustments to the strategy.

Today, staff will be presenting for your approval a final proposal for the reduction strategy. Short-lived climate pollutant emission reductions are important for meeting greenhouse gas emission reductions called for by AB 32, SB 32 and SB 1383.

In addition, the emission reduction plan is identified in the first update to the Climate Change Scoping Plan as one of the recommended actions to achieve additional GHG emission reductions. The strategy will be

integrated into the upcoming scoping plan update we're currently working on.

And with that, I'll now ask Marcelle Surovik of the Industrial Strategies Division to begin the staff presentation.

Marcelle.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST SUROVIK: Thank you, Mr. Corey, and good afternoon, Chair Nichols, Vice Chair Berg, and Board members.

In today's presentation, I will be discussing the short Short-Lived Climate Pollutant Reduction Strategy that is before you today for approval.

--000--

AIR POLLUTION SPECIALIST SUROVIK: This slide provides an overview of my presentation.

Next slide, please.

--000--

AIR POLLUTION SPECIALIST SUROVIK: Short-lived climate pollutants, or SLCPs, include methane, fluorocarbons, including hydrofluorocarbons, or HFCs, and black carbon. SLCPs are both powerful climate forcers and harmful air pollutants.

Reducing emissions of these GHGs now will not

only help us combat climate change, but also provide a number of co-benefits, including health benefits, especially in our disadvantaged communities.

Senator Lara authored two bills acknowledging the importance of short-lived climate pollutants and directing State agencies to help to reduce SLCP emissions.

Next slide, please.

--000--

AIR POLLUTION SPECIALIST SUROVIK: ARB staff worked closely with other State agencies, local air districts, and a full range of stakeholders, including disadvantaged communities to develop the strategy. The measures identified in the strategy, and their expected emission reductions will feed into the 2017 Climate Change Scoping Plan update that is under development.

The Environmental Justice Advisory Committee is advising ARB on the development of the scoping plan update as required by AB 32. Eight of the recommendations provided by the EJAC on the scoping plan update were related to the strategy. These were summarized and responded to in the final strategy.

Next slide, please.

--000--

AIR POLLUTION SPECIALIST SUROVIK: SB 1383 directs ARB and other agencies to do several things. It

requires ARB to approve and begin implementing the SLCP strategy by January 1, 2018. It codifies 2030 SLCP emission reduction targets setting a black carbon target for anthropogenic sources.

It provides specific direction on methane reductions from dairy and livestock operations, and diversion of organic materials from landfills.

Lastly, it requires establishing State policies for the development of renewable gas resources and markets.

--000--

AIR POLLUTION SPECIALIST SUROVIK: This slide shows the SLCP emission reduction targets in terms of both percentages and actual metric tons of Carbon dioxide equivalent emission reductions as presented in early versions of the strategy.

To put these numbers into perspective, the draft scoping plan update shows that achieving these SLCP targets will reduce overall GHG emissions more than any other single program through 2030.

--000--

AIR POLLUTION SPECIALIST SUROVIK: Methane emissions in the State are projected to stay relatively constant between now and 2030. Nearly half the emissions come from fermen -- from dairy and livestock operations,

specifically from managing manure and from enteric fermentation emissions.

Another 20 percent of emissions come from landfills. The oil and gas sector makes up roughly 15 percent of the statewide emissions. California's organic waste streams are responsible for half of the State's methane emissions and represent a valuable energy and soil enhancing resource.

Next slide, please.

--000--

AIR POLLUTION SPECIALIST SUROVIK:

Hydrofluorocarbons, or HFCs, are the fastest growing source of GHG emissions both globally and in California. HFCs are potent GHGs with global warming potential of hundreds to thousands of times higher than CO2.

HFC emissions are expected to increase 60 percent by 2030, as they replace ozone depleting substances, or ODS. The majority of HFC emissions come from commercial refrigeration systems.

--000--

AIR POLLUTION SPECIALIST SUROVIK: As this slide shows, anthropogenic black carbon emissions are going down between now and 2030, primarily from mobile sources, but more can be done. As black carbon emissions decrease,

residential fireplaces represent a bigger share of the inventory, off-road mobile sources will continue to represent a significant share as well.

--000--

AIR POLLUTION SPECIALIST SUROVIK: SB 1383 includes a number of directives for reducing emissions from the dairy and livestock sector. In the near term, ARB, in conjunction with the California Department of Food and Agriculture, and stakeholders will develop a manure management strategy that will focus on developing as many voluntary methane emission reduction projects as possible at California dairy and livestock operations before any regulatory action is taken.

This will be accomplished through a combination of actions, such as establishing incentives, filling research gaps, collaboration to overcome barriers, and development of policies to encourage renewable gas production.

To help us in this effort, ARB, CDFA, and other agencies are forming a Dairy and Livestock Methane

Emission Reduction Work Group. We are planning on a kick-off meeting on May 23rd in Sacramento, and plan to create technical working groups to evaluate specific topics.

--000--

AIR POLLUTION SPECIALIST SUROVIK: ARB and other agencies will undertake a number of efforts this year to address existing hurdles to developing biomethane projects in the waste sector, as required by the bill. The California Public Utilities Commission in coordination with ARB and CDFA is developing guidelines that gas corporations will use to select at least five dairy biomethane pilot projects to demonstrate the feasibility of pipeline injection, and help develop least cost pipeline injection strategies that will be transferable to future projects.

We are assisting the Energy Commission in developing renewable energy and infrastructure policies to through the Commission's 2017 Integrated Energy Policy Report planning process.

We're developing a pilot financial mechanism to improve the predictability of revenue streams from SL -- from LCFS credits and cap-and-trade offsets for methane rejection -- reduction projects to allow project developers to secure private development financing.

Similarly, we're working to develop guidance on the impact future regulations could have on the value of these environmental credits.

--000--

AIR POLLUTION SPECIALIST SUROVIK: SB 1383

requires ARB and CDFA to report by July 1, 2020 on the progress the dairy and livestock sector has made to meet the methane reduction goals for this sector. ARB in partnership with CDFA and with extensive stakeholder engagement will develop a regulation to reduce manure methane emissions from the dairy and livestock sector for implementation on or after January 1, 2024.

We will be gathering information from dairy and livestock operations to support rulemaking development. As noted, we will provide a progress report which will discuss the impact that a regulation will have on leakage, as well as a number of other considerations called out in the statute.

The State has committed to investing in methane reduction projects by allocating 50 million in cap-and-trade proceeds in the 2016-2017 budget for reducing methane from dairy and livestock operations.

CDFA will administer the program.

--000--

AIR POLLUTION SPECIALIST SUROVIK: SB 1383
requires that emission reductions from enteric
fermentation be provided through voluntary incentive-based
efforts until proven measures are available that do not
compromise the health of animals or consumers or affect
consumer acceptance of dairy products.

We will collaborate with other agencies, the dairy industry, and other relevant stakeholders to investigate potential emission reduction methods that meet these criteria.

The work group mentioned earlier could be play a leadership role in developing policies and measures to reduce enteric fermentation emissions.

--000--

AIR POLLUTION SPECIALIST SUROVIK: CalRecycle is -- in partnership with ARB will develop regulations to reduce landfill emissions by diverting increasing levels of organics from the waste stream and recovering 20 percent of edible foods to feed people in need.

CalRecycle started rule development earlier this year and expects to develop the final regulations by the end of 2018. By July 1, 2020 CalRecycle and ARB must report on the progress the State and local governments and the waste sector have made in achieving the organic waste reduction goals.

Next slide please.

--000--

AIR POLLUTION SPECIALIST SUROVIK: The strategy acknowledges that global agreement to phase down HFC production that was made last year in Kigali, Rwanda, referred to as the Kigali Amendment. ARB will work with

industry representatives to assess the impact of the Kigali Amendment. The assessment will be available later in 2017 for public and scientific peer review.

Preliminary ARB analysis indicates that the global production phasedown alone is not sufficient to reach the 40 percent emission reduction goal for HFCs by 2030.

Based on the final assessment, ARB may develop measures that can drive the adoption of low GWP refrigerants in California, and be easily adopted by other jurisdictions, both nationally and internationally.

These low-GWP alternatives and technologies are available today and have the same or better energy efficiency than HFCs currently being used. We will work toward better industry acceptance and pursue financial incentives to put them in place near term.

--000--

AIR POLLUTION SPECIALIST SUROVIK: As a result of State and local efforts over the past decades to improve air quality, California has significantly cut particulate matter emissions from anthropogenic sources, especially from diesel engines. The result is that black carbon emissions are about 90 percent lower than they were in the 1960s, or put another way, these reductions have helped avoid approximately 5,000 premature deaths in the State

each year.

The strategy emphasizes the importance of incentive programs to replace wood-burning stoves in the State. Wood stove changeout programs can provide not only climate change benefits through black carbon reductions, but also public health co-benefits.

Five million in cap-and-trade proceeds have been allocated in the 2016-2017 budget for wood stove replacement. These funds will augment existing incentive programs at the air districts where possible.

ARB is developing program guidelines in coordination with CAPCOA, which will focus on wood stove replacements in rural communities. ARB will continue to evaluate outreach and additional funding opportunities and other mechanisms to facilitate wood stove changeouts.

We expect other planning activities underway, such as the State Implementation Plans and Mobile Source Strategy that you heard about earlier today to continue to reduce black carbon from other sources in the State.

--000--

AIR POLLUTION SPECIALIST SUROVIK: The strategy also acknowledges the importance of addressing emissions from California's forest fires and forest health generally. Wildfire is the largest source of black carbon in California and, in general, wildfires are occurring at

increasing rates and at increasing levels of severity.

This affects both public health and climate change. Fuel treatments are key elements of strategies to restore forests and the natural role of fires at the local, State, and national levels.

However, many -- more research is needed to better understand radiative forcing estimates from wildfire emissions and to assess how forest management strategies affect fire behavior, emission profiles, and climate change.

ARB will continue to work with the Research Climate Action Team, CalEPA, Natural Resources Agency, and other State agencies to complete the Forest Carbon Plan, and along with the 2017 scoping plan update will continue to explore the interrelation of climate change, and natural lands.

In addition, ARB and sister agencies are planning two summits to elevate the discussion on woody waste related issues: a Central Valley Ag Waste Burning Summit, organized by the San Joaquin Valley Air District; and, a statewide Bio-Economy Summit to be held later this year in Sacramento.

--000--

AIR POLLUTION SPECIALIST SUROVIK: A revised

State Envi -- a revised Draft Environmental Analysis was

completed for the revised proposed SLCP strategy that was released last November. Staff determined that implementation of the revised strategy may have potential -- potentially significant indirect impacts to some resource areas. However, these impacts are mainly due to short-term construction-related activities.

Staff is committed to working with other State and local agencies to ensure that any steps taken pursuant to the strategy avoid environmental trade-offs and maximize potential environmental benefits. The revised Draft EA was released for a 45-day comment period, which ended January 17th.

Staff prepared a final environmental analysis, and written responses to all comments received on the revised Draft EE -- Draft EA and posted them on our website earlier this month.

--000--

AIR POLLUTION SPECIALIST SUROVIK: Staff recommends that the Board adopt the proposed resolution before you doing -- today. Doing so accomplishes several things. It approves the final proposed Short-Lived Climate Pollutant Reduction Strategy that incorporates specific directives from SB 1383, as well as an array of recommendations for other emission reduction measures that will help us meet our 2030 SLCP emission reduction goals.

It approves the written responses to the environmental analysis comments. It certifies the Final EA. It makes required CEQA findings. And it directs staff to provide periodic status reports to the Board on progress on implementing the strategy.

These will cover looking at a body of research and available technologies as they advance their costs, cost effectiveness, impacts, and how innovative new measures can be informed by these advances. It covers updates to the SLCP emission inventory that will be posted on our website, and ongoing work with local, regional, and federal and international partners in implementing the strategy.

As our efforts continue, our progress toward meeting the SLCP emission reduction goals will accelerate leading to a wide range of significant economic and environmental benefits for California broadly, and many of the State's most disadvantaged communities specifically.

That concludes my presentation, and we would be happy to answer any questions you may have.

VICE CHAIR BERG: Thank you very much Kirsten[sic] for a very thorough report.

I'd like to suggest to my fellow Board members, we have about 30 witnesses. And so if it would be all right for us to hold our comments until after the -- our

public testimony. But I would like to call on Senator

Lara. We're very excited to have you here, the author of

both bills AB -- I'm SB 605 and SB 1383.

Senator.

SENATOR LARA: Thank you. It's a proud moment to be a member -- a new member of the ARB, and particularly today as you all vote on this important item. This is a truly groundbreaking proposal that continues California's place as a world leader in furthering visionary climate change policy.

As we all know by now, short-lived climate pollutants have a dramatic impacts on our climate, air quality, agriculture, and public health. This is especially true in communities that already bear the brunt of high levels of pollution and poverty. Communities that we were talking about earlier -- in the earlier item, communities that are along heavy industry, refineries, railyards, busy freeways and freight corridors, residents in these communities breathe soot from the trucks and smoke stacks, which trigger higher rates of asthma and cardiovascular disease, and affect really the quality of life of many Californians.

This is why I'm excited to be here today. And as we get ready to formally adopt the roadmap for State agencies, industry and communities who will need to work

together to accelerate emission reductions in California.

You know, I had the opportunity of being in Paris for the COP21 a couple years ago, where I participated in the panel, which was hosted by the Climate and Clean Air Coalition to reduce short-lived climate pollutants, along with our governor. And it became very abundantly clear that short-lived climate pollutants have become a major development issue around the world, and that there's a very immediate need for aggressive action on a global scale, and California is going to provide once again that leadership worldwide.

The benefits of large scale mitigation by 2030 were outstanding and not just for global warming and sea level rise. It is estimated that we can actually avoid almost three million premature deaths and over 50 million tons of crop losses annually with collective -- our collective action here today. The economic value of these benefits are in the trillions of dollars to our State budget.

These work -- this is where California leadership really plays a key role. The strategies, best practices, and technologies that we deploy here can serve a model around the world, and vice versa. There are growing bodies of research and innovation in other countries that should be -- that we should be paying attention to, in

particular, Li Ehno[phonetic] in Chile recently launched a demonstration of alternative refrigeration technologies. And we know that again there's new research on black carbon emissions factors from ships, which is relevant obviously in our district, which we continue to talk about.

And countries like Kenya and Bangladesh have adopted innovative financing solutions. And so these are all very, very welcoming signs. And again, California is poised to be at the forefront of this.

I also wanted to just know who mentioned about wood smoke, and in particularly the wood stoves. On my end, I plan on introducing legislation next week to create a wood smoke reduction program at the ARB. The bill will be decide -- will be built on the work that air districts have been doing to provide incentives to customers, so they can replace their old dirty wood burning stoves.

And so I just want to again conclude by thanking the ARB staff, as well as the public, and other agencies, industry experts, and impacted communities that we're working together for years to bring this strategy to fruition.

Our work in meeting these targets will help California achieve its ambitious greenhouse reduction targets for 2020 and 2030, slow global -- slow global

warming, improve agricultural, and economic productivity, reduce air pollution, and ultimately save lives.

So I just wanted to thank you, and thank you,
Vice Chairwoman for allowing me to make a couple comments
on this important issue.

VICE CHAIR BERG: Thank you very much, Senator

Lara and thank you also for not only your leadership, but

also joining us today, I understand that you're going to

need to leave probably before we take the final vote to

catch and airplane. But by the time you land, we're

hoping you'll have good news.

(Laughter.)

SENATOR LARA: Great. I'll look forward to your text.

VICE CHAIR BERG: Thank you.

And before I start public hearing -- the public testimony, I'd like to direct your attention to the list. If the first three or four people could start lining up, and we could just keep that list moving, that would really be helpful. And while you do that, I'd really like to take this opportunity to welcome Assemblyman Garcia. And so we're very excited to have you, sir. Part of our advisory group and maybe you'd like to say just a couple of words, please.

ASSEMBLY MEMBER GARCIA: Well, thank you. And

certainly not an easy act to follow after my colleague to my right, but it's certainly an honor to be able to sit with you all as the representative for the State Assembly, and truly will take our role as an advisor to the fullest extent that we possibly can, and ensure that, you know, the message coming from my colleagues in the State Assembly regarding the policies and regulations coming from this agency are made very known.

Interestingly enough, I actually sat in this same chamber as a representative for the Riverside County Transportation Commission as a former locally elected official. And I don't know if it's by coincidence or just the irony that much of my interest is transportation, and seeing how we can improve some of the air quality circumstances in communities that are disproportionately impacted by bad air quality.

And so with that being said, it's an honor to be here and certainly look forward to many, many discussions here.

VICE CHAIR BERG: Well, wonderful to have you too and welcome home.

ASSEMBLY MEMBER GARCIA: Thank you.

VICE CHAIR BERG: So with that, let's start our with our first speaker Paul Delaney.

MR. DELANEY: Good afternoon to everyone. Paul

Delaney. I'm a senior engineer with Southern California Edison. I'm in the Emerging technologies group. And I have provided some handouts for the Board, I believe. Good afternoon.

If you go to page one and look at the energy efficiency and incentive curves that we follow, we try to look for new technologies that will work for our customers to improve efficiency and meet regulations.

And this is -- and the emerging technologies program that I work with looks at new technologies to do that. So if you can go to the next page please.

As in our efforts to find technologies that worked, we looked at things like -- in Supermarkets we looked at R-290 systems, which are propane based. We looked at CO2 systems, and we looked at ammonia systems. And we found that they are the most efficient and least cost from A refrigerant standpoint for many of our customers, and it shows some of the biggest promise that we see.

If you go to the next page, please.

As such, our program has continued to look at these systems. We have looked at a low charge ammonia system in Oxnard, California that was built by NXTCOLD, and founded to be 13 percent more efficient than the incumbent technologies.

There's a low charge ammonia CO2 system in Irvine that we're just finishing up that shows 20 to 30 percent more efficient than the 507A system that it replaces. So it not only meets the regulations for low GWP, but also serves our need to be energy efficient and find things that will reduce costs and reduce GHG.

The rest of the list shows other samples of what we're looking at. The PULCA means permanent -- sorry package ultra-low charge ammonia systems. To give you an example of these systems reduce the amount of ammonia charged from about 20 to 30 pounds per ton to less than a pound per ton, so a significant safety advantage as well.

If you'd like to take a look at some of the pictures. On page five, there's a picture of the new refrigerated warehouse in the Port of Long Beach that we are in the process of evaluating and validating the performance of that system. The original design for that plant was 22,000 pounds of ammonia, and it's got less than 500 as built.

The next example is the one I mentioned with a food processing plant in Irvine. It also uses a low charge ammonia system in conjunction with CO2. One of the advantages we see in the low charge ammonia systems is not only does it work in industrial warehouses, but it's moving into commercial applications as well, so walk-in

freezers, coolers, and eventually office buildings.

Thank you.

VICE CHAIR BERG: Thank you.

MR. SCHERER: Hello. My name is John Scherer.

I'm director of engineering for Los Angeles Cold Storage

Company. Our facilities cover about ten acres of downtown

Los Angeles. I also chair the Refrigeration and Energy

Committee of the Global Cold Chain Alliance, which

represents about 85 percent of the cold storage and food

distribution capacity in the United States, and speak on

their behalf as we move forward with these efforts. And

I'll be reporting to those groups on how we're doing out

here in California in Washington D.C. later this year.

What we're finding is that we're at a point -we've used ammonia for many years. It is -- somebody -people could say arguably, but isn't really, it's the most
efficient refrigerant. And in small communities, it is
also one of the safest refrigerants. It's self-alarming,
and it's sort of like a -- you know, it's just -- it's
under control. It's sort of like a -- you could look at
a -- a big ammonia leak is like a forest fire. And a
little bit of ammonia is kind of like a camp fire that -where you have your hot dogs there, and -- if you smell a
little ammonia, you go upwind, but you still have your hot
dog in the fire.

Our alternative though -- so we can't really build the big systems anymore with the regulations we have. They're cost prohibitive. We can't have a big leak and have a plume that covers most of one of our largest cities.

So we need to go with these ultra low ammonia-charged systems. They're more efficient, but they're a little bit expensive, and -- or we can go with HFs. We have 507, 404(a), of course, in California. Soon we won't be able to do that commercially. That's already been -- is disallowed and has they say.

That will follow with industrial also, but there are alternatives. And there are also HFCs or blends. But as we go to each one of these, the efficiencies go down. The cost of the units aren't very much, because they're built mass production by the thousands.

These ultra-low charge ammonia systems aren't built as frequently. Although, there will probably be a lot more, but we need to get them out there. We have some facilities where we're evaluating our options, and business is business. So if you're looking at an HFC system that's 70 percent the cost of the ammonia system, it's hard to convince some of the business people to go that direction.

So we're working with CARB. We're working with

245

everybody. We'd like to have some help in getting these systems in. I know that some funding has --

VICE CHAIR BERG: Thank you, John. Your time is up. Can you --

MR. SCHERER: -- been provided.

And on that note, I will finish. Thank you.

VICE CHAIR BERG: Good. Thank you so much.

MR. LIZARRAGA: Hello. My name is Joe Lizarraga.

I work for U.S. Growers Cold Storage in Vernon,

California. We operate about eight cold storage

11 | facilities in the City of Vernon. Our company is striving

to be good stakeholders and work with our community at

large. We're trying to move away from synthetic

refrigerants. We'd like to have two state of the art cold

15 storage facilities in the near future.

1

2

3

4

5

6

7

8

9

10

12

13

14

16

17

18

19

20

21

22

23

24

25

And as John Scherer was saying, the cost of these ultra charge ammonia systems is substantial in relation to a freon package unit. So we want to make sure that as new technologies are presented and it's more available to the industry, that we work in -- with other industries, since we -- regulatory bodies to make sure that those technologies are presented in the right way, and there are the alternative to these synthetic systems -- refrigeration systems.

But again, as John was saying, the business case

has to be made and sometimes they may -- the industry may need some financial assistance to reach that goal of being businesses with natural refrigerants instead of the synthetic ones.

Thank you.

2.4

MR. SKVARLA: Good afternoon. Mikhael Skvarla here on behalf of United Technologies Corporation, more specifically our subsidiary, Carrier Corps.

We're a world leader in refrige -- refrigeration and air conditioning HVAC units, and would like to make a commitment to the ARB and staff that we will continue to work with you guys moving forward on the technical details of these implement -- implementing the Short-Lived Climate Pollutant Strategy. It's not one fit -- size fits all solution as you heard, industrial versus commercial versus residential. They're all different things.

And there are some safety issues that need to be worked out and the industry is trying to fast track that right now. As you know, some of the newer refrigerants are flammable and that is a concern to our public safety employees, such as firefighters.

So we'll continue to work with staff moving forward, and would like to thank you guys for your time.

Thank you.

VICE CHAIR BERG: Thank you.

MR. CAPONI: Good afternoon, Madam Chair, members of the Board. My name is Frank Caponi with L.A. County Sanitation Districts. Pleasure to be here today.

With the plan we have in front of us, referring specifically to the organic diversion portions of the plan, we have huge challenges ahead of us, because of the shortened time frame in trying to get a lot done, as well as the huge infrastructure costs that we're going to be facing in trying to get the diversions that are called out by Senator Lara in the plan.

Because of that, we encourage the Board to do everything they can to take those costs very -- the most cost effective ways of reducing greenhouse gases, and develop the funding that's necessary to get this done. I think with that funding, the industry will be behind you and will be working to try to get their.

With all the challenges ahead of us, there's also a huge opportunities. For example, the use of biogas that could be developed from the organic diversion projects in a heavy-duty, low NOx, low carbon transportation. And that ties into what you were working on this morning. So that's another -- a real huge opportunity.

My agency, as well as the wastewater community, we are working very hard to try to jump start the organic diversion by utilizing our available capacity -- or

available digester capacity. At our wastewater treatment plants, we have projects underway. We've gotten funding.

Speaking of funding, we just got a \$2.5 million grant from CEC - thank you - and have other funding applications out there.

With that, we're going to be able to hopefully jump start the early introduction of food waste management, as well as developing biogas for transportation.

One item I would like to bring up to the Board, the plan and the presentation called for a report to the Board by 2020 of the progress and the barriers that are faced in implementing this plan. I'd like to suggest that 2020 is too late. We need really ongoing reports to the Board and evaluation of how this is going.

If there are serious road blocks by 2020, it's really too late. Don't forget, the first -- the first mandate hits in 2020, 50 percent, and then shortly after that, 75 percent by '25. So I'd like to see ongoing reports and evaluation of possible road blocks.

Thank you.

MR. EDER: Hello again. I'm -- good afternoon.

I'm Harvey Eder speaking for myself, and for the Public

Solar Power Coalition. I got a little going ahead of

myself last time. I want to try to slow it down a little,

but -- anyway.

Renewable natural gas is coming on at the big competition to solar for transportation. And you can see the proposal with the district to -- we need to go directly to battery electric solar and hydrogen fuel cell solar. There is a State law that says 25 percent of the hydrogen made has to come from solar.

And there is also the State policy 52002(b) of the Health and Safety Code that you -- State policy not to use fossil fuels and non-renewable fossil fuels. And that's what we're doing. That's what this plan is.

Using solar electric vehicles can resolve this right now. The green -- we've participated in the Low Carbon Fuel Standard process since '08. And there are exchanges of emails going back and forth with staff, and not using the right numbers for methane for CH4, anyway, too.

So this has to be gone over. The money that's paid for the credits are much higher than the cap-and-trade market. Maybe a lot of people don't know this, but it's like \$100 a ton, versus 10 or 15. There are some problems with this and with the GREET.

And also, there's drug resistant antibiotics.

There's a -- it isn't -- it's not report -- required for hospitals to report this until next year. It's done with

animal -- 70 percent of human antibiotics are used in animals, and it comes through the waste system. There's stuff -- I'm incorporating by reference information the entire record from the South Coast 2016 plan into the record here.

And included in that is information from CDC, WHO about deaths in the tens or hundreds of thousands from drug resistant antibiotics. And to that's being put into the distribution system, into the storage system, a la Aliso, et cetera. And there are deaths out there. And it's got to be counted at \$9 million per cost to society for premature death, and -- anyway. Thank you.

VICE CHAIR BERG: Thank you.

MS. GUTIERREZ: Good afternoon. I'm Irene
Gutierrez. I'm an attorney with the Natural Resources
Defense Council. I'd like to thank the Board for
recognizing the serious threats that are posed by
short-lived climate pollutants and for design a
comprehensive strategy to move forward with reducing them
in the State.

NRDC submitted written comments in January of 2017, so I'd like to just touch on a few key points from those comments.

First, with respect to reducing black carbon in the State, I'd like to point out to the Board, in case

they haven't gotten to our comments yet, that we've referred to a couple of other models from other jurisdictions, such as Alaska in the Pacific Northwest that have had successful programs at tackling black carbon emissions from wood stoves.

Second, with respect to emissions from the dairy sector, we respect that the Board is interested in moving away from fresh water lagoon systems, which have a number of problems associated with them. In our comments, we've referenced several models for non-digester systems to deal with dairy emissions. And we think it's important for the Board to look to those measures as well, and really invest in pilot programs that are not just looking at digester technology.

We think that other types of programs are more cost effective and could be more readily adopted throughout the State, and that there could be greater strides made that way.

Finally, with respect to attacking HFCs, we think it's really important for the State to move forward with strong measures in the State and to move forward with those measures expediently. As the Board is no doubt aware, there are a number of reasons why federal commitments to reducing HFCs are currently in flux:

There's litigation about the SNAP rules, the current

administration's commitment to international climate protocols is in question.

And so we think that there's a lot of opportunity for this State to move forward and really make progress on these issues in the State. And with that, I'd like to thank the Board again and say that we look forward to working with you in the future on these issues.

Thank you.

VICE CHAIR BERG: Thank you.

I don't think you look like Libby

(Laughter.)

VICE CHAIR BERG: I think they flipped a coin

13 | and --

14 (Laughter.)

MS. GROUT: Well, when my alarm went off this morning it 2:45 a.m., I felt very optimistic about today, and I still feel optimistic about today. So I'm so pleased to be here. My name is Libby Grout, and I'm with Families for Clean Air. And we are concerned that CARB did not use the operating cost for electric ductless mini-split heat pumps, when preparing the economic assessments and the wood to electricity conversion scenario in the residential tire place and wood stove conversion measure of the final strategy.

Electric ductless mini-split heat pumps are the

most energy efficient heating appliances. I don't know if you had a chance to review the graphic that our organization sent to you previously. If not, I do have additional copies. And this information comes from the Bay Area Air Quality Management District website.

As you can see on the graphic, an electric heat pump, the heat -- excuse me, the heat efficiency brings in at 300 percent versus a gas furnace at 78 percent; wood stoves in the 50 to 70 percent range; and fireplaces at 10 percent.

The cost to heat using an electric heat pump can be as low as \$62 a month. According to this data, that's lower than the cost of burning wood for heat, and notably, the PM2.5 emissions are much lower at 0.5 pounds per year, versus those in the wood burning category of 5 to upwards of 300 pounds her year.

Given the affordability of electric ductless mini-split heat humps, we are concerned by language in the final SLCP strategy concerning the provision of incentive funds for wood burning heaters in areas quote, "Where distributed natural gas is not available, or quote where central heat is cost prohibitive.

Since the cost of operating these heat pumps are comparable to those of natural gas heaters, and less expensive than wood, it makes little sense to provide

incentives for wood heaters in the above cases.

We are also extremely concerned that the unintended consequences of implementing this policy would be that of needlessly subjecting economically disadvantaged populations to much higher levels of air pollution. Since electric heat pumps can provide heat to these areas at a comparable cost to natural gas, such populations should not be subjected to the higher pollution levels and the resulting health effects of wood burning heating appliances.

To protect public health and to use incentive dollars most efficiently, only non-wood burning devices, such as heat pumps, solar and natural gas heaters should be incentivized, except in areas that require the use of wood-burning equipment for safety.

In addition, heat pumps can cost less to purchase than a wood stove.

I'll end there. Thank you.

VICE CHAIR BERG: Thank you very much.

Okay. Mark, you're up.

(Laughter.)

MR. KRAUSSE: Good morning -- see. Good afternoon. I'm Mark Krausse with the Pacific Gas and Electric. And like Libby, I woke up at 2:00 o'clock this morning. However, I had not set my alarm for that time,

so please bear with me, if I don't manage through this very well.

2.4

We are here to express PG&E's support for the targets that we have in the Short-Lived Climate Pollutant Strategy, and to commit to working with the Board, with the Department of Food and the Agriculture and the PUC in implementing the terms of Senator Lara's SB 1383.

Some of you may know PG&E has made big investments very recently in leak reduction throughout its gas pipeline system, both for safety reasons and, of course, for climate reasons.

We've employed new technology in the form of Picarro, car-mounted leak detection technology. And we've also been working, of course, with your staff here at the Air Resources Board on leak abatement through the oil and gas regulation, and support that program with an eye toward refinements in the future as we learn from its implementation. Fariya Ali will expand on that for us later today on that item.

PG&E has long been committed to the development of biogas from dairies and other sources. And our current portfolio of biogas contracts include nearly 50 megawatts of biogas derived electric generation.

And as the first utility in California, and the third in the nation, to accept renewable biomethane into

its pipeline system, we look to work with developers to ensure that biogas is a cost effective and safe pathway to achieve our climate goals, and we look to leverage State funding and incentives for initial infrastructure investments.

We encourage ARB to consider Greenhouse Gas
Reduction Fund support to help offset the overmarket costs
of dairy digester projects under SB 1383. And as the bill
highlights, the Low Carbon Fuel Standard is, of course, a
great opportunity for us to attribute whatever quantities
of biogas toward transportation and thereby buy down the
costs of some of those over market gas

I want to emphasize that RNG development efforts should remain technology agnostic, and location-specific procurement mandates should be avoided.

In terms of efforts -- should be avoided to preserve much -- the flexibility to help build this nascent market. Moving to black carbon, we would encourage ARB to consider Greenhouse Gas Reduction Funds also for the trade out of wood burning fireplaces to natural gas or propane fireplaces, particularly in light of the news that the new administration may eliminate that program at U.S. EPA.

And finally, we also hope to receive the last tranche of funding. Several utilities, including PG&E,

the Gas Company, and the Gas Technology Institute are on the cusp of an engineering analysis to look at the -- gasifying wood waste.

So currently, we and other utilities buy electricity that's generated from the burning of wood waste. These facilities have emissions, of course, particulate emissions, black carbon. If we can gasify that fuel and put it into our gas system, we think we can make a big difference. So we're looking for ARB support in that as well.

Thank you.

VICE CHAIR BERG: Thank you.

MR. YI: Hello, Board members. My name is John Yi. I'm with the American Lung Association. Thank for having me here.

Before I begin my remarks, I just wanted to share real briefly, I grew up with asthma. I grew up in Los Angeles, and so I saw firsthand what it's like to have a mother frantically trying to figure out solutions for you. So on a topic like this, I really appreciate your leadership, and it's such an important issue, so glad we're discussing today.

The American Lung Association of California supports the Short-Lived Climate Pollutants Plan in front of you today. You know, as you know, we need strong

protections and actions to control climate pollutants that worsen our air quality, and accelerate climate change.

And so today, I truly believe is a milestone in our fight against climate change, as we finalize the strategy to cut some of these highly potent pollutants from our air. And so in this plan, we support the strong strategies for controlling black carbon, methane, and fluorinated gases.

And we continue to support regulation incentives funding to accelerate these strategies. We need strong partnerships with local air districts as we roll out these measures as well.

In addition to cutting super pollutants, the impacts this has on our environment, you know, is pretty much well known. It cuts lung -- I'm sorry, it cuts cancer impacts, premature deaths. It helps improve our local air, and in addition to reducing food insecurity and food waste, and reducing local and regional health impacts on residential wood smoke.

Specifically on black carbon, I do want to mention that we support zero emission freight clean-up measures. And on wood smoke issues, we emphasize that the cleanest home heating option should be available to the public, and wherever possible, to save money and also to move away from the reliance of wood burning.

And finally, incentive fund should support cleaner options, including electric heat pumps, solar and natural gas options. There are new electric heating options that are extremely cost effective and should be more broadly utilized.

2.4

On methane reduction, we encourage the Board to continue to evaluate and fund a mix of strategies including alternatives to digesters, such as pasture based management. And so we look forward to working with you the Board, with Senator Lara, as we create strategies to protect public health and safeguard a clean and -- a clean air future.

So in closing, we encourage the Board to stay focused on improving community health at the core of implementing these strategies.

Thank you for your leadership

MS. WALTER-TERRINONI: Good afternoon. I'm Helen Walter-Terrinoni from The Chemours Company which is a two-year old name for a 200-year old DuPont company.

We -- we've been in the refrigerants and HFC business for a very long time, and we certainly have interest in the matter around the short-lived climate pollution strategy.

At Chemours, we strongly support HFC management and global warming potential reductions, especially

through structures like the Kigali amendments. And I'll talk a little bit more about that shortly.

But we believe that California can continue to play an important role in leading SLCP regulatory efforts to reduce emissions of high GWP HFCs.

The ARB staff has worked very hard to engage stakeholders in a meaningful way, and that's greatly appreciated, among industry as well as NGOs. They have developed a very thorough and thoughtful strategy, including leaving the door open for future technical developments, which is certainly one of the reasons that the Montreal protocol has been so successful.

For example, the energy efficiency, you've heard a lot of numbers. There's a lot of different little spaces that people talk about, when they talk about refrigerants. We have seen improvements, for example, of 10 to 12 percent energy efficiency in commercial refrigeration in hundreds of stores that have transitioned to medium GWP refrigerants in Europe.

That has to be balanced with leak rates, and energy efficiency. And so the ARB staff has been very thoughtful in this in the strategy wording that they have included looking at indirect emissions and keeping the door open to provide for further improvements in very, very low GWP energy efficiency footprints.

In addition to that, we wanted to say that we concur with the comments from NRDC earlier, that we do believe that the federal regulations are at risk due to litigation, and we think it is -- will be very helpful for the ARB staff to keep that into consideration, and thoughtfully make sure that wording is included in future -- in future regulations development, such that they're able to adopt SNAP rules and refrigerant management rules in case -- in case litigation goes in a certain direction.

We look forward to continuing to work with California as they lead the world in this very important emissions reduction effort. And we're not -- again, we wanted to thank the ARB staff for their efforts.

Thank you.

2.4

VICE CHAIR BERG: Thank you very much.

I think before we take the next speaker, what we'll do is take a 10-minute break and give our court reporter an opportunity to stretch his legs along with my fellow board members. So We'll be back -- well, by your phones, if you're looking at your phones, it is going to be 4:05. On the clock back there, it will be about 4:07.

Thank you.

(Off record: 3:55 p.m.)

(Thereupon a recess was taken.)

1 (On record: 4:06 p.m.)

VICE CHAIR BERG: All right, everyone. Let's take our seats, please.

Two house keeping items, while everybody is taking their seat. If you want to sign up for this item or the -- actually, the other two items we have, which is the SB 375 or the oil and gas, could you please sign up in the next five minutes, because I'm going to cutoff all sign-ups by 4:15 of that clock time in the back. So anybody else who wants to testify on this item or the following two items, 4:15.

Okay. And with that, welcome.

MS. GALE: Thank you.

VICE CHAIR BERG: Okay. Ladies and gentlemen, let's come back to order, please.

MS. GALE: Hello, Board members. Again, my name is Genevieve. I represent the Central Valley Air Quality Coalition as well as the Coalition for Clean Air on matters pertaining to the PM2.5 planning process.

I'd like to again make the connection between State planning and San Joaquin Valley needs. And I'll focus my comments on black carbon and methane.

So for black carbon, residential burning is the largest contributor to black carbon in the State, and it is also the largest contributor of direct PM2.5 in the

valley. So measures that address residential burning are really important in both avenues.

And the current plan proposes incentives to change out wood burning stoves and fireplaces, and also increases outreach and education of the impact of wood smoke on our health. So I am a big fan of both of these things. I'd also -- I'd like to quickly note that at present the San Joaquin Valley has an incentive program for changeouts of wood stoves and fireplaces, but they don't, at the moment, explicitly prioritize the cleanest burning devices. So I encourage staff to collaborate on this point and perhaps synchronize so that we are prioritizing the cleanest burning units.

And I also would like to thank Senator Lara, who must have run to the airport, for his bill that he's proposing on wood smoke. I encourage -- I look forward to reading the language and supporting it through the process.

For methane, I'd like to talk about methane that's produced from dairies. Alongside methane is ammonia emissions. And when ammonia mixes with NOx, it becomes a ammonia nitrate, which particle speciation studies have shown make up about half our PM2.5 problem in the valley. So it's a really big component of PM2.5.

And I encourage staff to assess how different

methane control strategies will affect ammonia reductions. And if certain strategies reduce ammonia, I would like that to be considered a co-benefit, and that we prioritize ones that address ammonia as well.

Keep it short and suite and thank you.

VICE CHAIR BERG: Thank you.

MR. HON: Hello. I'm Charlie Hon from True

Manufacturing, a commercial refrigeration manufacturer who specializes in self-contained equipment, one of the product you're looking at. And we are here to support you in any way possible. Thank you for your efforts so far, and agree with your decisions and your directions completely. And we want to make a few points about that.

Number one is the GWP -- ultra high GWP gases are out there. They're going to be -- continue to be out there, because the life expectancy of this equipment in your own reports is approximately 20 years. And by the time the regulations would be taking effect, that's half the life that's already out there, and we're continuing to add to that banking of refrigerants, so we encourage you to go consider these items and get clarification as soon as possible.

And we would also ask for some consideration, because the industry as a whole has a problem with people trusting the existing technologies. New technologies are

always in question. And so we would highly support any direction that the Board can give us to incentivize or publicize the newer technologies, which will reduce the GWP, and quite often make the units much more efficient in the process.

Thank you.

VICE CHAIR BERG: Thank you.

MR. BOCCADORO: Good afternoon. Michael Boccadoro, Dairy Cares. Very happy to be here today on behalf of California's dairy farm families. And while I cannot say that the dairy families full support the overall SLCP plan, I can say that we believe it has been dramatically improved, and in large part from the implementation of Senator Lara's SB 1383.

SB 1383 represented an important compromise to bring more balance and a more workable incentive based approach to dairy methane reduction in California. We appreciate his leadership and patience to make that happen. And he was very patient, particularly on the last night of -- the night before the last tight of session.

Even with these positive changes, the plan remains very ambitious, and continues to seek dairy methane emission reductions that go well beyond what is encompassed in 1383, and we still have some concern on that front.

So let me just be clear about one point is the hard work begins now. You know, the adopting the plan is the easy part, figuring out how we together get to the reductions that the State is looking for becomes the hard part. And the dairy industry is committed to doing our part. We are already investing in research to better understand emissions from dairies. We're also investing in research to understand the options. We're not just interest in digesters. We're interested in other ways of reducing.

In fact, we don't believe digesters are going to be the solution on the majority of dairies. We think maybe 100 to 200 more digesters get built in this State, but the smaller dairies in particular are going to need other technologies, or practices to achieve those reductions.

Investing, we are going to be spending a lot of time and money to move dairy digesters to the next level by creating clean transportation fuel. You've heard that from several folks today. We think that's a very important way of not only maximizing greenhouse gas reductions, but also maximizing criteria pollutant reductions in the San Joaquin Valley.

We're in this together. We want to continue to work with ARB. We're happy to see that ARB has initiated

the stakeholder process. We're happy to see that the CPUC has initiated the pipeline process. We need to make CDFA money available. It's currently being delayed in implementation. We have 25 shovel-ready projects at a minimum. That program is going to be heavily oversubscribed. They need to get the money out, and it's currently being delayed. We're very concerned about that, and we need to have more funding for digesters and alternatives.

And then let me just conclude by thanking your staff and the Board. Many of you have been out to see our projects. Mr. Corey spent 14 hours with us about a month and a half ago visiting a couple of large dairy digesters in the State. And I think he came away with an appreciation for how hard the industry is working, and I think for how hard the tasks that we have ahead. There's a lot of obstacles that we're going to have to overcome. So our sincere hope is we both succeed.

The shot clock just went off, so I better stop.

MS. O'BRIEN: Good afternoon. Thank you, Chair

Nichols and Board members. Rachel O'Brien with the

Agricultural Council of California. Ag Council is a

member-supported organization. We advocate for more than

15,000 farmers across California and represent the State's

three largest dairy cooperatives.

California dairies have been an engaged partner throughout the development of this strategy, and we do remain committed to doing our part to fulfill the goals laid out in SB 1383 by Senator Lara.

Now, I know he's taken off to catch his flight, but we did want to thank him for all of his work with the industry to craft a thoughtful and balanced approach to achieving methane reductions in our sector.

After reviewing the financial strategy, we are encouraged. The targets are still ambitious, but it's a big improvement over previous proposals. Like Michael, I'd like to thank the staff, Mr. Corey and others, for their extensive work on this strategy. The final copy recognizes many of the challenges that stand in our way, but we believe that there is a good process laid out by SB 1383, and it's crucial that we get there.

I wanted to point out that the cost effectiveness of achieving reductions works best when we have incentives prior to regulations. We have a tremendous opportunity to make sure markets are fully enabled, that dairies have access to capital, credits, and incentives. All of which is needed to help develop successful methane reduction projects.

We stand ready to work with ARB and other agencies to address the technical market and regulatory

hurdles, as well as any research gaps in forthcoming workshops, and as well as the work groups that you guys have put out.

Thank you very much.

MR. NEWELL: Good afternoon, Madam Chair and members of the Board. My name is Brent Newell. I'm with the Center on Race, Poverty, and the Environment.

Throughout the development of the Short-Lived Climate Pollutant Plan over the last couple of years or so, we've worked with many environmental justice groups and environmental organizations to comment on the various drafts, and to urge that there be mandatory regulations for methane from dairies. And we were very pleased a year ago when the plan shifted and went in that direction.

We are, however, disappointed that Senate Bill 1383 set a limit of January 1st, 2024 as the earliest point when regulations could be implemented. That's seven or so years from now, a significant amount of time when there's this much methane being emitted by these sources, and it's having such a significant effect on climate change, at 84 times the power of CO2. Over a 20-year period, it's 12 percent of the State's greenhouse gas inventory. It's a huge impact, and it must be addressed.

You know, when you compare that to the Aliso Canyon methane leak, dairies emitted more than twice as

much methane as Aliso Canyon on a daily average basis.

I look forward to working with the Board on the development of these regulations. The environmental justice groups that we work with look forward to working with the Board as it develops these regulations that are so important. And we ask you, and we ask staff, to really focus on not making San Joaquin Valley communities sacrifice zones for pollution from anaerobic digesters that are burning methane that produce electricity.

That's -- it's not acceptable when those are producing electricity that's 20 times as pollutant as a natural gas-fired power plant. We can't do it. We shouldn't do it. It's just bad policy.

So there are other things to do to reduce methane from these facilities, pasture based systems, avoid liquefied manure methane emissions, they allow healthy pasture to sequester carbon. There are air quality co-benefits. You get away from ammonia. You get away from corn silage volatile organic compound emissions. Huge benefits for public health with different policies. And there's really, really no reason why California should produce so much dairy product, so much.

We don't consume it all in California. It's exported. We're producing all of this methane in-state, when it's not necessary. Imagine if we had a robust

coal-fired power plant industry, we wouldn't continue with that coal-fired power plant industry just because it's here in California. No, California is decarbonizing its electrical grid. It's moving from that. It's decarbonizing the transportation fuels we use.

We need to decarbonize what we eat as well. So thank you very much.

MS. STARR: Good afternoon. My name is Christina Starr and I'm here to represent the Environmental Investigation Agency, an independent nonprofit that has been working on the issue of HFCs for nearly a decade since first calling for an amendment to the Montreal protocol back in 2008.

The Kigali amendment reached last October after more than eight years of negotiations neither changes nor reduces the need for California's leadership on this issue. In fact, we need that leadership now more than ever. Strong and effective policy here in the United States will be fundamental to supporting effective implementation of the Kigali amendment.

Despite broad support, we now face substantial uncertainty, as you heard from my colleague at NRDC, about the prospects for U.S. government ratification and implementation. Further more, the global phase down schedule and current policies will not achieve the

emission reductions quickly enough to meet California's 2030 targets.

Additionally, the regulatory capacity of the EPA faces substantial attack and threatens being rolled back. This includes legal challenges to both of the major programs at EPA used to regulate HFCs, the SNAP Program and the Refrigerant Management Program.

Even if upheld, existing federal policies are insufficient to ensure direct transitions to truly low GWP technologies, and instead we risk locking in years of additional emissions from the remaining high GWP HFCs and HFC blends that are still permitted.

For example, a new super market opening in California or an existing supermarket phasing out an old ozone-depleting substance using HCFC-22 is still permitted to use HFC 407C, a refrigerant with nearly near 2000 times the climate impact as carbon dioxide.

With No additional policies, all of the 2,400 facilities in California with large commercial refrigeration systems could convert so HFC 407C. Over their 20-year lifetimes, these new systems would contribute to additional emissions of approximately 40 million metric tons of CO2 equivalent, which is the same as running 12 coal-fired power plants for a year.

A ban on new equipment using HFCs above a GWP

threshold of 150, such as that proposed in SLCP strategy can avoid these emissions and much more. Last October, on the eve of the Kigali amendment, the Consumer Goods Forum, a group of leading global manufacturers that includes major U.S. household brand names like Target Coca-Cola, and Walmart did just that. They agreed voluntarily to commit to using only refrigerants below a GWP of 150 in all new commercial and industrial refrigeration systems.

We urge CARB to hold steadfast to this 150 GWP threshold in all equipment bans that it implements.

In closing, I'd like to reiterate our strong support for the proposed measures, and thank you for this opportunity to comment and look forward to working with you in the future.

VICE CHAIR BERG: Thank you.

EJAC MEMBER HAMILTON: Good afternoon. I am not Christina.

VICE CHAIR BERG: Yes. I was glad to see you weren't gone.

EJAC MEMBER HAMILTON: Yeah. This is Kevin
Hamilton with the Central California Asthma Collaborative.
And with regard to short-lived climate pollutants, I think
you've finally gotten to the place that some of us have
wanted to see you go where you have the intersection
between greenhouse gases and criteria pollutants.

This has been a blessing and a curse, I think, for you certainly, and for us in the San Joaquin Valley. But I think it provides an opportunity for you to help local air districts in their battle with stationary sources of pollution, and particularly with black carbon.

Black carbon is coming both from, of course, mobile sources and stationary sources. I want to challenge the Board again and re-challenge you. And I will continue to do this as long as I can stand in front you to come up with an off-road ag equipment rule. A lot of this black carbon we're talking about, and particularly with relation to dairies themselves is off-road black carbon from off-road ag equipment.

We don't have that rule. I think we've been asking for that rule for ten years now. That is too long. We need this rule. We need this inventory. I think you have a fairly complete inventory. I'm looking in the ARB's inventory. I can actually count tractors now. So when I can count categories of tractors, I think we're getting pretty close. IC engines, we have a comprehensive list of IC engines, okay?

So let's not talk about IC engines moving to natural gas. Let's talk about them moving to electricity. Let's not talk about moving natural gas heating units into housing, let's talk about you partnering with the CEC and

putting solar -- roof top solar on people's homes, so they can have electric heat in their house. And because of the offset on the cost to their electric bills during the day from the solar, they'll be able to afford to run it at night.

So let's get innovative here and start talking with the other agencies and working with them. Let's talk to the transportation folks and be more aggressive about helping them understand the intersection between that black carbon generated from those mobile sources that they're Building patterns to run around on and the health of the communities around them, because I'm telling you right now, I've been meeting them, and they really don't get it.

They -- and I don't understand that -- I do understand that. I understand it very clearly, because their discipline doesn't lead them that way, and they need help.

And who's -- who better to help them than the public health agency charged with protecting our health from air pollution. So I would really recommend that we be more aggressive in helping those folks out to understand that, but I'm just going to keep beating this drum, ag equipment rule.

Thank you.

VICE CHAIR BERG: Thank you.

MR. DAVIS: Chair and Board members, my name is John Davis. I administer the Mojave Desert and Mountain Recycling Authority. We're a nine-member joint powers authority up in San Bernardino County. It's high desert and mountain communities. We've been working together since the passage -- or before the passage of AB 939, and we'll continue to work together.

We've executed agreements. We've incentivized and secured land-use permits for compost facilities, including a facility funded by the cap-and-trade incentive funds. We're engaged in the SB 1383 process, because that process I think is the most significant change to this industry since AB 939, and we'll continue working with that.

I came off the hill today to thank you for your action in taking the lead on the short-lived climate pollutants when -- after the passage of AB 32 began to try to understand the links in our industry and climate. And I was always puzzled by this conversion of methane to carbon dioxide. I understand it from an inventory standpoint, but it affects and has affected decisions about what to do with that organic material.

So the action you're taking today sends a very clear message that this is important, that methane is

methane. You can't dress it up as CO2 and call it anything else. It's going to act like methane.

So I really, really sincerely want to thank you for doing that. I was a voice in the wilderness, you know, a lot meetings trying to convince people now we have something that we can turn to. And I think it's going to have that international impact that you've heard about earlier.

So thank you.

VICE CHAIR BERG: And thank you too for keeping being that voice. A generally --

MS. MORRIS: Good afternoon, Chair Nichols and members of the Board. My name is Jennifer Morris, and I am representing Southern California Gas Company. We appreciate ARB's recognition of utilizing organic waste streams to produce renewable gas as a key SLCP reduction strategy. When used as a transportation fuel for electricity generation, or displacing other traditional natural gas sources, pipeline-injected renewable gas provides a solution to address multiple emissions challenges, and it's a reliable and flexible renewable energy source.

We support the goals of SB 1383 to establish infrastructure development and procurement policies needed to encourage renewable gas projects. One procurement

policy that the SLCP strategy specifically identifies is a feed-in tariff. We recommend that ARB evaluate additional options, such as a green tariff, or a renewable gas portfolio standard as potential new policies to accelerate project development.

SolCal gas plans to be part of the SB 1383 working groups, and we look forward to working with ARB and other stakeholders in the coming year to help ensure successful implementation and ultimately achieve California's GHG reduction goals.

Thank you.

VICE CHAIR BERG: Thank you.

MR. HAMILTON: Good afternoon. My name is Derek Hamilton. I'm here on behalf of Shecco America. We are a market accelerator for climate friendly refrigeration and air conditioning technologies.

What this means is we support moving away from HFCs toward natural refrigerant technologies, such as ammonia, carbon dioxide, hydrocarbons, air, and water. We believe that the Board can be ambitious in stating targets for the elimination of HFCs in air conditioning and refrigeration, and that this ambition can be supported by proven technology, which is already on the market today.

I want to tell you quickly about the F-gas regulations in Europe and how that that has positively

affected the industry there.

F-gas regulations came into force in 2006, and were strengthened in 2015. Now, they're aiming to reduce your F-gas emissions by two-thirds of 2014 levels by 2030, and that's being achieved through a combination of phase down and of outright bans of certain gases, and specific applications.

And now what our research has shown is that bans and -- banning gases in certain applications is the best way to move this forward, and that that is supported by and beneficial to the refrigeration industry. In Europe we're seeing in real time that ambitious environmental legislation can drive innovation, and create jobs.

In addition to the F-gas regulations at European level, we're seeing other things happening at national level, and measures are being implemented, such as taxes on HFCs and incentives.

Now, it's the combination of regulations and incentives that's really help to drive the market towards natural refrigerants. The Air Resources Board by following a similar model can demonstrate that this technology works, and thereby accelerate the transition to an HFC-free future.

I want to reiterate clearly that its bans in conjunction with incentives that provide the most

effective mechanism to do this. For those who interested, we can provide further details of how this has happened in both Europe and Japan.

For me, the most exciting part of the discussion is that the technology we need already exists. To give you one example, there are already 10,000 grocery stores worldwide operating with carbon dioxide refrigerant. A few hundred of those are in the U.S., but California is already leading the way. So the technology is already available.

And to that point, we are going to be organizing a conference for around own industry leaders. The name is Atmosphere America, and it will be happening in San Diego in June.

And finally, I just want to say that this is a golden opportunity for California to become world leaders in moving towards a HFC-free refrigeration and future.

Thank you.

VICE CHAIR BERG: Thank you.

MR. STEWART: Hi. I'm Jim Stewart and I'm actually not speaking on behalf of the Sierra Club. I'm speaking as an individual scientist. I actually have a Ph.D. in physics, and I have looked a little bit at this methane from enteric - in other words the cow burps - and I have very exciting good news for all of us. And I was

hoping Senator Lara could be here to hear this, but we'll relay it to him.

Some Australian scientists have discovered a particular species of Asparagopsis seaweed, two percent added to the cow feed eliminates 90 percent of the methane emissions from cow burps. So there's hope for all of us. And I'll look forward to working with the ARB staff in getting some research going right here very quick.

So thank you.

VICE CHAIR BERG: Thank you.

MR. EDGAR: Chair, Board members, my name is Evan Edgar. I'm an engineer for the California Compost Coalition and the Clean Fleets Coalition. We totally support this program and SB 1383. Twenty years ago, the industry I represent we were hooked on heavy diesel and we were hooked on landfills. That was back in AB 939.

Today, we are deploying a CNG fleet, and we are diverting facilities. Today, we're making anaerobic digestion facilities. We take that methane at landfills, we dress it up and we make RNG, which is carbon negative.

We're deploying in our CNG vehicles these near zero, low NOx, ultra low NOx engines. We're net zero facilities on greenhouse gases. We do it with zero waste. We're at the intersection of waste diversion and healthy soils, the intersection of greenhouse gases and criteria

pollutants. Our industry has transformed with regulations and incentives.

CalRecycle is estimating they need about \$100 million a year incentives, along with the regulations, to transform the industry from landfill based to diversion based. Plus, the Clean Fleets is estimating they need about \$100 million a year to get off diesel into these low NOx, ultra low NOx engines on carbon negative fuel.

Cap and trade was a huge success. This report came out last week using cap-and-trade dollars at work. CalRecycle has done facilities that are the most cost effective facilities, as estimated by the Leg Office, and 100 percent DAC benefit.

Last week, CalRecycle took in 46 applications for \$97 million. We only have 24 available. We're four times oversubscribed, but once again it's going to transform the industry into these low criteria pollutants with carbon negative fuel.

So we totally support this program. The solid waste industries I represent, the compost and organics industry we're here, we're investing with strong support. So picture this, carbon negative fuel, near zero NOx, zero waste plans with net zero facilities 100 percent DAC.

We're doing it. So next year during cap-and-trade funding, we're looking forward to \$100

```
million from CalRecycle as well as a little bit more money
as part of the low carbon transportation fund and AQIP. A
lot of money in AQIP goes to other types of vehicles.
We're heavy-duty here. We're now. We're short-lived with
```

methane. We're the biggest bang for the buck now in order to get off landfills, and get off diesel. We can do it.

Thank you.

VICE CHAIR BERG: Thank you.

MR. FLORES: Good afternoon, Board members. Ooh, this is a serious podium. We're so close. This is good.

(Laughter.)

MR. FLOREZ: This is so good.

Hello to you guys as well on the left.

(Laughter.)

MR. FLORES: My name is Juan Flores. I'm with the Center on Race, Poverty, and the Environment. And I'm a community member as well of Kern County. I live in Delano. We drove three and a half hours this morning to be here with you.

First of all, I think from the point of view of community members, we're glad that we finally have a strategy to document emissions in our communities. I'm pretty sure you're aware that Kern County and Tulare County, we host the vast majority of dairies that we have in California. And this certainly is going to have a

positive impact in our lives.

Although, sadly, that will not come until 2024 for us, but -- although we're happy about the strategy, I think -- we think that there's also other things that we -- or that you guys could consider, and one could be the anaerobic digesters. They're not a complete solution for us. While you would be reducing methane and some sort of pollution, you will be generating another pollution for us. And that really doesn't move us more than that.

And also, I would like to invite you guys to consider pasture based dairies. I think that could be another tremendous solution for problems down in the valley.

Thank you.

VICE CHAIR BERG: Thank you.

MR. GARCIA: Good afternoon, Board members. My name is Miguel Garcia. I'm a resident of Arvin, California, and also a member of the Committee for a Better Arvin. I'm going to be brief.

I'm just going to hop on the point that Juan Flores mentioned. I believe that one of the strategies to reducing methane should be pastures. I believe that it's very manageable and easy to accomplish in a short-term. This would avoid methane from liquefied lagoons. It would also support healthy grasslands, which act as carbon

sinks, sucking the carbon dioxide into the soil, and -- instead of, you know, going into the air.

I believe that we should definitely focus on the pastures as a great strategy to reducing the methane, and act now instead of waiting years from now. Otherwise, we should start eating less factory dairy products and stop supporting these industries just to see what the impact would be.

Thank you.

2.4

VICE CHAIR BERG: Thank you.

MS. ESCOTO: Thank you. My name is Estela
Escoto. I'm coming from the San Joaquin Valley. In the
San Joaquin Valley, the dairy farms are the main source of
producing methane gas. In my community, we are suffering
due to so much pollution.

There are many people that are sick with cancer, asthma, and allergies. For that reason, I ask that you take this into account and do something. So that you do something so that the owners of the dairy farms invest in new methods in order to reduce the amount of methane, I invite you to come to my community to see what the people are going through.

Thank you very much.

VICE CHAIR BERG: And thank you very much.

MS. WOOD: Hi. Good afternoon. My name is Susan

Wood. I'm here on behalf of the American Carbon Registry. The American Carbon Registry is actually a registry under AB 32 that promotes the use of voluntary offsets for projects across California, and the United States, and globally.

I personally was an advisor to ARB on the design of AB 32. In 2006, I actually hosted Fabian Núñez and a group of about 25 other executives and regulators down to go see an anaerobic digestion project Latin America. And that helped form the basis for the use of offsets in the program.

So as you may ascertain, we have a vested interest in offset credits and projects that produce offset credits and the benefits that they have to the environment. We believe, and many others do, that these offset credits that are created from privately funded projects, that help reduce for short-lived climate pollutants are an excellent way to help the ARB achieve its 40 percent reduction target.

We're concerned that the Short-Lived Climate
Pollutant Strategy does not include the consideration or
adoption of new offset credit methodologies that reduce
short-lived climate pollutants. Offset credits created
through the reduction of short-lived climate pollutants
from privately funded projects are able to achieve greater

reductions than government-funded programs, or typical command and control regulations.

Some interesting facts. Under AB 32, approximately 55 million tons of greenhouse gas has been reduced through privately funded projects that created offset credits. Only 13 million of those credits have actually been used for compliance under the AB 32 program.

So therefore, there's an additional 42 million tons of greenhouse gas reductions that have gone unused for compliance. These are overcontrol measures that we feel that offset credits in the projects create.

We urge the Board to consider adding short-lived climate pollutant offset credit methodologies to its strategy. American Carbon Registry and other programs have already developed some short-lived climate pollutant methodologies, and most of which can be applied to urban environmental justice areas to reduce emissions locally.

For example, you were mentioning the low GW refrigerants being something that you really want to achieve a reduction in the strategy. There's currently a methodology that improves the refrigeration systems and reduces the manufacturing and use of HFCs. There's also a methodology that eliminates the use of HFCs in foam manufacturing, as well as a methodology that reduces emissions from the oil and natural gas production

industry.

In conclusion -- in conclusion, please consider offset credits.

Thank you.

VICE CHAIR BERG: Thank you very much.

(Laughter.)

CAPCOA EXECUTIVE DIRECTOR ABBS: Good afternoon, Chair Nichols and members of the Board. My name is Alan Abbs. I'm the Executive Director of the California Air Pollution Control Officers Association representing the 35 local air districts in California. I'm here to support the SLCP strategy. And, in particular, I'd like to thank staff for including the section on wood stoves and identifying the tremendous emission reductions that can be achieved through various wood stove programs that air districts perform.

I'd also like to thank ARB for helping us get that initial \$5 million of funding in the Greenhouse Gas Revenue Fund for this fiscal year. And I'm pretty excited that very soon we're going to be kicking off that program, and making it available to the 35 air districts focusing on rural parts of California, and low income parts of California, and working on changing out older uncertified wood stoves to either new certified wood stoves or cleaner alternatives, such as gas and electric, where they're

available.

Unfortunately, Senator Lara is not here, or I would -- I would thank him as well, because I'm pretty excited to hear about his new wood stove bill that he's going to be introducing. And I'm hopeful about that, because in the SLCP strategy, the wood stove reductions, it's going to be a tremendous lift to get to where we need to go to meet that requirement. There's an identification of up to 350,000 changeouts that we need to accomplish in the next 15 years to make this a reality.

And so any help that we can get from the legislature and for ARB -- from ARB to get us to that number, the districts would appreciate.

So thank you very much.

VICE CHAIR BERG: Thank you.

MR. NOYES: Good afternoon, Chair Nichols and members of the Board. My name is Graham Noyes. I want to start by assuring you I'm going to use one minute or less of time here and commend you for your dedication to receiving public comment and to greenhouse gas reduction and clean air, and recognize Assembly Member Garcia for signing up for this as an additional duty on his desk.

I work in the Low Carbon Fuel Standard space in particular, and really want to deliver a message from industry that there's tremendous enthusiasm about these

short-lived climate pollutants, frankly, as feedstocks to make transportation fuels out of. I want to commend all the work that staff has done to move that LCFS program forward, and the recognition in this report that this is an opportunity here, and encourage close collaboration between the agencies, particularly CDFA and CalRecycle and the Air Resources Board to build out the pathways and solve the other sort of technical problems that need to be solved in order to basically make these incentives work and valuable to the companies out there.

Thank you.

VICE CHAIR BERG: Thank you.

MR. MAGAVERN: I'm Bill Magavern with the Coalition for Clean Air. This is a sound plan. It's a strong plan. It's been a long time in the making and we urge you to adopt it today, and move quickly to the implementation.

As Senator Lara pointed out, this plan can really help other countries, as well as other states to figure out how to reduce short-lived climate pollutants in their areas. And we know these are powerful climate forcers. Some of these pollutants also are harmful at ground level. And with black carbon, when it falls on our snowpack, it accelerates the melting, and worsens our water supply problem.

Black carbon is -- of course, will be reduced in great part by a number of the measures that we talked about this morning, and which you adopted this afternoon to reduce diesel emissions from mobile sources. And as we've heard in this presentation, we also need to reduce wood smoke.

When it comes to methane, the biggest source is dairy. Genevieve addressed that issue in her comments. Second biggest source is landfills. We support diversion of organics, and particularly into anaerobic digesters and compost.

We do acknowledge that we come back again to the funding issue. It will take a fair amount of money to provide the infrastructure. So again, we face that issue of where do we come up with the funding?

And the third biggest source of methane is oil and gases, and you have a measure coming up soon that will deal with that.

We also support the use of renewable gas, when it's sustainably derived, and particularly when that renewable methane can be put into long-haul trucks, and used to displace diesel, and reduce air pollution that way.

And finally, I applaud you for using the 20-year time horizon. We think when it comes to assessing global

warming potential, we should always use a horizon of 20 years or fewer, because the situation is that urgent.

That's really a values choice and shows that we recognize that we have a crisis.

Thank you.

VICE CHAIR BERG: Thank you.

MR. SHEARS: Good afternoon, Chair Nichols, and members of the board. My name is John Shears. I'm with the Center for Energy Efficiency and Renewable Technologies. And California Hydrogen Business Council had asked us to represent an issue for them this afternoon, but I will leave that to my boss, John White, to speak to after me.

So I'll just speak for CEERT right now. First,

I'd like to thank Senator Lara for championing the -championing the legislation that's allowed this to come to
fruition. This is an issue that CEERT has championed for
over a decade. In fact, CEERT convened the first
symposium in California on this issue back in 2007, even
before the Haagen-Smit symposium addressing the issue. So
we're very happy to see today finally arrive.

I'd like to speak in strong support for the plan and the work that's going to come out of the plan. I want to acknowledge the concerns of some of my colleagues with regards to the work around dairies. And, yes, some

dairies will be too small for it to be feasible, you know, for certain approaches to work. And we do need to be sure that in whatever program develops from the SLCP reduction strategy does not, you know, lead to any perverse incentives.

So we should make sure that we're directionally moving towards cleaning up the industry, which is an important part of the economy. And the issue is if California doesn't regulate this industry and the industry moves to a neighboring state, you know, will it be regulated and operate nearly as cleanly as if we do it here. So we're -- the other option is to squeeze the industry out and push the impacts elsewhere. So I just want to note that.

I'm also glad to see that the related item later this afternoon on the oil and gas rule, there were some changes made as part of the 15-day changes, which are directionally consistent with the super pollutant reduction strategy, so I'm glad to see that as well.

And again, like many other speakers today, I am glad to see California again taking that championing role and working on climate and the linked air pollution issues, especially now with the federal government back paddling, if not abandoning, a lot of the issues. So California has an even more important role now than we

would have anticipated six months ago. So thanks to the Board, thanks to the staff who've done all of the work on the plan, and thanks to you all for the work we have yet to undertake on this.

So thanks.

VICE CHAIR BERG: Thank you.

And our last speaker, John White.

MR. WHITE: Madam Chair and members, John White.

I'm here today on -- not just on behalf of CEERT, but the Hydrogen Business Council. There are some technical issues that were raised in a letter to the staff that we've talked about in terms of use of certain phrases. We like the term "renewable gas" better than the term "renewable natural gas", and I think we've clarified that.

I also think that it's important as we look forward to this beginning, which is what this is, of a whole lot of work that we recognize the importance of the linkages between the programs. You know, we don't want another set of silos here that aren't going to inform each other as we go forward. I think what's important about being here today -- and first of all, I'm very glad to be in Riverside. I'm glad to see the Board here. You'll be here again more often, and it's where it all began for me, so I'm grateful to be here.

But I think it's important that we keep our eye

on both the greenhouse gas reductions and the criteria pollutants, and recognize the importance of achieving those co-benefits, and recognizing the importance of inventories. One of the things about methane that I really think is important, we've got to get better inventories, we've got to get better monitoring, and we've to recognize that it isn't a inert air pollutant. It's a slower reacting air pollutant that does cause ozone down wind.

Lastly, my colleague Kathryn Phillips from the Sierra Club asked me to raise an issue that she's discussed with staff, so it can be dealt with, and that has to do with the forest plan, and I think there's some recognition to get that right, there's going to need to be some more work done before we get into all the details and so I just wanted to raise that issue, since she hadn't got a chance to speak.

But anyway, I want to just thank the Board for being here. Congratulate Assembly Member Garcia on joining the Board, and thanks to Senator Lara for the leadership that he and the administration showed. It was a very important part of our presentation in Paris to talk about short-lived climate pollutants. And I do think Senator Lara said that the -- that what we learn, and what we experiment with, and what we succeed with will have

implications for success all over the world.

So I thank you for your attention.

VICE CHAIR BERG: Thank you very much.

Well, that concludes the public testimony. I'll now close the record on this item. I'd like to first turn to staff and ask staff if we have any wrap-up thoughts.

EXECUTIVE OFFICER COREY: No additional comments, Vice Chair.

VICE CHAIR BERG: Then I'll turn to the Board. Is there any Board Comments?

Yes, John.

BOARD MEMBER EISENHUT: Thank you. I just want to revisit the dairy digester, because I recall last fall we discussed this. And there were a series of issues that we discussed -- potential issues that we discussed with staff, the access to the utilities for the -- for the gas that would be likely produced, coordination with CDFA, coordination with the industry. And those have been handled very nicely and adroitly. And I encourage you to continue on the path in which you're engaged in and with the work group.

The observation I offer is there seems -- there is appears to be an acceptance that the technology or the4 economics will not be viable in small dairies. And I think that needs to be re-examined. There are -- there

are states and countries that have on average very small dairies that deploy digesters almost universally. And so I think we need to, in part of our demonstration project, and in coordination with CDFA we need to look at the possibility of at least a couple of those demonstration platforms being tied to small facilities.

Thank you.

VICE CHAIR BERG: Thank you very much.

Ms. Takvorian.

BOARD MEMBER TAKVORIAN: Thank you. Thanks to everyone for the incredibly hard work. This is a very important rule to come forward. I just want to repeat, and I guess ask staff, the EJAC has said repeatedly that there's a lot of concern in regards to the emphasis on dairy digesters as the primary technology for methane control. And I think we've heard over and over again today, and we've heard at other Board meetings that the environmental justice community and those that are living in those communities have serious problems and are very concerned about increased pollution.

So I just wanted to hear briefly - I know we're late - from staff in terms of what the balancing is on alter -- on technologies that are alternatives to the dairy digesters, so that we're -- we can ensure that we have a balanced approach.

Thank you.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

Yeah. If I can take a real quick stab at that. The strategy that's before you today describes a range of potential measures -- methane reduction measures to be considered in future programs. And it's important to point out that there's no -- there's no one size fits all approach to these things. So we do talk about dairy digesters, but we also talk about the use of manure as soil amendment and other approaches for that.

So you know, the measures that come out of this process, I think will go through a public vetting process. And a number of these issues and benefits and impacts will be analyzed through that process, so that's -- that's where we would be looking at those things, you know, on -- for each of the measures that come out.

EXECUTIVE OFFICER COREY: Board Member Takvorian, I wanted to add to something, because I think it's an important point that was implied here, and that is is that, I think today we have 16 dairy digesters in the State and 1.7 million cows. So the point was there's not going to be one solution, but clearly we're looking at better utilizing methane that's otherwise vented to the atmosphere.

To the extent that that methane is captured in a

dairy digester, for instance, and this was envisioned in 1383, how do we get it in the pipeline, not burn it in the valley, in an inefficient combustion unit? In fact, the Low Carbon Fuel Standard is providing a value stream to get that gas into a cleaner transportation sector and displace diesel.

That's the objective, so that's why there are multiple elements of 1383. One, the capital outlay up front for alternatives including dairy digesters. Two, the work with the PUC in terms of interconnection with the gas line to get that gas into the system. And three, the value stream to the Low Carbon Fuel Standard to have a reliable value stream to get the cleanest fuels into the transportation sector to displace diesel.

Now, there is a lot of work to do on everyone of these elements for all these pieces to come together, but that -- that's the vision for the effort.

BOARD MEMBER TAKVORIAN: Yeah. Well, thank you. And I wouldn't disagree with any of that. I think the piece that seems to be missing in terms of emphasis is, I guess what we'd call pollution prevention, and so how do we avoid the creation of the methane? What is -- what are mechanisms that don't regard it as just a fuel?

And I'm not saying that shouldn't be done, but I think that's the piece that at least I've heard today and

I've heard repeatedly seems to be getting not as much consideration as it should.

VICE CHAIR BERG: Dr. Balmes.

BOARD MEMBER BALMES: Thank you, Vice Chair Berg. I just wanted to pick up on something that my friend Kevin Hamilton brought up. And since he said he'd be back to beat on this drum, I'll beat on it for him right now. We talked about this in the last item, but I really do think the time has come for -- to consider an ag equipment rule. And since my friends from the left bank, the valley, have already brought that up, I just say the time has -- is here for this.

VICE CHAIR BERG: And, Ms. Mitchell, did I have you on my list?

BOARD MEMBER MITCHELL: I hope so.

VICE CHAIR BERG: Thank you. Please.

BOARD MEMBER MITCHELL: Thank you. Thank you 18 Vice, Chair Berg.

One issue was raised by Los Angeles County

Sanitation District, and that was - I'll ask staff to

comment on this - that reporting on this at -- by the year

2020 is perhaps too late, that we ought to look at an

earlier date for reporting back on progress on this. What

is staff's response on that?

EXECUTIVE OFFICER COREY: Supervisor Mitchell,

the 2020 is a reference in 1383, so -- oh, I'm over here.

(Laughter.)

EXECUTIVE OFFICER COREY: I could tell --

BOARD MEMBER MITCHELL: I should know your voice by now.

(Laughter.)

2.4

EXECUTIVE OFFICER COREY: I could tell there was some confusion.

So that reference is actually called out in 1383. We recognize and we could have been clearer on this. The fact is that we're providing and will continue to provide an annual update to the Board in terms of the roll-out implementation of the range of climate strategies, including those embedded in the scoping plan, how is it going, what are we seeing with respect to reductions, what are the barriers. So we certainly will meet that 2020 more -- report back, but there will be interim reports, because your point is if -- if we went dark between now and 2020 that is way too far out.

BOARD MEMBER MITCHELL: And then one other issue was raised by one of our speakers, and that is the problem with drug-resistant antibiotics getting into the water stream. And I've read about this, I'm just not sure what the real facts are about it. Can somebody talk about that?

No takers?

2.4

EXECUTIVE OFFICER COREY: That may be a report back, where we get the experts on that point.

BOARD MEMBER MITCHELL: All right. I'll be looking forward to that. Thank you.

VICE CHAIR BERG: Thank you.

Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: Thank you.

Three small issues/questions. One, I want to be sure, as has been mentioned, implementation tough and we heard earlier a couple dozen scoop-ready projects, in terms of dairy digesters. And I want to be sure that we are doing everything we can to help those move forward.

Second is a question. The electric heat pumps, if staff could comment on that as a fireplace option. I don't know what the financial capital investment is to begin with with one of those. It's not something that I think we've ever talked about in San Joaquin Valley.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

I'm sorry, Dr. Sherriffs, could you repeat the first part of your question?

BOARD MEMBER SHERRIFFS: Well, the electric heat pumps.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

Oh. Okay. The electric heat pumps were

considered as we developed the strategy, and we'll be continuing to consider those as we implement the wood stove replacement program with CAPCOA. So, you know, electric heat pumps work well in some conditions not others, so that would be one of the things we'll be looking at.

BOARD MEMBER SHERRIFFS: And capital cost?

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA: Of the heat pumps?

BOARD MEMBER SHERRIFFS: Yeah, compared to fireplace changeout or gas instead.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

Right. Again, it depends on the application. So we'll be looking at that as we implement that wood stove replacement program.

BOARD MEMBER SHERRIFFS: All right, so -- but we will continue to look at that.

And third, wondering how to get a ban on those higher greenhouse potential refrigerants, or thinking about a strategy -- if we come back in a couple of years and we're not making the kind of progress that we see we could, we should, we want to make to be sure we're thinking about, well, what about a strategy that would in fact be banning.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

Yeah, and I think -- you know, as we -- as

Marcelle pointed out in the presentation, we're still

looking through the Kigali agreement and seeing how that

impacts the programs that we're envisioning. And then as

we go through that analysis, we'll be looking at various

approaches how it -- how that analysis informs the various

approaches. And as we talked about earlier, we're going

to be looking at, you know, what the options are.

And as we pointed out, you know, a number of the low GWP refrigerants are already there in terms of the cost and the efficiency. So that will help inform the --you know, the measures that come out of this.

VICE CHAIR BERG: Supervisor Serna.

BOARD MEMBER SERNA: No, thank you.

VICE CHAIR BERG: Okay. With that, then we have a resolution in front of us, Resolution 17- --

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

I'm sorry, Vice Chair Berg --

VICE CHAIR BERG: Yes.

INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA:

-- before you do that, I need to add a CEQA statement to the record.

VICE CHAIR BERG: Thank you.

24 INDUSTRIAL STRATEGIES DIVISION CHIEF VERGARA: No. 25 new substantive issues have been raised today. We have

previously received and considered all comments heard today.

VICE CHAIR BERG: Thank you very much. With that CEQA statement, we have Resolution number 17-9 in front of us.

Can I have a motion?

BOARD MEMBER DE LA TORRE: So moved.

VICE CHAIR BERG: Second?

BOARD MEMBER TAKVORIAN: Second.

CHAIR NICHOLS: Thank you.

All in favor?

(Unanimous aye vote.)

VICE CHAIR BERG: Any opposed?

And we have no abstentions.

Thank you very much.

CHAIR NICHOLS: We'll move on to our next agenda item, which is the proposed updates to Senate Bill 375 greenhouse gas emissions reduction targets. Our representatives of our State MPOs have been patiently waiting here. And this is one we want to get done today.

So we're going to get through our agenda today, but it will -- we'll do it much better if we can shorten all of our presentations and also move the comments -- we're going to reduce the time for public comments from three minutes to two. So for those who are planning to

comment on this item, and I know there weren't as many of you, your time will be two minutes instead of three, if you're a regular member of the public.

Okay. So this item was discussed in our January Board meeting. SB 375 is an important complement to our clean vehicle and fuels program in helping to achieve our State's greenhouse gas reduction goals. And again, with practically everything we do these days, whatever it is we're doing for greenhouse gas reduction purposes also has co-benefits that are significant in the area of improved air quality as well.

The Board's role in updating program targets is an opportunity to help guide local land-use and transportation decision making towards meeting multiple goals, as I just mentioned not only in greenhouse reduction but as healthier communities as well.

And I know that some of the Board members who are with us who also have serve on their regional air districts and other regional bodies have been following this particular piece of legislation as it's unfolded very closely, and have often been involved in local planning, and implementation processes. And we have also included several MPO and State agency representatives on the program to speak today.

So we'll ask you, Mr. Corey, to get us started.

EXECUTIVE OFFICER COREY: Yes. Thanks Chair Nichols. And so staff for this update will have a -- has an abbreviated about 10-minute presentation followed by the MPOs. And with that, I'm going to ask Amy Volz of our Transportation Planning Research Branch to give the staff presentation.

Amy.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST VOLZ: Thank you, Mr. Corey. Good afternoon Chair Nichols and members of the Board.

Can we have the next slide.

Thank you.

16 AIR POLLUTION SPECIALIST VOLZ: Next slide.

AIR POLLUTION SPECIALIST VOLZ: You'll hear that quite often through this presentation.

As you recall, SB 375 is an important strategy to help meet our scoping plan greenhouse gas reduction goals, as well as achieving important public health and other co-benefits through more integrated land use and transportation planning.

Under SB 375, california's 18 Metropolitan

Planning Organizations, also known as MPOs, prepare a Sustainable Communities Strategy, also referred to as an SCS, in addition to their regional transportation plan every four years.

SB 375 gives the Air Resources Board two rules in this process. One is the responsibility for setting the targets for each MPO for the years 2020 and 2035. The other is to review the submitted SCSs and determine whether if implemented, the SCSs would meet the targets.

ARB staff has reviewed a total of 19 plans.

--000--

AIR POLLUTION SPECIALIST VOLZ: As a result of SB 375, we are seeing foundational changes occurring in the RTP SCS planning process. This includes greater coordination between MPOs and local agencies, as well as with stakeholders that have not traditionally participated in the planning process. This slide highlights the types of strategies the MPOs are including in their plans, and some of the actual on-the-ground projects resulting from these strategies.

Broadly, these strategies fall into two categories, transportation and land use. Transit project include new transit lines and rapid bus service as well as expansion of carpool and vanpool options.

For active transportation, incorporation of

complete streets policies and bike lanes have been add to number of roadway projects, as well as new bike share programs in several cities.

Common land-use strategies, including increasing development densities, more mixing of land uses, development in close proximity to transit stations and stops, zoning code updates, and redevelopment of vacant or under-used parcels within population centers. All of these strategies are making communities across California more sustainable and livable.

Next slide.

2.4

AIR POLLUTION SPECIALIST VOLZ: Next slide, please.

--000--

AIR POLLUTION SPECIALIST VOLZ: Thank you

In the last year, ARB has also began a dedicated effort to analyze associated public health code benefits of these types of strategies as part of its scoping plan analysis. ARB staff is working with the California Department of Public Health to review methodologies including use of the Integrated Transport and Health Impact Model, also known as ITHIM, to help quantify these benefits statewide.

Initial use of the ITHIM tool indicates

strategies that support increased walking and biking or active transportation, like SB 375 will be strong contributors to statewide public health co-benefits.

--000--

AIR POLLUTION SPECIALIST VOLZ: Next slide.

--000--

2.4

AIR POLLUTION SPECIALIST VOLZ: Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: Now, on to our work for the SB 375 target update process.

SB 375 specifies that ARB must update the targets at least every eight years. Thus the current update will take effect in 2018.

Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: As part of the target update process, ARB must consider a number of factors. This includes the existing targets and program progress to date, changes in statewide goals, especially for the year 2030 per Senate Bill 32, and information and technical analysis received from MPOs and stakeholders as part of our public process. I'll touch on each of these over the next few slides.

--000--

AIR POLLUTION SPECIALIST VOLZ: This table

summarizes progress to date and includes the current target and plan performance for each MPO.

Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: In addition to what we've seen through development of the regional plans since we first set targets, staff is also considering what is needed to meet our broader statewide climate planning goals. This slide represents the transportation scenario from the scoping plan update. We need substantial transformation and technology and fuels and vehicle miles traveled referred to as VMT as indicated in the box to reach our State goals.

In this scenario, technology and fuels are being aggressively deployed. By 2050, zero emission vehicle sales need to reach 100 percent. And the associated fuels that power these vehicles need to be from increasingly renewable sources. But even with this aggressive transformation and vehicle in fuels, we will still need to reduce VMT another seven and a half percent beyond what is provided by adopted plans to meet our climate goals.

While stronger SB 375 targets will enable the State to make significant progress towards our goals, alone they will not provide all of the VMT reductions needed. There is a gap between what SB 375 can provide

and what we need to meet the State's 2030 and 2050 goals. Complimentary measures initiated at all levels will be needed to achieve the full VMT reductions.

--000--

AIR POLLUTION SPECIALIST VOLZ: Put in another way, in order to accomplish our State's goals, we will all need to reduce our vehicle miles traveled by an additional 1.6 miles per day.

Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: The big 4 MPOs developed individual stress tests that evaluated the potential effectiveness of various strategies. It should be noted that the strategies in the stress test are not fiscally constrained or limited by regional, State, and federal rules.

The findings of the stress test indicate that the ability of the big 5 HMOs to match or exceed their plan performance levels will depend on State supportive actions, including pricing. Stress test results were completed very recently, and the MPOs are still working on their target recommendations.

Next slide.

313

1 --000--AIR POLLUTION SPECIALIST VOLZ: Next slide. 2 3 --000--4 AIR POLLUTION SPECIALIST VOLZ: Next slide. 5 --000--6 AIR POLLUTION SPECIALIST VOLZ: Next slide. 7 (Laughter.) 8 AIR POLLUTION SPECIALIST VOLZ: One more. 9 --000--10 AIR POLLUTION SPECIALIST VOLZ: Based on the 11 information we have received to date, and our analysis of 12 what's needed to reach our climate goals, we put together 13 the following preliminary discussion targets. 14 Next slide. 15 --000--16 AIR POLLUTION SPECIALIST VOLZ: Next slide. 17 --000--AIR POLLUTION SPECIALIST VOLZ: For updating the 18 19 2035 targets, staff is considering the following 20 approaches: 21 For the big 4 and the 8 valley MPOs, we would use 22 the latest modeling of their current SCS as the starting 23 point for adjustments. Adjustments would be based on the 24 statewide climate goals current SCS performance, as well

as the challenges the MPOs have highlighted. For the 6

25

other MPOs, staff would use their later analysis or plan performance whichever is greater with a commitment from ARB to continue working with these MPOs to identify areas for additional reductions.

--000--

AIR POLLUTION SPECIALIST VOLZ: Here are some of the challenges to achieving reductions beyond the current SCSs. These include the declining transportation revenue as a result of lower fuel prices, fuel taxes not being adjusted for inflation, and increasingly fuel efficient vehicles entering the market.

In addition, current transportation spending formulas and allocations provide little flexibility to shift funding to more sustainable transportation projects. It's also important to consider local land-use authority. Local jurisdictions must be partners in implementing the plans. Many jurisdictions have stated a need for additional infill and redevelopment tools to achieve greater land-use changes.

And the verdict is still out on the effects of new mobility technologies on VMT. This includes transportation network companies like Uber and Lyft, as well as connected and autonomous vehicles. Most experts agree VMT could increase without some level of policy intervention.

--000--

AIR POLLUTION SPECIALIST VOLZ: We have also identified areas for opportunity. We have mentioned the need for additional tools and resources. If the State is able to pursue new pricing and revenue strategies, this could lead to an increase in investment for sustainable development. The State can also look at adjusting our transportation spending priorities to allow for flexibility and project type funding.

This State will also continue to support local actions, facilitate collaboration, and provide resources to help local jurisdictions identify successful climate actions strategies.

We mentioned emerging technologies on the last slide as a potential challenge, but it can also represent an opportunity. Vehicle-to-vehicle and vehicle-to-infrastructure technology, ride sourcing and ride pooling, as well as shifting preferences among demographic groups presents us with opportunities to transform the transportation system.

These opportunities will need to be approached deliberately with greenhouse gas reductions in mind.

Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: Next slide.

--000--

AIR POLLUTION SPECIALIST VOLZ: Now, we want to spend some time responding to the question you posed back in February regarding the role of SB 375 and the scoping plan.

--000--

AIR POLLUTION SPECIALIST VOLZ: Can we hit -- yeah, next. This slide is animated. Thank you.

Let's first start with historical VMT. This graph shows that per capita VMT has declined from 2002 until 2012, where it stayed relatively flat until 2014. In 2015, we see this trend begin to reverse and per capita VMT increase. While it's difficult to attribute changes in VMT to any one factor, we have observed that the sudden increase follows a decline in fuel price.

I think if the audio/visual person could back up one, we have a chart that should have popped up.

Oh. Okay. I'll describe VMT verbally.

This graph, or should-be graph, shows historical fuel prices in California for the same time period that we have VMT here. Except during recession, the cost of fuel has steadily increased since the early 2000s. However, by the end of 2014, the price of gas dropped nearly a dollar a gallon from what it was a year before. These Xs show the initial SB 375 targets for 2020 and 2035.

If you could hit enter.

There we go.

The adopted SCSs, if implemented, will achieve additional reductions beyond the targets established in 2010. This is shown by the green square.

Next.

This blue diamond represents the per capita greenhouse gas reductions needed from the transportation sector to meet our climate goals. If you recall, these are the reductions needed above and beyond the aggressive ZEV deployment and renewable fuels needed in the scoping plan. They are also above and beyond the performance of the adopted SCSs. Achieving these reductions will require coordinated SB 375 and State VMT strategies.

Now, let's zoom in to 2035. This box shows what is needed from a combination of SB 357 -- there should be a box here.

There we go.

All right. Okay. So this -- the numbers associated with this box are statewide per capita greenhouse gas reductions relative to 2005, the same metric SB 375 targets are evaluated with. Our adopted SCSs achieve on average a 17 percent reduction. We think updated SB 375 targets could range up to 20 percent, if additional revenue and other tools were available. When

combining SB 375 with other State tools, we can achieve the full reductions needed to meet our climate goals.

Some of these critical State tools will be discussed in more detail by Louise Bedsworth of OPR.

But first, I'll briefly summarize our next steps.

--000--

AIR POLLUTION SPECIALIST VOLZ: The individual SB 370 tar -- SB 375 targets for each MPO will be presented in a draft staff report and associated environmental document for release in late spring or early summer of this year. Staff will conduct our workshops during summer for CEQA and on the draft staff report.

The final staff report and environmental document will then be presented to the Board for final adoption in fall 2017. After this, ARB will update our technical methodology and evaluate SCSs based on the new targets that will take effect in 2018.

--000--

AIR POLLUTION SPECIALIST VOLZ: At this time, I want to introduce Louise Bedsworth, Deputy Director from the Governor's Office of Planning and Research to say a few words about State level VMT strategies.

After Louise, we have Kirk Trost, the Executive Director from SACOG will give a short presentation.

Following him, Kevin Hamilton member of the AB 32

Environmental Justice Advisory Committee will also say a few words.

2.4

MS. BEDSWORTH: Thank you, and good afternoon. Louise Bedsworth with Governor's Office of Planning and Research. And I will also try to pare down my comments and move as guickly as I can.

But I've been -- want to thank, first of all, the opportunity to come and speak with you all, and staff for working with us on a number of these news important issues.

So in the public draft of the scoping plan, there was a an appendix included around State actions to support the reduction in vehicle miles traveled that also accompanied a vision statement that a number of State agencies worked on around really developing healthy and sustainable communities, and landscapes, including forests and agricultural lands across California.

And we did this really to try to work collaboratively to look at how across all of our agencies and departments so many of our actions touch on efforts to reduce vehicle miles traveled, but also to meet land conservation goals, to address housing, to protect public health, equity, economic development.

And so in doing that work, we are looking at highlighting State actions, but also really identifying

the opportunity for partnership between State, regional, and local partners to achieve VMT reductions. And so I'll -- so that's the big picture. I'll go into more specifics on some of the areas that we exploring for additional State action.

So the next slide.

--000--

MS. BEDSWORTH: So as was noted, we know additional VMT reductions are needed to meet State climate goals. And so we are exploring what are options for the State to help support meeting these targets, and we believe there's a number of win-win solutions across State and regional governments to help meet these goals.

This scoping plan included an action -- an appendix C with a number of actions as well as in the main body of the document in really four primary areas: Infill and -- infill development and conservation, infrastructure investment, pricing policies, and transportation system efficiency.

I'll focus really on the first three of these.

Some actions have already been undertaken to support some of this work. And the ITHIM model -- modeling results were already mentioned. But also just recently, the National Center for Sustainable Transportation prepared an analysis of State actions to

help reduce vehicle miles traveled.

This -- excuse me. This analysis was supported by the Strategic Growth Council and really represents a first step, and it's an academic analysis to look at what are the actions out there, what is the scope and the magnitude of the effect of different VM -- actions the State could take to reduce VMT.

The Strategic Growth Council is continuing to work with the National Center for Sustainable

Transportation to dig deeper in this analysis. And so as -- I will walk through some specific actions now. And as was noted in the scoping plan, these ideas were laid out, and we are committed over the coming months and following the passage and adoption of the scoping plan to work in a holistic cross-agency way, but also with the public to further refine these actions.

So next slide.

--000--

MS. BEDSWORTH: So first I'll talk about infill and conversation. I think this is where a majority of our activity to date has occurred. We've been doing a lot of work on CEQA streamlining for infill development with several legislative directives there.

We've recently, at OPR, did a comprehensive update to the general plan guidelines for the first time

since 2003, integrating climate change throughout that -those guidelines completely, and addressing a number of
other issues, including Complete Streets.

Of course, we've been implementing funding programs through the Greenhouse Gas Reduction Fund that go to support sustainable community projects that directly reduce vehicle miles traveled.

So under -- additional actions under consideration that will be led by the Strategic Growth Council are the opportunity to expand incentives for infill development, and then also to connect these incentives with regional conservation policies. And the use that is being developed under the implementation of Assembly Bill 2087 to develop regional conservation investment strategies.

So the next slide.

--000--

MS. BEDSWORTH: Looking at aligning infrastructure investments. To date, much of this has been accomplished through the increased investment in the active transportation program, but also investment in high-speed rail and transit connectivity projects.

Looking ahead. Actions that are under consideration that would be led by the California State Transportation Agency, and also the Strategic Growth

Council are the development of performance metrics for infrastructure development, and infrastructure investment to align those investments with performance goals that we have, and then expanded investment in transit and active transportation moving forward within our transportation investment

And finally on the next slide --

--000--

MS. BEDSWORTH: -- continuing to explore pricing policies and the role that these could play. CalSTA has been leading the California Road Charge Pilot that's been underway to assess and increase the understanding of road user fees and implementation. A final report on that program is due to the legislature this summer.

So as we look forward and as was laid out in the California Transportation Plan 2040, CalSTA will continue to assess and look at the feasibility of pricing policies and how they fit to meet multiple objectives going forward, and how they can be used to fund infrastructure investment, reduce congestion, and also to reduce vehicle miles traveled.

So next slide.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

--000--

MS. BEDSWORTH: And so I'll just conclude by 25 saying I think all of these actions have emerged really

through our conversation looking at supporting integrative climate actions and really trying to think about how the State can work across scales, so State, regional and local projects, as well as across sectors, so looking across housing transportation, climate change, public health, and equity.

So I won't run through everything on this slide, but a lot of work has been going on to date, and we will be continuing to develop and refine these programs going forward. So thank you.

CHAIR NICHOLS: Okay. Welcome.

MR. TROST: Thank you, Chair Nichols, members of the Board. Really appreciate the chance to come here and talk to you. I still have my hour that was allocated, right?

(Laughter.)

MR. TROST: So I'd like to introduce this item on behalf of the MPOs. I would like to give an opportunity to representatives from the other MPOs who want to talk a little bit about their plans and the stress tests that were done in each one of the major MPOs.

I do want to -- can you go to the next slide, please.

--000--

MR. TROST: So I do want to start by saying we've

developed a great relationship with your staff. We really appreciate the opportunity to work through tease issues. We started last year talking about this process of doing stress tests and the parameters for doing those stress tests. And we haven't always agreed with each other. We've had different perspectives about these things, but I've we've had a really great dialogue with them and we look forward to continuing to work with them throughout the process.

The next slide, please.

--000--

MR. TROST: So what we're going to do here is we're going to talk very briefly about what's going on in each one of our regions and the plans that we have developed and are in the process of developing. I want to give a little bit of background about the stress test and then talk about the results in each one of the regions and talk a little bit about the conclusions.

But I will say the 20 percent number that was put out there is just a number that your staff is working off of. And we are still working very hard to figure out where we think we can go with our plans under various conditions. But the 20 percent number is not a number that we see as reasonable yet. We're still doing that work.

When we talk about our plans, I do want to say that as you probably well know, the process of developing our plans is a very delicate balancing of issues around the environment, including specifically focused on air quality and greenhouse gas emissions, equity issues in all of the communities within our regions, the economic development and health of our communities and also the mobility needs of our regions at a time when those things are changing very dramatic and fast right in front of us.

Next slide, please.

--000--

MR. TROST: So I want to talk a little bit about the stress test. The staff talked about it and I won't go through it in details. And the slide that you have in front of you talks about the different areas that we looked at. But I -- what I want to do is just focus for a minute on the theory of what we did here, because it was a theoretical exercise.

By definition, the stress test involved implausible scenarios. They were kind of like the scenario testing that was done back in 2009 and 2010 when the RTAC developed the initial target recommendations for the regions. We didn't look at the targets from the ground floor up. What we looked at is what were the existing targets, how were the plans performing, and how

could we make incremental changes in the targets.

But what we mean by implausible is that we can't necessarily go back and implement them. There are two critical elements to adopting these plans. One is they are financially constrained. We can only assume the finances that are reasonable project over the horizon years of the plans, we can't assume additional revenues.

The other thing under -- is under State and Federal law in particular, we have to assume a reasonable forecast for the land use development within our region. We can't just assume any amount of additional density and infill or anything else. It has to be reasonable.

We do in our -- we have each made extraordinary efforts in each one of our regions to try and create a more compact form that is served by a good transportation system. And we've made enormous progress, but we can't just design anything that a planner would put on a piece of paper and assume that we can achieve that over the horizon years of our plans.

So we've looked at all of these factors, and I guess the other thing staff talked about a little bit, and I want to highlight here is the issue of the change in vehicle efficiency and the technology that is racing so quickly ahead of us.

Looking at SB 32 now, we are seeing a scenario

where fuel efficiency or vehicle efficiency is going to increase maybe 40 percent. The result of that is that the cost of driving is going to go down by something like 17 percent. And we call that the rebound effect. And we can disagree on percentage points about what impact it's having, but it's clearly -- as any economist would tell you, it is clearly having the impact and going to have the impact of driving vehicle miles traveled up.

And so the solutions you'll see in a minute are going to be that the biggest bang for your buck, or the biggest way to influence the plans is user cost neutrality or bringing user cost back up through some kind of pricing strategies in order to balance out that increase in vehicle miles traveled that were seeing in our plans.

Next slide, please.

--000--

MR. TROST: So these are the things that we're learning through this. Not all the strategies are equal, and you're going to hear from each one of the MPOs.

They're different in each region, based upon the different tests. Why?

The land use forums are very difficult, the amount of money that each region has is very different, the amount of transit and the amount of driving that is baked into the plans in each one of the regions is very

different. And you'll see that in the results that we're going to talk about today.

But again, this new challenge is efficiency is great, right? It's good for the environment. It reduces tailpipe emissions. We get cleaner air and fewer greenhouse gas emissions, but there is this other impact of increasing VMT that's a reality that we have to find a way to deal with.

Next slide, please.

--000--

MR. TROST: So I want to talk -- this is my opportunity to talk a little bit about the SACOG region and then I'll ask my colleagues to come up and talk about their region. We are very proud of what we've done in Sacramento.

Our plan is largely -- and I want to acknowledge Member Serna who's been on our board and been a leader on our board for many years, and I appreciate him being here. He gets more of this credit than I do for the plan that we've developed. It was largely based upon the blueprint that was adopted in the Sacramento region in 2004. We've celebrated over a decade of its existence. And the plan being based on it has made extraordinary developments.

We have now a compact form that's developing in the Sacramento region. Fifty-eight percent of all

revidential[sic] -- all residential growth and 80 percent of all employment growth is going in infill areas. Those are the gray and red areas that you see. So we've taken where a decade ago we were looking at a growth pattern that extended out into the green areas, we're now making success in bringing that into focused infill areas.

That creates more opportunities for mode shift for more biking, more walking, a better way that we can serve efficient transit to those areas in the future.

One of the other key principles of the blueprint was diversity of housing options, and we're seeing much more focused development within those centers and corridors. Dwellings in these areas increased by 80 percent in our plan, and we're also seeing that we're achieving that. This is not just a -- statistics that are in the plan. We've seen that.

In the period from 2005 to 2014, we are doubling the amount of growth that's occurring in the attached unit forms. So we are seeing more small lot, more attached units, more multi-family. We are delivering on the promise that we made in the blueprint to our region to reduce congestion, to improve air quality and reduce greenhouse gas emissions.

Next slide, please.

MR. TROST: So this slide describes the three areas that we really focused on when we did the stress test in the Sacramento region. So we looked at enhanced local electric vehicle deployment, we looked at pricing strategies both at \$0.04 sense a mile and \$0.08 a mile.

But I want to focus for a minute on this enhanced land use transportation. In that was, we didn't look at just land use, we looked at what we thought was a realistic scenario. We combined a more aggressive land-use strategy with what you need to go with it, which is more transit and dollars to support investing in the infrastructure that would allow us to build more infill development.

So we took the existing plan, which was doubling the investment in transit. It was doubling the investment in bicycle and pedestrian improvements, and we kicked it up a notch by about 15 or 20 percent beyond what was already in our plan, but here's the important thing. Doing that cost us somewhere between three and five billion dollars, right?

We need about one to two billion dollars of landside infrastructure to achieve those additional densities, and we need two to three billion dollars in additional transportation funds in order to build the infrastructure that we need to support that denser land

use form.

Next slide, please.

--000--

MR. TROST: And this will give you some indication of what the results of our testing were. We can get up to four percent additional greenhouse gas reductions potentially, if we go to that scenario. It was referred to as Scenario 3 in our environmental document. But we figured it was not a feasible plan to implement, because we didn't have the revenues associated with it.

So with revenues in the range of three to five billion dollars plus additional money for affordable housing, these are the kinds of impacts that we could see.

But the other thing to keep in mind our target is 16 percent. With the VMT rebound impact, we think that that is going to cut back our potential emission savings by three percent. So in the current scenario, where we're looking at greater fuel efficiency, a 16 percent reduction plan is going to perform much worse. These kinds of strategies help get us back to where we plan to get and maybe do a little bit more.

So I'll stop there, and I'll let my colleagues come up. If I can just make a final -- a couple of final remarks on behalf of SACOG. When SB 375 was adopted back in 2008, I think we assumed we -- I know we assumed we had

a lot more in our toolbox than we actually have today. We assume that we had redevelopment that would support infill development and reuse of parcels in our urban area. We assumed that we were not going to have the kind of erosion of purchasing power of the federal and State gas tax, which have respectively 30 and 40 percent the value of what they had in the 1990s. All of these things have made it much more difficult for us to achieve the objectives in our plan, and we're doing well notwithstanding those constraints.

So when we talk about more aggressive targets and doing better, we have to keep those things in mind that we need revenue solutions to help us, and we need pricing strategies to help drive the VMT down. And the final thing that I would just say is SB 1 and AB 1, our Board has been aggressive supporters of that -- those bills, and they mean a lot. They will do a lot for our region. They are absolutely essential, but they are not an answer to the revenue problems that we're talking about here.

There is not enough pricing there, and there is not enough revenue there to solve these kinds of things that we're talking about achieving more aggressive targets.

So with that, I' like to introduce Gary Gallegos from SANDAG.

MR. GALLEGOS: Thank you, Madam Chair, and CARB Board members. My pleasure to be here before you this afternoon. And I thought I would first start by focusing on land use. And I don't if we've got some slides that are coming up.

So I brought a couple pictures. And you know pictures are sometimes worth a million words. But while they're bringing them up, I wanted to highlight the progress that we in San Diego have made over the last 17 years or so when we looked at, you know, where our land-use patterns started back around the turn of the new century.

And, you know, we had land-use pattern.

So here's these two maps.

--000--

MR. GALLEGOS: Oops. Can we go -- can we stay there for second.

All right so here's these two maps. Here's what our land-use patterns looked right at the start of the new century. And what you see in blue is where housing was being planned. What you see in purple is where jobs are. And what you see in green is where open space was planned.

And I'd like to, you know, highlight just to put some numbers on that. Back at the turn of the century about two-thirds of the county was planned for

development, and about a third of it was planned to be preserved in open space. And our housing mix, in terms of new houses being planned back at this time was almost a split between multi-family houses and single-family houses.

So now I'd like to focus your attention to the right side of the map on 2013 or where we're at currently. And again, same colors there. And so hopefully what you see here is a lot more green, a lot less blue, because we're compressing the blue into the urban part of the county. And you'll see that the job centers grow a little bit, but they relatively stay the same.

So to put some context to this map. In this map, about 55 percent of our county would be preserved in open space, and about 45 would be dedicated to development. On the housing side, we made dramatic changes, where, you know, before our split between multi-family and single-family houses were roughly 50/50. Today, about 82 percent of the new housing being planned in San Diego County is multi-family housing, and about 18 percent of it is single-family housing.

So we've -- this has not been done without a lot of pain, so it has been difficult. I want to highlight Supervisor Roberts here, because most of the blue dots that you see on the left-hand side that are not on the

right-hand side, that was -- and many -- we have 18 cities in San Diego county within the county, and most of our cities have currently adopted general plans that aren't, you know, 20 or 30 years old.

And the county took the lead for -- in adopting a new general plan where they down-zoned over 30,000 parcels. And so as the county was down-zoning then, the rest of our cities were up-zoning and that's what you see in this picture, and that shows. And the reason this is important when we highlight some of the stuff on the stress test is -- and Kirk talked about in SACOG they can achieve a certain amount through land-use planning. In San Diego probably a little different for us, because a lot of the, you know, concentration of housing has already been done, so we don't get as much out of the land use piece.

But this is kind of where we're at. We're proud of that in the fact that we're definitely focusing more development into the urban core area and reducing sprawl out in the back country.

So if I can go to the next slide quickly, I know we're short on time.

--000--

MR. GALLEGOS: So we, like the rest of the major MPOs, conducted these stress tests. And on the land-use

side in advanced transit planning, we think we get around two percent. So that's a little different than I think the four percent you saw from Sacramento. We looked at using a mileage based user fee. We were probably a little bit more aggressive than maybe some of our partners here were.

And the drive here was -- in working with your staff to get to, what would it take if we had a seven and a half percent reduction the VMT? And our modeling model shows that, you know, that would require somewhere between a 15 to 18 cent per mile fee.

We've spent some time talking to our board about this. This is an area of major concern, because it would really drastically raise the cost of driving for many San Diegans after -- throughout our region.

And then we also looked at vehicle technologies. And this is an area what we would encourage CARB to continue to be as aggressive as you can, because this is where we believe we'll see the greatest opportunity to really move the dial, and we believe that, you know, if you could enhance EV penetration into the market that's four times faster than your current plans are suggesting, then we could probably not get one or two percent, but we could get like 20 percent reduction in greenhouse gases, if we just had a lot more EV penetration.

So if I can go to the last slide.

--000--

MR. GALLEGOS: This kind of summarizes, you know, where we're at and the fact that our plans have been moving aggressively. We continue to transform our land-use plans. We're building a robust transit program. We're currently extending a light rail system that connects our two largest job centers, about a \$2 billion light rail extension that we're part of -- very proud of.

We're working at trying to establish mobility hubs. We've advanced two, three hundred million dollars of advanced active transportation dollars to really jump start a bunch of bike a ped projects in San Diego, so those continue

We like to highlight, and we suspect, you know, you heard that from Kirk, and you hear it from the others that revenue is declining and additional funds are going to be needed if we're going to make continuous project. In our case, we had a sales tax measure that didn't pass. So that will have an impact as we look into the future, not to say that our Board won't come back to the voters of San Diego in the future to ask for more, but we've got to deal with the realities we have today.

Major efforts in pricing and technology are going to be required. We've been doing that on Interstate 15

for a while, where we've been pricing pretty successfully for -- since 1996.

And then the last thing I'd like to leave you, while there's a lot of focus on pricing, that as we do that, that we take particular interest into what that might do and the impacts it might have to our disadvantaged communities.

And in San Diego, as an example, that, you know, if we look at where our job centers are versus where our disadvantaged communities, they don't necessarily all match up, right? So people in disadvantaged communities commute to where they work. And so as we explore the pricing idea that we're just sensitive of the impact that it has to all Californians, and all San Diegans, but also specifically to our disadvantaged communities.

And with that, let me pass it on to our partners from the Bay Area.

MR. KIRKEY: Good afternoon, or should I say good evening, Chair Nichols and Board members. I know it's been a very long for you all. I'm Ken Kirkey, Planning Director with the Metropolitan Transportation Commission. I should first note that Steve Heminger who was here for quite awhile is regrettably no long here. He had to head back for an important Board meeting tomorrow morning back in San Francisco.

So I'm going to walk through our view on this topic. And I'll try not to repeat myself or repeat my peers that you've already heard from.

--000--

MR. KIRKEY: First, looking at our plan that was adopted in 2013 is a highly aggressive plan. It's know as Plan Bay Area. It focuses 80 percent of the growth in what we call Priority Development Areas. Those are transit served infill areas adopted by local governments. They're only five percent of the regions land area.

It also assumes that the existing urban growth boundaries are urban limit lines, and that counties outside of the City and Count of San Francisco that they stay where they are through 2040, which is a pretty significant achievement.

It assumes a lot of investment in transit.

Significant transit growth and capacity increases,
modernization of the system in those focused growth areas.

It incentivize housing production through our One Bay Area

Grant Program and a number of other grant programs that we
put in place to incentivize trance-oriented development.

And we also, as you may recall, those of you who were here, our plan incorporates a number of initiatives related to climate programs, accelerating electric vehicle usage, launching a commuter benefits ordinance for the

nine counties, and a number of other programs to really ramp up GHG reduction related to SB 375.

Next slide.

MR. KIRKEY: So we are still in the middle of our second plan, which is slated for adoption this summer.

--000--

MR. KIRKEY: And so the approach we took on the stress test was to utilize one of our scenarios for our plan update. It's called a Big City Scenario. It focuses a lot of the growth in our three largest cities, San Jose, San Francisco and Oakland, as well adjacent urban suburbs. And it does add a couple of points relative to the preferred scenario that our board, the ABAG Board and the MTC Board selected.

However, it also does a couple of other things that I think are worth noting. One is it really goes to a highly aggressive level of land use in those communities. At a level that those communities were not particularly comfortable with, and that was in part because of the really significant increase in funding that would be needed for affordable housing.

The loss of redevelopment has been a big issue as you're aware in many of these communities. And also, there would be a huge need for expanded transit service, not just frequencies and so forth, but capital investments

well beyond what we could foresee with the funding that we can identify.

We have also tested road pricing like the other MPOs. And a \$0.04 per mile and an \$0.08 per mile VMT fee can be make a difference. However, as Gary just noted, we are concerned, our Board is concerned about the potential impact of VMT fees on low income populations.

Displacement was a big concern with the big city scenario. And VMT fees, which have the equivalency of a very expensive gas tax, that's what essentially it equates to. We believe that while it could be significantly helpful, particularly if those funds are utilized to support focused growth, the effect on low-income populations would have to be seriously considered.

Also, as was mentioned earlier, cleaner vehicles and technology improvements do lower the cost of driving leading to increases in VMT.

Next slide.

--000--

MR. KIRKEY: So we know that aggressive land-use patterns can make a difference, but we can't do them in the Bay Area without a lot more money for transit. We need resources to address equity and displacement, as I mentioned relative to any roadway user fee, as well as a lot more funding for affordable housing than currently

exists.

And as you're probably all aware, housing is a big problem in much of California. It's a particularly chronic problem in the Bay Area.

And lastly, I will mention that an opportunity that we think is to look at really linking zero emission vehicles with autonomous vehicle fleets as they evolve and go forward. Right now, we're seeing a big impact in our region from Uber and Lyft and other ride-hailing services. If those are clean fleets, that could be a good thing. If they aren't clean fleets, it's not a good thing. It's actually driving up VMT and starting to impact some of our transit ridership.

So with that, I will stop and pass the baton to Hasan from SCAG.

MR. IKHRATA: Thank you good evening, Chair Nichols, Board members. Good to be with you. It is a long day for you I know, so I'm going to move very quickly.

We adopted a second plan last year.

--000--

MR. IKHRATA: And we're proud to say that we have pushed the envelop to achieve 18 percent per capita reduction in 2035, which exceeded the targets set by the Air Resources Board. Many other benefits to the plan.

Go to the next slide, please.

MR. IKHRATA: Now, I'm not going to repeat what my colleagues talked about. We obviously focus on fixing what we have. We concentrate growth in high quality transit areas. Fifty percent of the growth was in three percent of the land area.

--000--

We focus a lot on, and we're actually the furthest metropolitan planning organization in the country, to assume that the existing gas tax, both at the federal and the State level, will be replaced by a user-based tax, because we feel from a venue standpoint from a congestion standpoint that's the way to go.

Next slide, please.

MR. IKHRATA: Now, the debate here is about what else can we do? What you, as an Air Resources Board, going to tell us how much we can achieve?

A few months ago, the voters in Los Angeles

County voted their fourth sales tax measure. That will

generate \$120 billion, and we're going to invest a lot in

transit. That's a good thing.

But transit ridership is going down, not only in our region, in the nation. And we do have researcher from UCLA, Dr. Brine Taylor is looking into that. Why is that

happening?

And, you know, we could guess, and I can tell you that the fact that Uber and Lyft exist created a competition. So that tell us we need to continue investing in transit, but we need to be smart how to invest in transit.

We need to make sure that we deploy market strategies like Uber and Lyft into the transit. The first and last mile was a big issue for especially rail. Those market strategies could be a key in putting people into rail and getting them to the transit station and to the last mile. We did a lot of stress test.

Going to the next, please.

--000--

MR. IKHRATA: And those stress tests said, you know, you could push the envelope and get \$120 million dollars and put transit with -- on an established urban form like we have in Southern California. And I think that's true for our -- my other sister MPOs, is you could get another one or two percent.

Where you really start making a difference is when you deploy pricing. You know, I think I spoke to you a few years ago, and I said bad pricing kills good planning. You could have the best plan in the world, and if you don't price the system right, it's not going to

work. And pricing takes different forms.

So I do believe, and I had to with my colleague said, is user fees are the most effective going forward.

Of course, there's all kinds of political realities and all kinds of equity issues -- social equity issue need to be dealt with.

But we're also kind of bearing -- you know, our success sometimes lead to more greenhouse gas emissions, you though, more fuel efficient vehicles makes it cheaper to drive, and therefore there's more vehicle mile traveled. But if you price it, you might get a different result.

So we're trying to really push the envelope now in our regions. And I want to add my colleague said, we have -- in this price, we have changed the discussion in the State of California in a good way about the future, how to sustain the future.

But at the same time, we still have 40 million Californian that need to get from A to B. And we can't over night think that they're all going to bike or use transit. Some of them will drive. And if the discussion is about using greenhouse gas emission, we have to be realistic about how much can we achieve in 20 years.

Next slide and the last slide.

--000--

MR. IKHRATA: So I believe -- I'll leave you with this. We're trying to do our best to achieve, and we did that in 2016. And we're going to our board very shortly and we're going to push the envelope. I will caution you this -- obviously, you're in charge. You can do whatever you want with the target.

(Laughter.)

MR. IKHRATA: But let us not go backward. Let us not put a target that these stress tests are telling you we cannot achieve, because the law clearly allow as MPOs to do what's called alternative planning strategy. Alternative planning strategy, there's a different name for them, a fantasy plan.

I would say this is going backwards. Let us keep the discussion about moving forward. And I urge you to set a target based on these stress tests that we can achieve, so we move forward, not backward.

And I thank you very much, and welcome to Southern California. And I told my colleagues they saved the best for last, you know that.

(Laughter.)

MR. IKHRATA: I also told Sacramento, if you have trouble achieving a target, they can be part of the SCAG region, because we're not big enough.

(Laughter.)

348

```
1
             MR. IKHRATA: So thank you very much for being
 2
   here.
 3
             CHAIR NICHOLS:
                             Thank you. Especially appreciate
 4
    it as we wear on into the evening, but really this is too
5
    important to put off and so we appreciate you're sticking
6
    with us.
7
             Board member comments at this point?
8
             Later.
                     Okay. Let's wait until we've heard from
9
    the audience. We have a number of people who've asked to
10
    testify, but not a huge number. If I could find the list.
             AIR POLLUTION SPECIALIST VOLZ: Chair Nichols.
11
12
    Sorry to interrupt. We had one more presenter.
13
             CHAIR NICHOLS: Oh, I apologize.
14
             AIR POLLUTION SPECIALIST VOLZ: That's okay.
15
             EJAC MEMBER HAMILTON: How could you forget me,
16
   Mary?
17
             (Laughter.)
18
             CHAIR NICHOLS: I don't know. It's because I
19
   take you for granted.
20
             (Laughter.)
21
             EJAC MEMBER HAMILTON: I know. It's just like
22
   being at home.
23
             (Laughter.)
2.4
             CHAIR NICHOLS:
                             I'm sorry.
25
             EJAC MEMBER HAMILTON: That's okay.
```

--000--

EJAC MEMBER HAMILTON: Thank you. And I want to thank the Board again for their patience and for allowing the EJAC to present on this particular item. These SCS targets are critical parts of all of our planning moving forward to reduce greenhouse gases, and improve the liveability of our communities. And I think the EJAC you'll find is very supportive in all the approaches that we've heard today.

And I really appreciated hearing the MPO leaders who mentioned their concern for the disadvantaged communities that might be impacted by any pricing plans. We all reconciled -- we're all pretty much reconciled to sharing the pain around, but some have been experiencing the pain for a long period of time already anyway. And so we need to think about how we balance that, and make sure those options are flexible and available.

And I really appreciated the planning when I heard in San Diego where they illustrated where the work is, and where the housing is and connecting those two. Far too often, we see in MPOs, that I deal with at least, the planning is oriented around getting people to retail shopping, and spending money, rather than places where they go to work and make money. So I'm glad to hear that kind of approach. Thank you. Thank you for that. I

think that's incredibly important.

If we could have the next slide, please.

--000--

EJAC MEMBER HAMILTON: So from the EJAC, you have these overarching themes that we think were well illustrated here and we need to keep considering. And I'm just going to run down through them very quickly. The access to quality and affordable clean transportation technologies. In disadvantaged communities, people are poor. This kind of technology tends to be pricey. And so we're starting to see some inroads there, but we need a -- we have a long way to go.

So we were talking about Teslas today, and it's like when -- when will my community ever be able to -- hell, when will I be able to afford a Tesla? But, you know, I just don't see that.

And even Priuses, and other class of vehicle like that are still very expensive, and require incentive funding to offset their cost to even match their counterparts in the conventional gasoline driven side of the business.

And so we need to see again increased penetration into that market with targets for the industry itself that California has taken the lead on setting for conversion over to EV side.

And as that happens, of course, the pricing will take care of itself. We need meaningful investments in these communities by the transportation sector. And I'm hearing about some of those now from these MPOs, but we need the pressure from ARB to make sure that happens. We need to capture these sustained economic benefits in these communities. And I -- I quote -- I really want to emphasize the word "sustained".

So this can't be just a push coming in, but it has to be long-term gain for that community. And that game is going to translate more in terms of jobs. And by the way, it was mentioned earlier, a distribution center warehouse job is a leg up, but it's not a career. Okay. So we really want to have opportunities for these communities to participate in careers in their lives, and get some fulfillment from their work other than just a paycheck.

So we think that there is a pathway to that by helping. When you invest in these communities and these projects, we see them trained, they learn new skills, and they get access to that better way of life, and improving their own situation.

Coordination of State and local agencies I kind of touched on that in earlier comments, so I won't go further into it now. But again, there's 13 agencies, and

this interagency collaboration is critical to the success here. I heard discussion about needing money for housing, needing money for roads. Well, you know, there's departments that have that money.

And so all these plans need to be coordinated together and the cities are really pretty good overall at connecting the dots there, but they're going to have to be really good at that to make this successful. It's going to take all this money coming together. Redevelopment money was a nice thing when we had it, but we don't anymore, so we move on and we figure out new strategies and new ways to do this.

And we want accountability at the community level. So we talked about -- somebody mentioned earlier benchmarks, setting benchmarks and measuring against them. We don't do a lot of that. And we need to really hold ourselves, all of us, accountable to that. And, of course, we support robust community participation.

Sorry, Chair Nichols, I'm losing my voice along with you here. So that could be a win.

(Laughter.)

EJAC MEMBER HAMILTON: Next slide, please.

--000--

EJAC MEMBER HAMILTON: So we still find regions that are funding roads before transit, so we need to see

that stop. A new freeway is not a GHG reduction, so -and we're still seeing that come into plans. We still see
again the priorities are, and we see plans coming forward
- I certainly do from my region - where we don't have the
benefit of SCAG or a large interwoven metropolitan
planning organization, but yet eight individual ones.
That's so much fun, you know, where we just don't see this
kind of investment happening in those communities.

It's more how can we do what we've been wanting to do for 30 years with this huge list of transportation programs, projecting out 10, 15 years ahead, and how can we keep those and still do this.

So we need direction and guidance from Air Resources Board to suggest that this isn't the way to get funding at least from us through the programs that we control. And if you want to access that, you're going to have to change the way you think, and modify those programs.

And again, the idea of land-use planning and making good land-use planning fit with transportation, quite often, the transportation people are as much victims of poor land-use planning as the Air Resources Board is, because that's controlled by local cities and local counties. And it was good to hear that some of our supervisors have been really proactive in their land-use

planning approaches.

Unfortunately, we don't always see that in cities, and some counties, and we really need to see that done better. And again, there is no strategy for addressing the needs of unincorporated communities.

They -- they're kind of left as island to themselves, and have to figure out how to deal with this situation without the benefit of elected representation through their board of supervisors.

And in counties with large numbers of rural cities that are stretched across a lot of geography, like the San Joaquin Valley, we find that they are often left behind.

Next slide, please.

EJAC MEMBER HAMILTON: So I'm not going to go down through all these, but these are our recommendations, and we really support the idea of reducing VMT. We want, again going back to the idea of infrastructure, needing to include complete streets. I heard that mentioned by one of the MPOs. I need to hear it from all of them.

Complete Streets are critical for these communities. We have so many communities where you drive down a street, sidewalk ends, street light ends, houses continue, kids continue to have to walk to school.

Communities don't feel connected. They don't feel like they belong. They don't feel it's safe to walk around in their communities. Kids are still getting hit by cars, because the cars -- the streets are not complete. They're aren't adequate even cross walks.

I drive through communities in Sacramento, in Fresno, and Los Angeles where I can drive for a quarter of a mile in places and not find a crosswalk, but there's residences all along the way. That's just setting targets on people. How can you expect somebody to walk a quarter of a mile with three kids to cross the street to the corner -- to the store that's right here?

It's not going to happen. They're going to take that run and bad things are going to happen. So there are things that can be done to increase the walkability of communities with the existing resources and a little paint.

So let's just not always think that we have to spend an incredible amount of money to solve some of these problems. We can readdress some of the issues that we've -- that we have. Some of the resources that we have and not spend nearly as much money.

Again, you know, EJAC keeps coming back to the idea of freeways not being GSF.

And if I could have the next slide, please.

--000--

EJAC MEMBER HAMILTON: So I think this is -- is this the last slide?

No. Dam.

So we need to see the SCS compliance with these greenhouse gas targets, based on documented -- you know, some of these are fairy tales. And it was mentioned before, I think somebody said that, that, you know, the alternate plan. And we see alternate planning being inserted into these. And those are fairy tale plans. We know that's not going to happen. Again, it's that idea of status quo. How much of this can we do and still follow the plan that we've had and been following? Our transportation plans are laid out years in advance, because they cost so much money, so we have to anticipate it coming down the road. And literally that was an unintentional pun.

And the MPOs must only be allowed to authorize implementation of projects that are included in the most recent SCSs. So again, it's that idea of constantly looking backward instead of forward, and that we need these transit agencies to adhere to the projected routes and costs adopted in the SCS, unless something alt -- the alternative is actually demonstrated to increase emission reductions while maintaining and improving access to

alternative transportation choices.

ATPs, active transportation plans are just catching on. We're seeing cities begin to adopt them.

And I'm really excited about that. We need to push more of that.

So -- and then we need to -- again, we talked about, and I heard somebody say prioritizing investments in disadvantaged communities. We want to raise all communities, but we want to see the communities that have never been raised at least get equal with the other ones first, and then we'll raise all communities.

So they're so far behind. I mean, some of these communities are 30, 40, 50 years behind in their infrastructure. How do we expect them to step into this new generation of zero emission and low GH gas -- GHG gas production, when, you know, if we put an electric car in their driveway, they won't be able to run their oven, because as soon as they plug the car in, the circuit breakers go off in the house, okay?

So we need to really be thinking realistically about infrastructure. And again, the interagency cooperation between CEC and ARB and everybody else, so that these investments are crossing over and this planning is working together.

And, you know, aligning that scoping plan with

the California transportation plan for 2040. Ours is 2050, theirs is 2040. It would be great to align that, you know, so they're working together and moving forward in lock stop, because I'm not really feeling that right now.

Next slide.

--000--

EJAC MEMBER HAMILTON: So last slide. We would suggest again you set these ambitious targets to help reach our goals in 2030 and 2050. It is not unreasonable for a State like ours to be thinking about 2050. I guarantee you the business you're talking about think that way. That's how they survive. These goals need to align with these VMT reduction targets and be done in collaboration with the Department of Transportation, and I would add the Department of Energy, sort of the triad on which this State runs.

And those three things should always be working in concert with each other. I would recommend that you have members interchangeably, at least a member from that board -- each of those boards on your board, and a member from your board on each of their boards. That would make a lot of sense. Well, maybe.

So -- and stringent practices for verifying SCSs. Who's going back and checking, right? Again,

accountability, benchmarks. And we need to prioritize the investments in the MPOs that put transit and active transportation first.

Thank you very much.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

2.4

25

CHAIR NICHOLS: Okay. I think that completes the presentations. Let's now move to the public testimony.

I have a list of ten witnesses who wish to speak.

Why don't you come on down and start with Harvey Eder,

Bonny Holmes, Jim Stewart, David Harris, Bill Magavern.

We may have lost a few along the way.

I don't see Mr. Eder. Is he here?

He was earlier. There he comes. Okay.

This is a gentleman who has stamina.

MR. EDER: Evening.

CHAIR NICHOLS: Evening.

MR. EDER: I'm Harvey Eder speaking for myself, and for the Public Solar Power Coalition.

This bill being passed, 375, and being worked on is a good thing. It must be and should be coordinated with immediate total solar conversion plans. This could work with what's happening now, but also with input from the Strategic Growth Council and the Office of Planning and research.

And to encourage -- the plans -- the climate plans have to be rewritten because the new numbers are

from 750 to 800 parts per million CO2 equivalent. So these numbers have to be brought up to do this -- to convert to solar as soon as possible. The price of solar has gone way down. They're saying a dollar a watt. I know for a fact, they're putting in systems for a \$1.60 and less, the co-ops. I was in a meeting at co-ops.

And the financing is here for the district and for the State. The solar industry started in Southern California 100 years ago. And in the City of Pasadena in 1910, looking at their building permits, 30 percent had solar hot water on them. And the gas company gave away free heaters, gas heaters and hooked up, and wiped out the industry, but we're back now, and things are looking very good in terms of lifecycle cost effectiveness for solar.

In the February issue of solar industry that we're looking at two to three cents a kilowatt hour by 2030.

CHAIR NICHOLS: Okay. Your time is up.

MR. EDER: Yeah, I got that.

Maybe our time is up.

CHAIR NICHOLS: We're listening and we're also reading, if anybody wants to give us anything.

Yes.

MS. HOLMES-GEN: Hello. Bonnie Holmes-Gen with the American Lung Association in California. You've had a

lot of information thrown at you very late in the day.

I'm going to try to give you a clear simple summary of my key points.

VMT reduction and sustainable community planning strategies are extremely important from a public health and air quality GHG perspective. And this issue needs a lot a more time and focus from your Board on how we're going to align State and local efforts and make progress.

These strategies are critical to completing the scoping plan, completing the GHG reduction strategy that we -- that we're building right now for our State. And although we might like to think we can, we cannot achieve all our GHG and air quality benefits through technology advancement. We can't do it all with technology advancement, even if we -- and even if we step up the work we're doing at the regions on Sustainability Community Strategies, and even if we achieve the 20 percent goal that was discussed with the regional targets, we still wouldn't achieve all the VMT reduction that's needed to get to our 2030 and 2050 targets. So we have a gap here.

And we would be missing out on tremendous health and other benefits. I just wanted to point out in your -- in the scoping -- in the draft scoping plan on page 100 it talks again about how transport-related physical activity can achieve historic reductions in chronic illness. And I

know that you're fleshing out some of this information and some of the health analyses that are being developed.

This is so important to understand these tremendous health benefits that we can achieve. We agree there's been tremendous efforts by the regions. I can't go into detail on that because of time. We been involved in those efforts at the local level and the State level, but we have a lot more to do.

So where does this lead us? We need a viable strategy to get the VMT reduction.

CHAIR NICHOLS: Two minutes.

MS. HOLMES-GEN: We need you to ask solid questions about how we're going to align our transportation funding at the State level to get those reductions among many other efforts I would love to discuss with you.

CHAIR NICHOLS: Very good questions.

MR. STEWART: Hi. I'm Jim Stewart actually speaking as an individual. And the -- I'm really representing Mike Bullock who is a transportation expert and systems engineer. And I really -- I just passed out and I have some slides here that he actually provided to you several of the papers that he's written. And I hope that Dr. Sperling will take a look at those comments by -- because obviously, the next slide is we've already covered

it that you can't spend another dime in this State on additional freeways. And then the next slide is there's lots of projects that we've just gone over. And the MPOs are doing all of them, except the second one from the bottom there, end free car parking.

And the next slide actually he's presented an analysis of this before the American Public Works or something association meeting. And the point is that pricing parking produces much higher reductions in trips. And Dr. Sperling knows that and Dan Schoop knows that. And it's time, I believe, for the Air Resources Board to put a little money into this. And I hope that Dr. Sperling will support this, because I think it's deserving of a look.

So thank you very much.

MR. HARRIS: Good evening, members of the CARB Board. I'm a volunteer with San Diego 350. My name is David Harris. The goal of San Diego 350 is to mobilize citizens and work together to prevent the worst impacts of climate change.

I'll just say in one sentence we strongly support stronger targets as outlined in the staff report to keep the MPOs on track.

Thank you.

2.4

(Applause.)

CHAIR NICHOLS: Well done. Very well done.

Luckily this is only an informational item, but we got your point.

MR. MAGAVERN: Bill Magavern with the Coalition for Clean Air. I want to first thank the Board for the actions you took earlier that significantly strengthen the Mobile Source Strategy. So that will help bring down emissions from mobile sources. Now, we're focusing on one of the very key ways that we reduce emissions from mobile sources. And I urge you when you're setting the targets to take into account the multiple benefits of reducing vehicle miles traveled.

SB 375 is about reducing greenhouse gas emissions, but we also can reduce local air pollution. And there, of course, are a lot of benefits from active transportation that should be taken into account.

Also since you earlier heard and endorsement of SB 1 and AB 1, I want to point out that those bills are part of the problem not part of the solution. That a lot of that spending would actually increase VMT, increase pollution. And there's not enough money in there for transit. There's a punitive fee on electric vehicles, which we're trying to encourage. And those bills represent transportation planning, completely divorced from air quality and climate planning. So that's a

paradigm we should have left a long time ago.

And finally, I want to point out that we need to encourage transit oriented residential development. We do not want to encourage freeway-adjacent residential development, because living near a freeway is hazardous to the health of human beings. So I think that ARB should provide guidance to the MPOs and to the Strategic Growth Council on how we prevent focusing more residential development near freeways.

Thank you.

MS. GALE: Good evening, Board members. I'm going to quickly read testimony from my friends at Leadership Counsel for Justice and Accountability. They are an organization working with, and on behalf of, disadvantaged communities in the San Joaquin and East Coachella Valleys.

Leadership -- I apologize from reading from my phone for this.

"Leadership Counsel would like to emphasize the need for ARB to set ambitious targets in order to push regions to think differently about land use and transportation planning and reach our climate goals. This would encourage MPOs to model scenarios that include robust investment in active transportation, affordable housing, and

relocation of growth to existing communities and cities, rather than new developments or sprawl.

"ARB must work with MPOs to ensure transparency in modeling assumptions and scenario development. We believe that stronger more ambitious targets will promote stronger programs that create real transit options and choices, especially for folks living in rural disadvantaged communities.

"Since ARB is responsible for the implementation of SB 32, it is important that we move towards a trajectory that plans for and prioritizes existing communities. Land-use planning in the San Joaquin Valley has generally focused on new development and sprawl. And transportation has generally focused on highway expansion rather than active transportation. So this has created the necessity for folks to drive to access basic services daily".

That's true.

"It is important that local plans and SCSs are aligned and that regions are held accountable for implementing the programs included in these plans. And that projects that reduce VMTs are prioritized. SB 375 in this target setting

process provides an opportunity to shift the way projects are prioritized in order for disadvantaged communities to see real on-the-ground co-benefits.

"ARB has a critical role to play in this shift, and we believe the setting of strong ambitious targets is a key part of this role".

Thank you.

MR. PAWLING: Good evening, Board. Thank you for still taking comments at this time. My name is Kristen Pawling. I'm with the Natural Resources Defense Council. And most of my comments have already been said, so I will be brief and just mention one tool that the State has already taken action on.

The legislature passed SB 743 in 2013. It's 2017 and we haven't quite implement that yet. So going back to the point of stronger State coordination, I really appreciate that the Office of Planning Research is here, and working with your staff, but there's other key staff and other State agencies that need to be here to fully realize the ambitiousness and achievability of our targets -- and our targets as we continue to move forward.

So strongly encourage additional coordination and swift implementation of SB 743.

Thank you.

MS. LINDBLAD: Good evening. I'm Bryn Lindblad with Climate Resolve.

I just want to raise some concerns that are maybe arising how the scoping plan process is playing out. I see it as a critical process to map out how we're going to achieve our VMT reductions. And this round it's unveiled that we're going to need additional State strategies beyond what MPOs can account for in local and regional efforts, but -- and I think that's great that the State is taking on additional strategies, and encourage -- encourage continuation down that path.

But it sure -- but I don't know what's -- what's stopping us from counting those VMT reductions twice.

We're seeing it in the MPO's presentations today that pricing is a critical component of how they're achieving VMT reduction, but we're also hearing it from ARB staff that it's part of their additional VMT reduction strategies.

And so just not sure that we're doing the counting that adds up to the -- that achieving the full VMT reductions that we need to meet our State climate targets.

Encourage ARB Board -- or ARB to help -- to try to build more accountability into our scoping plan process, and SB 375 targets, and not let the waters get

muddied.

Thank you.

MR. SADLER: Good evening. I'm Bill Sadler. I'm here on behalf of the Safe Routes to School National Partnership. And I wanted to first just support the MPOs in recognizing active transportation as a key strategy in reaching the targets and the scoping plan as well. You know, my organization really carries -- is focused on safe walking and biking for children in their daily lives, but also in their communities.

And, you know, this is a bigger issue than just walking and biking to school. This is really about you know, reducing VMTs. This is about improving air quality, improving public health as well. And so we're happy to see that active transportation is playing a big part overall in both the targets and the scoping plan.

But I did just want to touch on the funding. And many of my comments have already been said, that I think we're still not seeing a lot of the funding for active transportation being aligned with our State goals. We're seeing State legislation right now that -- for AB 1 and SB 1 that while it has some active transportation funding, it's millions in a multi-billion dollar package. And yet, we're relying on this to, you know, be reaching our targets.

So, you know, I'd just encourage you to think more about that. And, you know, me and my colleagues here today, you know, really would like to request a special round table where we could talk about funding alignment with the scoping plan and the targets, and how that is front and center in SB 375 and the scoping plan, so that we can just have more time than at the end of a really long day to talk about this really important issue.

Thank you.

MS. FLETCHER: Last.

(Laughter.)

MS. FLETCHER: You guys all heard that.

Okay. So My name is Channell Fletcher. I am the associate director of Climate Plan. And as I side, I am the last one that you guys have to hear from today.

All right. So I will keep my comments brief, because you guys are probably all exhausted. I think one thing that I wanted to say is that you've heard a lot about ambitious targets. Obviously, as Climate Plan, we are in full support of that as well.

I think one of the things that I did want to say and I think push, I think, both the Board and the staff to think about is critically assessing what the MPOs have presented in front of you today.

We just say this kind of today with you guys as

well. Some of my thoughts, I think, just initially was how ambitious are these really? I don't know. I haven't looked at it. But I was wondering like what's the ratio of infill to sprawl development? How are the current transportation funds being prioritized? What's happening with the discretionary transportation funds that MPOs do have control over? Where is that going? What is it being invested in? How are we, I think, addressing the role of induced demand?

I think particularly as we're building new highways, like the high desert corridor in Southern California? And I think we've heard a lot about no new highways, and yet that's being built I think right here. And so I think that that's something that's going to impact achieving our targets. And if we're not addressing induced demand, if we're not thinking about Implementation 743, we're not going to meet, I think, our, you know, SB 32 climate goals.

So I think for the draft targets what I'd really encourage the Board and the ARB staff to do is to really work with the MPOs to develop scenarios that I think really shift the flexible funds that they do have control over. And I think for maybe the SCAG region, that's actually the CTCs.

And then, in addition, I think outlining what

exactly is the need from the State? Like how much are we talking about? And then we talk about, I think, SB 1, AB 1, what other mechanisms are out there. And I'm looking at you Assembly Member Garcia, because you are in the legislature, so you have a role in that directly.

I think the other piece is really thinking about 743 how that plays a role in these targets, thinking about induce demand, because those things, if we're prioritizing funds, for highways and roads expansions first, we really aren't going to meet our climate goals.

The end.

CHAIR NICHOLS: Well done. And that concludes the public testimony on this item.

I don't need to chose the record, because this was an informational item, but I do think it's a good opportunity for Board members who would like to make a comment on where we are or where we're headed to have some input.

So, Dr. Sperling, since you've been referred to several times as the source of funding --

(Laughter.)

CHAIR NICHOLS: -- for initiatives, why don't we start with you.

BOARD MEMBER SPERLING: And brilliant and brilliant ideas.

(Laughter.)

BOARD MEMBER SPERLING: All right. So I'm going to try to synthesize everything here.

CHAIR NICHOLS: Oh, good.

BOARD MEMBER SPERLING: All right. So let me start off by saying we have the most resource intensive and expensive transportation system imaginable in the U.S. You know, think about that for a moment.

Now, I commend progress. We've heard from MPOs, from Louise Bedsworth from OPR about progress and breaking down silos. But at the same time, we've learned VMT is increasing, and transit use is flat or decreasing. This is going in the wrong direction. Something important has to change. We're not on the path to achieving the goals that -- of SB 375.

So I'd say -- so I have three kind of overarching strategies we should think about, but then I have two proposals I'm going to make. So the three overarching strategies that we need if we're really going to get major change is, one, we need more choice. We need more choice because people are not going to give up their cars until they have a larger suite of choices. No one alternative, not transit, not Uber is going to be enough to get more than a few people to give up their car.

And if we have more choice, it will become much

easier to do all these financing ideas that we've -- all these pricing ideas. We can't do pricing as it is now, because people think of it as just punishment, and their, you know, mostly right in thinking that. So that's number one.

Number two is we need better land-use development that we heard about a lot.

And number three, we need money, but we need money in a way that rewards the cities and the counties who are being most effective at reducing VMT. Right now, the -- as a couple people mentioned, our transportation money mostly goes to rewarding those that have more VMT. We've got to change that.

So I've got two -- so I think I've boiled down most of what I heard today. So I think there's two really important things, if we're going to have a change. One is innovation and the other is money.

So innovation. The biggest idea out there, the biggest opportunity is shared mobility, not UberX, but we're talking about uberPool Lyft Line, Micro Transit. Using all of this information technology, all of these capabilities that we're developing, but using them to expand the choice, and to increase load factors. And doing it in a way also that will help transit, because right now transit has gotten so expensive and it serves so

few people. We need transit to do what it does best, serve key corridors, dense areas, and use these other services to partner with it.

And that way, we can expand access, and we can -we can reduce cost, and therefore expand access. So from
an environmental justice, social equity perspective, this
is probably the best idea out there that we have.

So -- and this does need -- this is big changes. This is not going to happen easily. We need a lot of local governments involved. We need the regional. We need the State.

So I'm not asking anyone to do anything on this, because I'm -- I've kind of taken on the responsibility of trying to move this forward. So I am heading up an initiative, and the MPOs have been involved with it, ARB is a little involved with it, to focus on what are the policies, what are the levers to create these choice and improve these services that can improve load factor?

So I'm just going to ask everyone to kind of work with me, and, you know, build that coalition and figure out what some of those ideas are

But here's the other idea, the money one. And several people mentioned this. So here's I think a step forward. I think what we should do is hold a roundtable modeled after what we did with the environmental justice

community, the EJAC Committee. And this is a first step, but it's an important one. Get our -- the ARB Board members, get the California Transportation Commission, get Caltrans, get some of the MPOs and others involved in it, and in a discussion to figure out how do we redirect money, transportation money, especially, you know, to those cities and counties and MPOs that really are committed to reducing VMT and are adopting programs, policy. Reward them. And we're not doing that now as basically we heard from all the MPOs.

And so I think that's -- that's -- I think -- so that's a first step, but I think that's a step that would really help move us forward. And I've talked to the MP -- you know, a number of the MPO leaders and the ARB staff and the NGOs, and actually a couple people already mentioned it, because I've been talking about it.

So I think there's a lot enthusiasm for it. And probably one of the ideas to be talking about there, how do we make these SB 375 plans and efforts more compatible in conformity with the transportation funding, in conformity with local general plans?

And, you know, ARB has really got to grab this, I think, you know, we've kind of been -- you know, we don't have the authority, so we kind of haven't taken the bull by the horns. So that's my modest suggestion.

377

```
1
             CHAIR NICHOLS: Thank you.
             Next, we'll hear from Supervisor Roberts.
 2
 3
             BOARD MEMBER ROBERTS: Thank you, Madam
 4
    Chairwoman.
5
             CHAIR NICHOLS: Everybody who wants to speak and
6
    get into the queue needs to really press hard on that
7
    request to speak thing or your name does not pop up, just
8
    so you know.
9
             BOARD MEMBER ROBERTS: I'm amazed it works.
10
             CHAIR NICHOLS: But YOU did. You did. You're
11
    in.
12
             BOARD MEMBER ROBERTS: Yeah, I did. I had no
    idea if I would be successful but --
13
14
             (Laughter.)
15
             BOARD MEMBER ROBERTS: First of all, I think, you
```

BOARD MEMBER ROBERTS: First of all, I think, you know, if there were a theme today, I think Mr. Sperling -- Professor Sperling has seized it. From the very start of the day today, we've been talking about every solution is based on money. Think about it.

16

17

18

19

20

21

22

23

24

25

Go back to all the discussions we've had all day long. I've heard that term come up again, and again, and again. So if we leave here and we don't understand that, we've wasted a day.

I guess I'm more optimistic. I don't think the decline in the transit -- public transit ridership, I

think, it's a little dip, but that's like a couple year decline. It's not a -- this isn't a long trend. And I think we're projecting too much into that.

And I'm hopeful that that's the case. And we're doing everything possible to ensure that's not. But we're seeing a lot of things going on. It was mentioned in San Diego we did a major down-zoning. You know, if you try do one property just down-zoning you just don't know how much agony you go through to do tens of thousands of different lots in a down zoning. I tell you, you get very little positive emails, very few, and you check your car before you start it up every day, too.

(Laughter.)

BOARD MEMBER ROBERTS: So we've been through that. And would we're seeing now though, even in our urban areas, we're seeing a push back. You know, we're not seeing everybody greet us when we say we want to increase the density. In fact, on a new light rail line, while we're trying to do increased density at the stops, we're seeing a considerable amount of push-back.

People don't like change. Okay. And we've talked about a lot of ideas that are all changed. If we don't have the funding -- significant changes in the funding, none of this is going to happen. We've heard about the planning that's dependent on funding. All of

this is dependent on funding. And yet, we've -- you know, we're doing things without looking at what really pays off. Where is the money best spent. We have performance criteria for one project for another over another, maybe in infrastructure.

But we need to compare different types of solutions to see what it gets us, whether they're active or passive or whatever, we ought to have some metrics that show us where do we get the most bang for the buck, since the bucks are weighs in short supply here.

I don't know what your round table looks like, but I'd certainly want to join to see if we can advance some of these ideas. But we're not going to make any of these goals without a significant difference. And you're not going to get there by creating disincentives.

You've got to create incentives. The disincentives may look good on paper, but unless you change the form of government where the public doesn't have a say, those don't -- are not going to get you too far, and you're going to see a rebellion that's going to make a lot of elected officials very uncomfortable.

So I would like to see how we can create positive incentives. You know, if we had more money for public transit, I guarantee there's probably not a region around that couldn't do a better job with it. And I think some

of the changes -- it's hard to predict what these are going to be that are coming in the new technologies, but the vehicle mile traveled number I think has been one of our -- if you look back historically, it's been one of the poorest metrics that we have on performance on anything.

And I think with the new technologies coming, I think that will continue to be the case. I wouldn't hang my hat on vehicle miles traveled. I would rather look at how do we increase clean vehicle miles traveled, how do we do the things that we need to do? How do we get people in communal commutes?

You know, we're looking at how -- what's the future of transit going to look like? It's probably not going to be big buses. It may be vans. It may be smaller types of commutes as you were discussing Professor Sterling -- Sperling. And I -- you know, I think there's a lot of unknowns when we try to project where we're going to be in 2035. But the one thing you know, it's going to cost a lot more money to get the things that we're going to need to make that to be a positive outcome.

So I'm sure we can all vote in favor of a lot of -- a lot more money today, but this is just an informational item, so I appreciate the MPOs that are here, and they're -- they're all struggling with similar issues, maybe slightly different, and some are in a

slightly different position than others. I know we're very envious of the fact that L.A. can pass all these ballots issues and get all this money, but they've got big needs too, and they're still going to need help in spite of all of that.

So thank you all for participating here today.

And we'll find out where to get all this money here
shortly. Come back next month, we'll have it figured out.

(Laughter.)

CHAIR NICHOLS: Great.

Okay. Supervisor Serna.

BOARD MEMBER SERNA: Great. Thank you, Chair Nichols.

So first of all, I have two general comments. The first I'd like to respond to Dr. Sperling's suggestion I think it's the -- the right one in terms of a convening or roundtable to understand especially from the perspective local government what is in our -- what is in more of our control in terms of enhancing the respect from a planning perspective between plan -- between transportation and land use, the things again that are in the control of cities and counties.

I would add to, or at least put it out there for consideration, that perhaps as part of a roundtable discussion we might want to think about inviting the

development community to the table. Because I think as much as local government may want to believe in it's heart of hearts that simply by way of, you know -- you know redoing our general plans or thinking differently about how you plan in general to accommodate more infill development, I think it's always wise to have the actual practitioners engaged that are actually investing their capital to promote development and understand really what it takes to encourage more investment in infill to begin with versus suburban development.

And I know in Sacramento we actually have in our local building industry association an infill council. So there are existing channels to tap where I think that wouldn't necessarily be that difficult to do if we thought that was a positive adjunct to some of the other elements that have been proposed for a roundtable.

And then the second thing I'd like to mention is there's a chart that staff produced. It was the one that Amy was having some difficulty with the animation. But it had the -- it showed VMT going in the wrong direction, going back up in the years 2013 through '15. And the explanation I was given in my briefing, and certainly it was made mention of here today was most -- that had most to do with gas prices.

So I'm -- I'd be curious to know if it's -- first

of all, are we going to be looking at moving forward price sensitivity at all between fuel prices and what we think might lessen the strain on MPOs to meet new aggressive targets, and if not, why not? And if it's -- if we all agree that that's something that we want to kind of keep an eye on, if there's a way to maybe establish a dashboard with that, so that we can understand moving forward when that strain might ebb and wane with regards to the responsibilities of MPOs, I think that's something I'd like to understand a little bit better.

I know that there are other factors, including the advent of all these other technologies, and Uber and whatnot. But that to me, at least the way it's been explained to me by our staff thus far, it really has been fuel prices mostly that have affected the number of vehicle miles traveled per capita going in different directions. So that's something I'd like for us to explore further.

Thank you.

CHAIR NICHOLS: Does staff want to respond to that comment and about tracking pricing?

DEPUTY EXECUTIVE OFFICER KARPEROS: So the rebound effect, as it was called by the MPO directors when they spoke, is very much something that we are now doing a deeper dive with the MPOs in their models. We have our

own modeling system that we use to look at that. We're all coming up with somewhat different numbers. And so we are -- so it is an important opportunity an important thing that we needed to get further into.

The sensitivity analysis, the stress test that the MPOs have already done certainly have illuminated that it's the biggest sort of knob, the biggest sort of dial that we have, the cost of driving, to impact VMT. What will be particularly interesting is to see how that then marries up with the innovation technologies, the shared economy that we're seeing, and those things -- how those things cross over in the 10-, 15-year period in front of us in the 2035 time frame.

So, yes, very much something that we need to be looking at.

CHAIR NICHOLS: Okay. Dr. Balmes.

BOARD MEMBER BALMES: Thank you, Chair Nichols.

I'll try to be brief given the hour. And I thought I was going to be pushing the workshop/roundtable, but I don't have to do that. I'll just agree with my previous Board members. I think that would be an important thing to do. I guess the big picture item that I'd like to emphasize is that I think that the AB 1, SB 1 bills that are moving forward in the legislature -- and I'm glad that Assemblyman Garcia is next to me to hear

this -- I think they need to be aligned with our statewide climate goals. I think it's like they're two separate paths now.

And I agree with my previous Board members who spoke both Professor Sperling and Supervisor Roberts that it's all about the money. And most of the money, as I understand AB 1, SB 1 is going to go to road maintenance and highways. And as one of our witnesses testified, you know, that's not the way to deal with our climate change goals.

You know, I drive on pothole, you know, ridden roads and would like to see them fixed. We need to fix our infrastructure. I'm not saying that we shouldn't, but we also need to align how we spend those monies with our climate change goals. So that's part of the reason I'm supporting the roundtable that is being suggested.

I think that, and maybe I'm being naive her, and maybe Assemblyman Garcia will tell me that I am being naive, but it seems to me the legislature thinks that our climate change goals can be funded by the greenhouse gas revenue fund.

But I don't think that there's enough money there to provide the kinds of positive incentives, the transit money, that Supervisor Roberts and Professor Sperling are calling for. I mean, I think some of the money should

come from SB 1, AB 1. You know, we need to have more money for public transit and active commuting, if we're going to try to meet our climate change goals.

So -- oh, and I also wanted to say, and in full transparency I just bought a Volt, but you know, I think that EV drivers need to be paying their fair share for road use, but I don't think there should be a punitive fee, which I think is sort of the way it is in SB 1, AB 1 now. We, again, have to incentivize electric vehicles not, you know, punish people for using -- for buying them.

So I think that's all I need to say at this point, but I really do feel like we have to align climate change goals with, you know, our transportation infrastructure needs. And I guess the final thing I would say is I do really appreciate the MPO presentations today, especially recognizing the need for more money from other sources. They can't do it with the existing financial structure, and the fact that there was a recognition that low income communities could be impacted by, you know, road pricing so I appreciate the MPO input today.

CHAIR NICHOLS: Okay. Ms. Mitchell.

BOARD MEMBER MITCHELL: Thank you, Madam Chair.

I think one thing that we can deduce from what we've heard today is that this is really hard. And Dr.

25 | Sperling's comment to establish some kind of roundtable I

think is a good way to start.

Also, what we've seen from the presentations from the MPO's is that each of these regions is very different, and one size probably isn't going to fit all. I'm disturbed by, you know, the fact that's been stated here that VMT is rising, and transit use is declining, because that imposes a very difficult challenge, I think, because we were going on the assumption that we could increase transit, we would reduce VMT. And certainly gas prices are one of the causes of that.

I think the other thing that we grapple with is that land values do drive land use where -- and we saw that today in early testimony. People are living in inland areas, at least in Southern California, but they may be driving two hours to get to work. And the whole idea of SB 375 was to have people live near where they work. That's hard to do because of land values. I really -- I don't know the answer to that, but I think we all need to sit down and think about it.

The other thing we have, and particularly difficult in Southern California, although it's happening in other places, is the homeless problem, the need for housing. And is there an opportunity here with some of the money that's going to be put forward to increase housing to -- for the needy people to also work on the

transportation side of that.

There's a lot of work to be done here, and the answers aren't easy. I think maybe the first step is sit down with somebody as smart as Dr. Sperling with our MPOs with developers. I think developers, as Supervisor Serna mentioned, they need to be at the table with us. The people that are working on increased housing for lower income, they need to be at the table.

So I started out saying it's not easy, and everything I've said tells us it's not easy, but we need to work on it. So I think we need to work on it together.

CHAIR NICHOLS: I think I'm going to have the last word here unless somebody else wants to sign up.

Yes, go ahead.

BOARD MEMBER TAKVORIAN: I couldn't believe I can't push this.

CHAIR NICHOLS: Well, there's two of you that want to speak apparently.

Go ahead.

CHAIR NICHOLS: You know, nothing is coming through here.

All right. Diane, you -- just press the button.

(Laughter.)

BOARD MEMBER TAKVORIAN: This is just torture all

25 | the way around. I'm so sorry.

So I just want to reiterate or endorse what Professor Sperling has said in terms of a number of things. I think in terms of choice, I know that we're thinking about choice that is resting on accessibility and equity. And those are critical things that I think are important. And we also need to look at what choices are not in existence for a number of our communities. So I hope -- I'm all for the roundtable. I think it would be a great idea, and I hope I get invited.

I think that we also need to start from the same set of metrics. And so I want to recommend that ARB needs to standardize the methodology for our regional greenhouse gas reduction targets and require consistent baselines and assumptions for modeling.

I really appreciated the MPO presentations today, and I felt like everybody was talking from a different play book. And while I don't think that's entirely true, I think it's somewhat true. And while I don't think one size fits all in terms of solutions, I do think we need to look at what the problems are in a consistent way and apply the strategies that we think do fit and have an explanation about why some strategies don't fit in some regions, and why there are other strategies that might be better.

So I'd like to ask us to have more consistency in

regards to the baselines and the assumptions for modeling. And I think as we heard in testimony induced demand has to be a critical component that's in that, and I didn't hear that across the Board.

I also appreciated the sensitivity to displacement and to equity. And I'd like to see that be a consistent theme throughout in all of the modeling, because I don't think we're thinking about that across the Board. And again, that goes to pricing for transit. And as the economy suffers, we also have folks who can't get on transit, because it's too expensive.

I think VMT does need to be prioritized as the way to achieve the ambitious targets that we want. And so while some of these other strategies are important, some of the ones that we're proposing and pushing here at CARB in terms of ZEVs and other kinds of car-charging strategies, and Lyft and Uber, but we really are about land use, and we're about reducing VMT here. So I think we really need to make that happen.

I would also like to have us have a consistent assessment of our -- the funding allocations. I'm sure we do need more money, but let's look at where the money we have now is going. How are we spending it? Are we spending it in order to meet our climate goals? Are we expanding freeways with it that aren't needed to be

expanded?

So I think we need to have that assessment across the board. And I was heartened to hear in my briefing that staff really wants to take a look at that. So those are some of the things that I would suggest that we do. And I also want to endorse Dr. Balmes thought about aligning the -- our climate goals with our AB 1 and SB 1. I think that's critically important, and we need to fix our infrastructure. So I think both things really need to happen.

Thanks.

CHAIR NICHOLS: Dr. Sherriffs, did you have your -- No. Okay. In that case, Assembly Member Garcia.

ASSEMBLY MEMBER GARCIA: Thank you, Madam Chair.

This has been a very good discussion. And the first thing

I guess I will share with my colleagues in the Assembly is

that the folks on ARB aren't out of control --

(Laughter.)

ASSEMBLY MEMBER GARCIA: -- and way off line, some other planet --

(Laughter.)

ASSEMBLY MEMBER GARCIA: -- trying to regulate and align our climate change goals with reductions of greenhouse gases and improving air quality throughout California. So that's my first report to my colleagues.

But let me touch on a couple things. And I'm going to associate my position with many of the comments that have been mentioned related to economically disadvantaged communities, the need to prioritizes our efforts in those regions, because when you overlay maps in those particular areas of not only the pollution, the inability to access affordability of housing, or care in the health care arena, transportation services, and the list goes on and on, they all seem to cluster themselves in the same geographic locations, which is why I think that, you know, prioritizing our investments into those areas are extremely important.

You begin to see the co-benefits of those investments above and beyond the reductions of emissions and improving air quality. But we have a huge challenge when we're telling our local governments, for example, a small community in Imperial County that has a budget of maybe 10 or 11 million dollars annually to update their general plan that's going to cost them a million or a million and a half dollars to conform to these policies.

We have a huge problem there, right? That does not become very feasible in order to put in the necessary policies, the smart growth development policies that lead us to the smart land-use development, the transit-oriented type development, and ultimately the connectivity, the

safe routes to school, and the things that are going to reduce the miles traveled, but also again reach the objectives that we have.

So we have to be mindful of that and reconnect with the point of investments in those regions are extremely, extremely important, and valuable above and beyond the goal.

The other thing is that I can assure you that the conversation in the legislature is occurring as it relates to SB 1 and AB 1, that they are not aligned with California's climate change goals. And we have a conflict here, because we also have \$70 billion of deferred maintenance of road improvements in the State of California, not to mention what the costs are at the local and county levels, right?

But the conversation is happening in terms of we need to begin to turn the corner to align our policies and our investments not to promote, you know, legislation that we're working on, but we're talking about transportation equity. And I think that's what we're referring to when we're beginning to turn the corner as it relates to investing in transportation modes that are going to align us with our climate change goals.

But that's not received very well. That's a radical idea when you're talking about moving from

building bridges and roads to taking the turn and saying, you know, the active transportation and other transportation modes is a radical idea. And so there are legislators that do believe that this should all come from the GGRF funds, right?

And I'll tell you what, those are the same legislators that don't support the climate change policies, but actually have their handout saying, hey, how come our communities aren't getting any, right?

And so there's kind of a dichotomy there that is somewhat challenging for folks to understand. But I make that connection, because I think we have a unique opportunity through some of our legislative efforts. You know, the Chairman of the Transportation Committee for Assembly sits on the Joint Legislative Committee that came about AB 197. And it's a great opportunity for us to have this discussion in terms of so at what point do we start turning the corner, and again aligning these efforts.

So I wanted just to share that it is a money issue. And, you know, SB 1 and AB 1 have some hikes in the gas tax and diesel tax that may, on its own, help us with our, you know, miles traveled as this conversation has kind of taken place.

But I think that it's important to note that we're not aligned. We recognize that, and that we've got

some work to do, whether it be through these workgroups, roundtable discussions, the joint legislative committees that we have, but it also is going to really require us to do a lot of education and information of some of my colleagues as well.

And again, the first thing I will come back and report to them is that the folks on ARB aren't -- you know, these folks that are living on another planet, that we're actually talking about the policies that we are implementing in the legislature, and that we need to align if we're going to reach these goals.

So I just wanted to commend the folks who are here representing the local government agencies is that we understand, as a former Mayor, you know, where you're coming from, and that there are people in the State legislature that want to align these efforts and make sure that the resources are made available, limited or not.

And look, we can't overlook the fact that we have these deferred maintenance issues on our roads. We had a bridge fall apart on Interstate 10 last year, right, because of the lack of maintenance. And so we can't overlook that. Those are safety issues. Those are economic issues for our region. But we also need to be mindful that we need to begin turning a corner more aggressively in aligning our policies, our transportation

396

```
policies with our climate change goals.
1
 2
             And I hope to be able to bring somebody value to
3
    that conversation, as I mentioned in my earlier comments.
 4
             So thank you, Madam Chair, for allowing me to
5
    speak.
6
             CHAIR NICHOLS: Thank you very much. Mr. De La
7
    Torre wants to be recognized to explain that he actually
8
    does live on another planet.
9
             (Laughter.)
10
             BOARD MEMBER DE LA TORRE:
                                        Exactly. I mean,
11
   we've made quite a bit of effort to talk to some of my
    former colleagues and others. And I didn't all of a
12
13
    sudden go crazy when I left there and came here.
14
             (Laughter.)
15
             BOARD MEMBER DE LA TORRE: I think I'm pretty
16
   much the same person.
17
             (Laughter.)
             BOARD MEMBER DE LA TORRE: So -- but apparently
18
19
    they didn't believe us when we went and talked to the
20
    legislators over the last several years.
21
             Thank you.
22
             (Laughter.)
23
             CHAIR NICHOLS: Okay. Well, that -- I probably
24
    should let that be the last word --
25
             (Laughter.)
```

CHAIR NICHOLS: -- but I'm not going to, because I just have one point of information that I want to raise, because I don't think it's a question of all money going only to maintenance or all monies going only to alternatives. I think there's room for some -- a little bit more careful perhaps look at what makes up the package. And so I just wanted to at least make the observation that from what I have seen and the briefings that I've heard that something like 20 percent of the money that relates to roads that's in the bill actually is going for expansion of roads.

And we do have an ongoing discussion in this State, which needs to be resolved, I think. I believe I know the right answer, but, you know, it's possible that there is another position on this, which is that whenever you add capacity to existing roadways, it does create some induced demand, and it fills up immediately. So I would argue that maybe the first place to look, at least in a modest way, would be at the parts of the -- the parts of the package that relate to increasing capacity and see if we can -- if we could perhaps redirect those into things that would be more in line with our other goals.

And that, I think, is the end of this discussion. (Laughter.)

CHAIR NICHOLS: So with that, thank you all so

much. It was a great conversation, and we've got some items to work on going forward. Thanks to the MPO directors for coming and staying with us, and for all the good analytical work you've been doing. And the next question is -- first of all, we obviously need to take a break. Everybody needs to stand up and stretch and move around a little bit.

Are we up for dealing with the final item on our agenda or will people just -- if you just can't take it any more, which I would understand, we could move it to tomorrow. Why don't you think about it while you're taking your stretch, and then we'll decide.

(Off record: 7:13 p.m.)

(Thereupon a recess was taken.)

(On record: 7:19 p.m.)

CHAIR NICHOLS: I'm on now.

Thank you. Thank you, sound engineer. We are dependent on you. We're going to take the last item, because the staff has told me that they have boiled their presentation down to the essentials, the absolute essentials. Thank you so much.

(Laughter.)

CHAIR NICHOLS: And we have a short list of witnesses, so -- and again, we'll be imposing the two-minute limit. This is actually the -- placement of

399

```
1
    this item on the agenda does not reflect the importance.
    This is actually a very important item that we're dealing
 2
 3
    wit here, but everything has to have an order, and this --
 4
    this is where it fell today.
5
             So with that, I am going to call Agenda Item
6
    17 - 3 - 6.
             This is the --
7
             BOARD MEMBER MITCHELL: Madam Chair?
8
             CHAIR NICHOLS: Yes.
9
             BOARD MEMBER MITCHELL: Madam Chair, I just need
    to announce that I'm going to recuse myself from this item
10
11
    and leave the dais, because a decision on this item may
    affect a financial interest that I hold, so...
12
13
             CHAIR NICHOLS: Thank you very much, and thank
14
    you for letting us know that you weren't just leaving to
15
    go party while the rest of us were still working --
16
             (Laughter.)
17
             CHAIR NICHOLS: -- because there are others who
18
   would have, I'm sure, opted to join you.
19
             We'll see you tomorrow.
20
             BOARD MEMBER RIORDAN: 8:30.
21
             CHAIR NICHOLS: 8:30 tomorrow morning.
22
             (Laughter.)
23
             CHAIR NICHOLS: 8:30, yes.
24
             Okay. So last item on the agenda is a proposed
    regulation for greenhouse gas emissions standards, for
25
```

400

```
crude oil, and natural gas facilities. It's the second of
1
    two hearings on this item. The first hearing considered
 2
 3
    the proposed regulation along with the staff's 15-day
 4
    change proposals. And this is now back before us for
5
    final approval.
6
             And with that, I'm going to turn it over to the
7
    staff.
           It's about methane.
8
             EXECUTIVE OFFICER COREY: Yes, go.
9
             CHAIR NICHOLS: Okay. You got a nice picture.
10
             (Thereupon an overhead presentation was
11
             presented as follows.)
12
             CHAIR NICHOLS: That's a good start.
13
             AIR RESOURCES ENGINEER FISCHER:
                                               Thank you.
14
             Thank you, Mr. Corey. Good evening, Chair
15
   Nichols and members of the Board, right?
             (Laughter.)
16
17
             CHAIR NICHOLS: He was going to waive his
18
   presentation any way.
19
             (Laughter.)
20
             AIR RESOURCES ENGINEER FISCHER: Well, given the
21
    late hour, and that this is the second hearing, I will
22
    just be covering the highlights.
23
             Next Slide.
2.4
                              --000--
25
             AIR RESOURCES ENGINEER FISCHER: Here's an
```

overview of my presentation.

Next slide.

AIR RESOURCES ENGINEER FISCHER: Now, I will go through a little background.

--000--

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: Both the original and 2013 update to the Climate Change Scoping Plan identified the oil and gas sector as a significant source of methane emissions. In addition, the Short-Lived Climate Pollutant Strategy includes a 40 to 45 percent reduction in methane from this sector by 2025. The proposed regulation also helps further the objectives of SB 4 and SB 887.

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: In 2013, methane emissions from this sector accounted for approximately four percent of the total statewide methane emissions in California. Other large sources of methane include agriculture, waste handling, and pipeline related activities.

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: We coordinated with our sister agencies at the Division of Oil and Gas and Geothermal Resources, or DOGGR, and the California Public Utilities Commission, or CPUC, to ensure consistency with the related rule-makings. Also, we have been working closely with the local air districts throughout the development of this regulation.

Next slide.

2.4

--000--

AIR RESOURCES ENGINEER FISCHER: We've also been reviewing federal actions related to oil and gas facilities. Our proposal is for both new and existing sources, is broader in coverage, and is generally equivalent or more Stringent. We've been working to harmonize these requirements as much as possible in order to smooth implementation and to streamline the different testing and reporting requirements.

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: I will now briefly discuss the proposed regulation with changes incorporated since the last Board hearing.

--000--

AIR RESOURCES ENGINEER FISCHER: We have been developing the proposed regulation for over two years

through an extensive engagement process with air districts and stakeholders.

Next slide.

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: The proposed regulation overs intentional emissions, also known as vented emissions, as well as unintentional emissions called fugitive emissions or leaks.

Here's a list of the types of new and existing oil and gas operations covered by this rule.

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: I will now describe the main provisions of the proposed regulation. Separator and tank systems are used for separating crude oil from produced water or for separating produced water from natural gas. As part of the 15-day changes, we clarified the provisions to exempt very low throughput systems, as well as small gauge tanks because these systems or tanks would have negligible

Next slide.

--000--

AIR RESOURCES ENGINEER FISCHER: Circulation tanks are used in conjunction with well stimulation

treatments and used to remove excess sand from a well after hydraulic fracturing or fracking.

In addition to following a best practices management plan, as part of our 15-day changes, we clarified that the technology assessment specified in the proposed rule be made available in time for the ARB Executive Officer to make a determination on whether or not vapor controls will be required by January 1st, 2020.

--000--

AIR RESOURCES ENGINEER FISCHER: Leak detection and repair or LDAR is a program designed for finding and repairing leaking components, such as valves, flanges, or pipe-fittings. Under this proposal, LDAR would be used to find and repair leaks of methane at all types of facilities, including natural gas facilities not covered by district rules.

The proposal requires quarterly instrument inspections to locate leaks. These requirements have been modeled directly after existing local district rules. In the July 2016 version of the proposed regulation, there was a provision that allowed facilities to step down from quarter to annual inspections.

Based on additional scientific information and per the Board's direction, we removed the annual step-down provision as part of our 15-day changes. During the

comment period, we received comments by some stakeholders that believed that leaks found in the 4th quarter will result in an automatic violation. We clarified that as stated in the context of the regulation, they will not receive a violation for repairing leaks within the specified time frames.

We also received comments expressing concern that a facility may need to vent or blow down large volumes of gas in order to make minor repairs, and that this could create more emissions. We believe that -- we believe that most leaks would not require such blow downs to repair. Nevertheless, this concern can be addressed for safety or natural gas system reliability reasons by way of the delay of repair or critical component provisions which allow for longer repair times.

We plan to include these clarifications as part of our Final Statement of Reasons that we submit to the Office of Administrative Law. And we may also find a need to issue additional guidance during implementation for this and other topics.

--000--

AIR RESOURCES ENGINEER FISCHER: For underground natural gas storage facilities, the proposal includes a monitoring plan that covers both ambient air monitoring and wellhead monitoring designed for the early detection

of leaks. These requirements are in addition to LDAR and are based on lessons learned from Aliso Canyon, which highlighted the need for regular monitoring at these high pressure concentrated sites.

As part of the 15-day changes, we revised the ambient air monitoring provision to include upwind and downwind monitoring censors and revise the baseline monitoring criteria. We also incorporated new requirement -- a new requirement based on SB 887 requiring the use of optical gas imaging in the event of a well blowout.

--000--

AIR RESOURCES ENGINEER FISCHER: We made no significant changes to the provision for -- on compressors, so in the interests of time, I'll skip this slide.

--000--

AIR RESOURCES ENGINEER FISCHER: We also made no significant changes to pneumatics or measurement and reporting requirements, so I will skip this slide.

--000--

AIR RESOURCES ENGINEER FISCHER: Beginning

January 1st, 2018, the testing and reporting requirements
take effect. Beginning January 1st, 2019, the equipment
changes-outs go into effect. And finally, beginning

January 1st, 2020, circulation tank must be controlled with the use of a vapor collection system, unless the ARB Executive Officer determines otherwise, after reviewing the results of the technology assessment.

We have developed this phased-in approach to put the regulation in place as quickly as possible, while recognizing necessary lead time.

--000--

AIR RESOURCES ENGINEER FISCHER: The overall estimated annualized cost of the proposed regulation is \$27.3 million, and the regulation results in estimated annual methane reductions of more than 1.4 million metric tons of CO2 equivalent using a 20-year global warming potential. These estimates reflect 15-day changes.

The proposed regulation resulted in an overall cost effectiveness of about \$19 per metric ton of CO2 equivalent reduced.

--000--

AIR RESOURCES ENGINEER FISCHER: This proposal also results in statewide emission reduction co-benefits, and VOC -- of VOC and toxic air contaminant and results in a neutral statewide NOx impact.

--000--

AIR RESOURCES ENGINEER FISCHER: Next, I will briefly discuss the environmental analysis.

--000--

2.4

AIR RESOURCES ENGINEER FISCHER: Staff completed a draft environmental analysis, or EA, for the proposed regulation. Staff received two comment letters on the draft EA during the 45-day public comment period. Staff has also provided the final EA and written responses to comments on the draft EA to the Board for your consideration.

--000--

AIR RESOURCES ENGINEER FISCHER: I will now cover some of the aspects related to implementation.

--000--

AIR RESOURCES ENGINEER FISCHER: As I mentioned, the local air districts play a major role in reducing emissions from stationary sources. This proposal allows both ARB and the districts to implement the proposed regulation. However, district implementation is preferred. Districts are encouraged to charge fees to help cover the cost of implementation, and that can also keep enforcement penalties. ARB is also working with the air pollution control officers of affected districts in exploring additional resource options to aid with the cost for personnel and test equipment.

--000--

AIR RESOURCES ENGINEER FISCHER: ARB and the

districts have developed a Memorandum of Agreement that specifies each agency's roles and responsibilities, enforcement coordination, as well as a supporting -- as well as supporting information and data sharing. We expect the MOA to be completed this summer prior to implementation of the regulation.

--000--

AIR RESOURCES ENGINEER FISCHER: As is typical of ARB programs, we will examine the data reported each year, along with any additional voluntary data provided. We also plan to work closely with CAPCOA and stakeholders to develop guidance, while we monitor implementation. This may include guidance on clarity issues related to LDAR concerns on the fourth quarter violations and blow downs. We plan to periodically update the Board and propose adjustments as necessary.

--000--

AIR RESOURCES ENGINEER FISCHER: I will now present staff's recommendation.

--000--

AIR RESOURCES ENGINEER FISCHER: Staff recommends that the Board adopt Resolution 17-10 to approve the written responses to the environmental analysis comments, certify the final environmental analysis, and make the required CEQA findings, to adopt the final regulation

order, and direct staff to continue working with the districts to finalize the MOAs.

That concludes my presentation, I would now like to introduce Alan Abbs, the Executive Director of the California Air Pollution Control Officers Association to say a few words.

After Alan, you will also hear from Rob Habel of the Division of Oil, Gas and Geothermal Resources. In addition, CPUC has provided a letter of support.

CHAIR NICHOLS: Hello again.

CAPCOA EXECUTIVE DIRECTOR ABBS: Good evening. I didn't realize I had a position of honor tonight for this.

(Laughter.)

CAPCOA EXECUTIVE DIRECTOR ABBS: I thought I was just going to be a commenter.

My name is Alan Abbs and I'm the Executive
Director of the California Air Pollution Control Officers
Association. Thank you for the opportunity to come up and
support this regulation, that if approved and implemented
would result in significant reductions in methane across
the State, as well as toxic air contaminants. And I think
that's one of the things that we're -- we strive to do in
all these GHG regulations is not only get the reductions
for GHGs, but also get the criteria pollutant reductions
and the toxic air contaminant reductions. And so that's a

nice thing to see as part of this regulation.

This -- staff only had give minutes to do the presentation, but it belies that there's been a lot of work that's gone into making this regulation. And the air districts have been working with ARB staff for over two years in various work groups to look at the regulation and the implementation, and try to do refinements.

And this regulation is one of those unique ones that connects stationary sources with greenhouse gas regulations. And so it's a mash up of air district responsibilities, and ARB responsibilities. And these are particularly difficult regulations to get through and -- but we manage to do it.

And so we have haven't fully gotten the process down, but we got pretty close this time. And we're looking forward to finishing up the MOU process and the implementation phase to make this regulation a success.

The last thing I'll stay is that there -- we have two types of air districts that are going to be implementing this regulation. We have oil and gas districts, ones that have existing oil and gas operations and traditionally have -- have these facilities under permit. And then the non-associated gas districts, which traditionally have only permitted combustion devices that are at these non-associated gas facilities like

compressors and dehydrators.

The non-associated gas districts, as staff mentioned, are going to need some significant support going forward to make sure that they can implement this regulation, because they're going to be adding a lot of -- a lot of components as part of their -- as part of their permitting and enforcement that haven't been permitted and inspected before.

And so staff mentioned some help with staffing, with resources, with equipment, we'll all be -- we'll all be looking for support from ARB for that going forward.

So with that, thank you for the opportunity to comment. And as I said, we look forward to working with CARB during the implementation phase.

Thanks.

BOARD MEMBER SHERRIFFS: Can I ask a question?
CHAIR NICHOLS: Yes.

BOARD MEMBER SHERRIFFS: I was wondering how many districts this will affect and what percent of them, in fact, are -- have expressed an interest in --

CAPCOA EXECUTIVE DIRECTOR ABBS: In implementing the --

BOARD MEMBER SHERRIFFS: In implementing it, yes.

CAPCOA EXECUTIVE DIRECTOR ABBS: So we have -- we have 15 air districts that look like they would be

affected or would have sources that they would regulate as part of this regulation, and about, roughly split, half 3 are oil and gas districts and half are non-associated gas. 4 And from what I've been able to figure out, the oil and 5 gas districts are all going to be able to roll those 6 regulations into their existing enforcement and 7 implementation. We have the non-associated gas districts that are really looking at the regulation. And part of 8 it's going to rely on the implementation and the 10 Memorandum of Understanding with ARB.

But I believe that our goal should be to get all of the districts to do it. But it will be challenging, but we'll give it a shot. May not be successful, but we'll give it a shot.

Thanks.

1

2

9

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIR NICHOLS: Okay. We were going from our colleagues with Department -- Division of Oil and Gas. DOGGR SPECIAL ASSISTANT HABEL: Good evening. CHAIR NICHOLS: Ηi.

DOGGR SPECIAL ASSISTANT HABEL: My name is Rob Habel with the Division of Oil and Gas and Geothermal Resources. As Joe mentioned, a sister agency to ARB.

First of all, I'd like to mention that the Division of Oil and Gas is the major regulatory agency responsible for overseeing the development of oil and gas resources in the State.

And although the majority of our work deals with the subsurface, the construction of the wells, the operating the wells, and a variety of other things, we also do have a component of the surface, such as tanks, pipelines, compressors and so on. Therefore, we have an overlapping role with a lot of the work that ARB does. And so we've been working very closely with ARB for several years, even before SB 4. You remember SB 4 dealing with well stimulation, hydraulic fracking.

And through that effort, we do have a memorandum of agreement to share information, and bring ARB into the permitting process, and take their comments. So they're very involved.

And more recently, we've had a lot of conversations with the staff ARB dealing with Aliso Canyon. So we've had meetings on a regular basis. We've conducted site visits looking at new technology. And because the Division has Emergency regulations in effect, as a result of Aliso Canyon, we had leak detection protocols associated with that.

And as a result of the emergency regulations, we're in the process of finalizing having permanent regulations, which should be coming out next several weeks. And in that component is with the leak detection

most of that really should fall onto ARB, but since we were already poised to do that, we have that responsibility, and we're working very, very closely with the ARB staff.

At the same time, with our rule-making that's coming out very soon in the next several weeks, we've also worked out a nice hand-off to ARB. So we've been informed that even though the regulations may be in effect January 1, 2018, they probably won't be fully implemented until September 2018. So the way we worked very closely with our legal team and ARB's legal team to draft our regulations to make a nice smooth hand-off that we will continue doing the monitoring until ARB's program is fully implemented.

And so we are here in support. We're working very closely with ARB, and we look forward to continually working closely with the staff to regulate the oil and gas industry and any emissions. And I'm here to answer any questions if you may have any.

CHAIR NICHOLS: Thank you. I appreciate very much your being here and spending the time with us, and always your collaboration on this. It is always a little bit tricky when you've got agencies with slightly different mandates, but overlapping areas of jurisdiction. And we certainly recognize that your Division has the lead

on this industry as far as California is concerned. But we get to -- we get to be responsible for everything that competes -- everything that contributes at least to greenhouse gas emissions. So it's -- I think it's worked well, and thank you for all your help.

Thank you.

DOGGR SPECIAL ASSISTANT HABEL: Thank you.

CHAIR NICHOLS: As you mentioned, we also have a letter from the Public Utilities Commission urging us to move forward at this point as well.

So I guess we should now turn to the witnesses. If you want to come forward, those of you who have made the long trek and are still with us starting with Bruce Baizel and on.

MR. BAIZEL: Good evening. Good evening,
Chairman Nichols and Board. Thank you for persevering. I
came from southwest Colorado. And it's a little different
than the last time I came and submitted comments. I
worked -- we have an -- I'm an NGO. We work with
communities on the impacts from oil and gas and mining.
And under my supervision, we have a couple of the OGI
infrared cameras that we've been using in conjunction with
communities, particularly down in Kern County, but also in
L.A. basin to look at emissions. And we do some air
testing and things like that. So I participated in the

Colorado rulemaking when we did our methane rule in 2014.

So part of the reason I felt it was important to be here today was because this is a very significant rule, and we are extremely pleased that this has come to fruition. This rule -- this rule nationally will raise the standards for what's done in terms of leak detection, and control of methane emissions in the oil and gas exploration and production and storage areas.

So for us as an NGO trying to reduce impacts we're extremely pleased. And I think for that reason alone, it was worth the price of the plain ticket to come out. And hopefully, you will be passing that -- passing this.

But the second reason is that we -- because we do work with communities, and part of what we do is try to help increase enforcement, and we -- so we read the rule very carefully. And we're very comfortable with the provisions that are in there that will allow us to continue to use the infrared technology to say, yes, what you're smelling is also -- have some methane components to it. And therefore, you can go to the air district. And we've done that successfully this past fall. For example, some tanks down in Kern County, where they submitted the videos and the complaint was filed, and a violation of -- notice of violation was issued.

418

```
1
             So I'm really pleased that you're doing this, and
    glad to be here.
 2
 3
             CHAIR NICHOLS: Thank you. Thanks for joining.
             MR. EDER: Is there a timing thing?
 4
5
             CHAIR NICHOLS: Yes.
             MR. EDER: Where is it?
6
7
             CHAIR NICHOLS: You can see it off to your left,
8
    I believe. The number should pop up as soon you start.
9
    Well, it's not popping up at the moment. Where is the
10
    timer.
11
             MR. EDER: Is this it here?
12
             CHAIR NICHOLS: It's that yeah, but it hasn't
13
   started yet.
14
             MR. EDER: One that doesn't move.
                                                Anyway.
15
             CHAIR NICHOLS: It won't start until you start
16
    speaking.
17
             VICE CHAIR BERG: And the lights in front of
18
   you --
19
             CHAIR NICHOLS: And there's a light in front of
20
   you also. That green light that -- so --
21
             MR. EDER: Okay. Well, knowing how much time you
22
   have is valuable. Anyway. I support this. I did some
23
   work with going to DOGGR meetings about solar for storage,
24
   which was ignored. They're using these -- the same
25
    facilities could be used for solar storage as used for
```

natural, gas and oil.

Worked with a group on fracking. You folks said 8, 10 years ago there was no fracking in the State. Well, there is. And that happens on the 90 percent of the natural gas that comes into the State.

This brings the greenhouse gas numbers way up, even on 100-year basis over 100. Work done out of Cornell Howarth et al. incorporated into the record by reference.

They're -- this -- we have -- we've got oil and gas around, and we've got to use them for the transition.

Also, there's the possibility of the State litigating against ExxonMobil. They knew about this since '76 -- I see a green light -- this is a minute that I'm limited to?

Okay. All right. Well, they've got to be phased out, and solar has to be phased in.

Oh, okay. Anyway. There's no two ways about it. The sooner we do it, the better, and there is, you know, the laws on the books about non-renewable fossil fuels. And anyway, we need to work on solar conversion as soon as possible.

It says in the law that is expediently as practical, which means at least five years ago, when we had the '12 plan and stuff was cost effective then.

MS. THOMAS: Good evening. I'm Taylor Thomas with --

1 (Timer went off.)

MS. THOMAS: Woop. I didn't even start yet.

I will be very brief. I'm Taylor Thomas with East Yard Communities for Environmental Justice. I'll just get right to the point. I'm here with four specific asks, maintain the leak threshold at 1,000 parts per million, maintain the quarterly leak repair timelines, prioritize the top 25 percent of disadvantaged communities, as identified by CalEnviroScreen, and move forward with the adoption of this rule today.

Thank you.

MS. ALI: Good evening, Chair Nichols and members of the Board. Fariya Ali on behalf of PG&E. I'd like to start off by really thanking staff for all of their hard work on the oil and gas regulation. In particular, staff's efforts to try and address some of our operational concerns.

For example, as Mr. Fischer mentioned, the clarification by ARB that it is not their intent for leaks above the thresholds that are found by operators in the fourth quarter of every year to automatically be considered violations, as long as they're repaired on time is really important and we look forward to seeing this explanation in the Final Statement of Reasons, and recommend that it be included in guidance to the local air

districts as appropriate as well.

However, the use of EPA Method 21 as the basis in this rule for characterizing the severity of leaks is still a major concern, as it can lead to a considerable -- as it could lead to a considerable amount of time and resources being spent to repair leaks of negligible size.

Method 21 os not a good predictor of actual methane emissions. A leak that has a high concentration measurement does not necessarily indicate a high emission leak. And this has been demonstrated in the Stage Research Report recently released by ARB as well as our survey results as well.

So as we move forward into implementation, we really hope that ARB will continue to work with operators to identify better tools and methodologies to characterize leaks in Method 21 alone, and that we can incorporate these into the regulation as soon as its feasible to make amendments. I'd just like to thank staff again, and look forward to continuing to work on this to achieve our common goal for cost effective methane emission reductions to the natural gas system.

Thank you.

MS. PHILLIPS: Kathryn Phillips with Sierra Club California. This was a rule that one of our national attornies, Elly Benson has been following carefully. The

fact that national got involved should suggest to you how important this is for the Sierra Club, but also for everybody around the country who's been watching this rule.

I just want to urge CARB to continue the work that it's going to be doing on the MOA to make sure that there's a very careful plan to make sure this is actually implemented at the local level, and there's probably going to require some monitoring and some close coordination.

Also urge ARB to prioritize enforcement at facilities near environmental justice communities. And then finally, I just want to thank you for requiring the quarterly inspections and for rejecting a stepdown provision. That's a very important one for all of us.

Thank you.

MR. BARRETT: Good evening. I'm Will Barrett with the American Lung Association in California. The American Lung Association supports the reduction of methane and other toxic emissions from the whole lifecycle of the oil and gas sector.

In contrast to the federal dialogue right now on methane, we view this proposal before you as an important signal that will continue to protect our people and our climate against the unnecessary waste and leakage in the oil and gas sector. We view the quarterly -- ongoing

quarterly monitoring and correction of leaks as key, and applaud that the Board is moving forward with that provision without a stepdown going forward.

We encourage you to adopt the plan today and move forward with implementation in coordination with the air districts and in coordination with ensuring that the environmental justice community is most affected by this -- the leaks are treated well in this implementation.

With that, thank you very much for your leadership and your patience throughout the day.

Thank you.

MR. MARQUEZ: Thank you for this opportunity to speak. My name is Jesse Marquez, executive director of the Coalition for a Safe Environment, and also speaking on behalf of Los Angeles Environmental Justice Network and the California Communities Against Toxics.

And I'm here to say congratulations for doing a great job. Staff who worked on it, a special kudo to you, especially for doing the interfacing with other agencies, because I always have to deal with all those little problems.

What we do like about this regulation are several things. We do support the natural gas underground storage facility's air monitoring, but we also want to make sure it's for all categories of chemicals.

We do support the daily and continuous leak screening at each injection with withdrawal wellhead and pipelines. I live on top of the Wilmington oil field all my life. There are over three, four hundred operating oil wells right now, and about 100 more still in the planning to be done, so this is a major concern.

We do congratulate you for using and acknowledging the best available control technology, which is a vapor collection system and vapor control devices. The ironic thing I have to ask is why is it mandatory here, when I brought it up during the SIP and AQMD that oil refineries do not have to use this best available control technology on their storage tanks. That needs to be corrected.

We also want to make sure that this reg is not a permit that allows the oil well drilling industry to continue fracking or expanding their fracking. I do not want this to be a reference that is a permit for them to do that. So please clarify that.

I did look at your regulations for -- that identifies your enforcement. And I do applaud you for the categories of clearly defining what they must comply with. However, I discovered a big problem here.

Nowhere is there an acknowledgement or section for the penalties and sanctions for violating any of these

criterias. It does not exist in the document. Please correct that, and we want to see it for the next document.

MR. PITCHER: Good evening Chair Nichols, members of the Board. My name is Jenifer Pitcher, and I'm here on behalf of the Western States Petroleum Association.

I would first like to start off by expressing our appreciation to your staff for working with WSPA and our members over the last three years in the development of this methane relation.

From the beginning of the rule development process, we've emphasized the importance of ensuring that methane regulation recognizes existing control requirements and does not unnecessarily impose duplicative requirements on operators.

In general, WSPA supports many of the staff's revisions. However, we would like to again, for the record, point out some of the following issues and recommendations for your consideration.

For circulation tanks, ARB is proposing control measures for circulation tanks beginning in 2020. As noted in our comments, we remain concerned that there are no feasible control technologies currently available that can achieve the requirement to be able to meet the 95 percent control efficiency, including the disposal without the use of supplemental fuel, or that can be disposed of

without raising potential safety risks with the control measures proposed.

We believe staff's revisions provide clarification to allow for operators to continue with BNPs if no such technology is available by the 2020 deadline. We want to emphasize the importance for ARB to revisit the regulation and make necessary revisions in the event that no technology is available.

We also provided a safety analysis on the circulation tanks, and we have that safety expert here to answer any questions that you have.

For leak detection and repair, we've stated previously in our comments that oil and gas operators have been subject to LDAR programs for over 30 years in the San Joaquin Valley and in other air pollution control districts. We understand the concerns raised in regards to natural gas storage projects. And we again want to point out there is immense differences between oil production and storage.

Given that WSPA members Have implemented LDAR inspec -- LDAR programs and equipment for the past several decades, we would urge the Board to reinstate the step-down provision. And if the Board does not agree to reinstate it, we would encourage you to direct staff to evaluate the data that's generated from the LDAR program,

and reconsider adjusting the frequency of inspections at a later date.

And with that, I also provided some letters of support for you. And I thank you for your time.

MR. RIVERA: Good evening. Willie Rivera,
Director of Regulatory Affairs for the California
Independent Petroleum Association.

I've been waiting in that audience for 11 hours to be in front of you. So I am glad to have finally made it here.

The beauty of 11 hours is I had a whole lot of time to condense my comments into four points. And they are Joe, Jim, Elizabeth, and Craig. Your staff to my right did a great job on this over the last few years. This has been long, enduring, and arduous. And while we made a great degree of progress and I can't tell you that we believe there's a perfect regulation before you here this evening, we're excited to continue working with you and your staff on the implementation of this particular regulation at the local districts.

I think as the MOA process continues and memorandums begin to take shape, as key stakeholders, we should be involved in that process to the greatest extent possible. And we ask that that be incorporated into your actions moving forward.

We did submit a letter with several items for consideration in February. I don't need to go through those now. But if those items can be recognized in a Final Statement of Reasons, or in the adoption of the resolution, or in somehow, or in some fashion be addressed, we would appreciate that.

We would also stand in strong support of WSPA's suggestion just now related to LDAR inspections and revisiting data in a few years. We believe that's critical as well.

Otherwise, thank you for your time. Have a good evening.

MS. MORRIS: Jennifer Morris representing SoCalGas. First, we'd also like to thank the staff for working with stakeholders during the rulemaking process. Particularly during the past year, staff have put a lot of effort into addressing our concerns and we do appreciate that.

We especially appreciate Mr. Fischer addressing our concern about the issue of leaks reported by operators in the fourth quarter. And we look forward to this clarification in the upcoming FSOR and guidance to the air districts.

We share ARB's methane reduction goals, and support State efforts to mitigate methane in a technically

feasible and cost effective manner. We do still have a few remaining operational and feasibility concern with this rule, and we have raised these issues with both staff and the Board. These concerns are automatic violations for leaks measured above allowable thresholds as Method 21 concentration measurements that have been shown to be a poor predictor of actual methane volume.

Safety risks and feasibility issues with vapor recovery requirements for compressors and limited viable technology options in the storage monitoring provision of the rule.

We do appreciate staff's commitment to work with us on remaining concerns during implementation of the rule, and to modify the rule, if needed.

We look forward to working with ARB to ensure a successful rule implementation. And again, we thank staff for their efforts in working with stakeholders.

CHAIR NICHOLS: Thank you.

Laura Yao, or Willie Rivera -- no. Jennifer Morris, Laura Yao. Not here.

Irene Burga?

And then Bill Magavern.

MS. BURGA: Hello. Good afternoon -- evening.

My name is Irene Burga and I'm with the

25 | Environmental Defense Fund. Thank you for the opportunity

to comment in support of this landmark rule, which we urge the Board to adopt today. This rule is the product of many years of effort by the Board, careful consideration by staff, thoughtful listening of stakeholders, and tracking important developments and impacts of methane on climate and the effects of oil and gas pollution on public health.

EDF has been an active participant on this issue in California for much of the last seven years. We can say with confidence that finalizing the rule today will bring climate benefits, produce jobs, reduce waste and inefficiencies in oil and gas operations and benefit communities in California.

The rule will also support efforts of like-minded jurisdictions across the country, which is especially important, given federal efforts to repeal similar regulations. These requirements are critical to ensuring that ARB meets objectives aimed at reducing statewide methane emissions, all while delivering significant public health benefits. Oil and gas emissions include cancer causing compounds like benzene, as well as volatile organic compounds that form smog and cause respiratory problems. Impacted communities near oil and gas have reported experiencing severe headaches, nausea, nosebleeds, and respiratory problems just to name a few.

These and other related impacts often correlate with a higher number of days missed from school and work, lower educational attainment and income potential, and weakened health, and overall impacts, which are felt most in low income communities and communities of color.

Given the equity concerns, we recommend the rule implementation prioritize facilities in close proximity to disadvantaged communities identified in the top 25 percent of the CalEnviroScreen.

We applaud CARB for remaining committed to requiring quarterly inspections.

And I just wanted to say we urge you guys to adopt this and appreciate all the hard work done by staff and the Board. Thank you.

MR. MAGAVERN: Good evening, Bill Magavern with the Coalition for Clean Air. And as Irene said, this rule has been in the making for a long time. We're very eager for it to be implemented. I'm also very eager to get something to eat.

(Laughter.)

MR. MAGAVERN: So I will just say speaking also on behalf of John Shears from CEERT who's sitting behind me, we particularly appreciate the removal of the step-down provision for inspections. And this rule we think is going to be the best in the country and becomes

especially significant, given the federal government's retreat from methane regulation.

Thank you.

CHAIR NICHOLS: And you are the last speaker, and so I am going to close the record.

(Applause.)

CHAIR NICHOLS: And I'm going to omit my closing remarks, because actually Mr. Magavern pretty much said what I would have said. The only thing I would add to that is that I really appreciate the fact that the oil and gas industry worked with us on this regulation, and played a positive and constructive role in bringing us to this point. Not to say that that isn't always the case, but, you know, sometimes our disagreements, especially on technical matters, can really be profound and difficult to overcome.

And I think this is one where respect on both sides prevailed. And so as a result of that, we have a much stronger rule, but it's also one that can be adapted as we move along, if we gain new information if there's reasonable to do so.

So with that, I want to thank the staff as well, especially for being so flexible and for making your presentation so brisk.

And now, unless anybody has any further

433

```
1 discussion on this item, I think I can just ask that we 2 bring it forward.
```

VICE CHAIR BERG: Yes, I would move that we move Resolution 17-10.

BOARD MEMBER DE LA TORRE: Second.

CHAIR NICHOLS: We have a second.

All those in favor please say aye?

(Unanimous aye vote.)

(Senator Lara, Assembly Member Garcia and

Supervisor Roberts not present.)

CHAIR NICHOLS: Opposed?

12 Or abstentions?

3

4

5

6

7

8

9

10

11

13

14

15

16

19

20

21

25

We have no abstentions.

All right. Thank you all very much.

It has been a long day, but we really got a lot

done. So thank you very much.

BOARD CLERK McREYNOLDS: Madam Chair, we have a public comment.

CHAIR NICHOLS: Is there is someone who's asked to comment from the general public on a general comment not before the Board?

Oh, that's the card I have right here. I apologize. I didn't know that that was what it was for.

24 It's yellow. I should have recognized it.

All right. Mr. Harvey Eder.

I'm not -- oh, it's -- he's back. Your handwriting changed.

2.4

MR. EDER: Hello. I'm Harvey Eder talking for myself and for the Public Solar Power Coalition. I've come before you in the past. That was when Dr. -- at least when Dr. Lloyd was here for electric vehicles, 12, 15 years ago.

Now, we're cutting back our numbers on electric again, only one and a half million by '25. This is pathetic. Back then, the -- Paul Scott and Plug In American were there. They're the ones that did who sold the electric car, where -- your predecessors were involved.

This history is important, because there's been so -- this shows the decades and whatnot of dragging feet. And I first saw solar in Israel nearly fifty years ago on the relative -- my relative's roofs who survived Hitler. I said, What's that? Oh, that's our solar hot water system". We had in the eighties, a third of the size of a giant nuke, 354 megawatts built in the desert out here within 100 miles of here in Daggett and Victorville. And back then, it only cost \$3,500 a kilowatt hour. That's not much.

Got a lot of lip from the environmental community. They were out there, after the tax credit,

435

```
1
    getting their billion dollars, going each year to get them
    extended and whatnot. It was Luz, an Israeli company.
 2
 3
    And they've been operating using solid storage.
 4
    there's a -- concentrating solar has been ignored.
                                                         When
5
    combined with district heating and cooling, you get 70, 80
6
    percent of your energy in -- it's in the record for South
7
    Coast about the sun shot, the last eight papers in March
8
    of last year.
9
             Anyway, I'll -- the stuff is way proven out
10
            There's two gigawatts going in in Chile with
    24-hour storage at $0.10 a kilowatt hour by Solar Reserve.
11
12
             CHAIR NICHOLS: All right.
13
             MR. SHEARS: I just want to quickly give my --
14
    give kudos to the court reporter, who's had to be the --
15
             (Applause.)
16
             MR. SHEARS: -- the most focused person in the
17
    room all day today --
18
             (Applause.)
19
             MR. SHEARS: -- and deserves a bonus.
20
             (Laughter.)
21
             CHAIR NICHOLS:
                             That was a good comment.
22
             All right. We are adjourned.
23
             (Thereupon the Air Resources Board
24
             adjourned at 8:06 p.m.)
25
```

1	CERTIFICATE OF REPORTER
2	I, JAMES F. PETERS, a Certified Shorthand
3	Reporter of the State of California, do hereby certify:
4	That I am a disinterested person herein; that the
5	foregoing California Air Resources Board meeting was
6	reported in shorthand by me, James F. Peters, a Certified
7	Shorthand Reporter of the State of California, and was
8	thereafter transcribed, under my direction, by
9	computer-assisted transcription;
10	I further certify that I am not of counsel or
11	attorney for any of the parties to said meeting nor in any
12	way interested in the outcome of said meeting.
13	IN WITNESS WHEREOF, I have hereunto set my hand
14	this 10th day of April, 2017.
15	
16	
17	
18	
19	Rimin W
20	January I Marine
21	
22	JAMES F. PETERS, CSR
23	Certified Shorthand Reporter

24

25